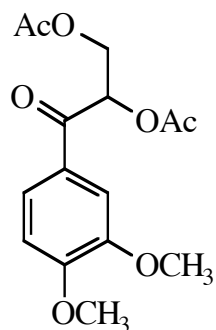


Compound Number 1



2,3-Diacetoxypropioveratrone
2,3-diacetoxy-3',4'-dimethoxyphenone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	74	20.49	72	20.30	88
Ac Me	20.72	71	20.58	64	20.42	87
OMe	56.05	98	56.11	98	55.51	95
OMe	56.15	97	56.25	100	55.77	100
γ	63.22	84	63.64	96	62.60	71
β	72.99	98	74.14	96	73.28	85
2	110.32	100	111.60	91	110.35	78
5	110.64	91	111.66	92	111.03	84
6	123.33	98	123.85	98	123.02	88
1	127.41	55	128.35	38	126.67	77
3	149.31	41	150.31	30	148.72	71
4	154.16	40	155.21	30	153.72	63
Ac C=O	170.21	48	170.35	32	169.61	67
Ac C=O	170.75	36	170.88	32	170.03	56
α	191.52	48	192.03	36	191.18	66

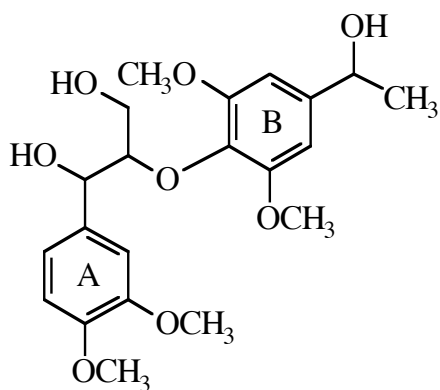
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.08		
Ac Me	2.19		
OMe	3.95		
OMe	3.95		
γ1	4.25	dd	12.1, 7.9
γ2	4.68	dd	12.1, 3.1
β	6.18	dd	7.9, 3.1
A2	7.56	d	8.4
A5	6.93	dd	2.0
A6	7.71	dd	8.4, 2.0

Notes:

M. Mozuch #36/46/Ac
21 mg

Compound Number 2

¹³C*threo*

1-(3,4-Dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	1.45	d	6.4
OMe	3.85	s	
OMe	3.85	s	
OMe	3.87	s	
OMe	3.89	s	
B α	4.81	q	6.4
α	5.02	d	8.7
B2,6	6.63	s	
A2	6.9	m	
A5	6.83	d	8.7
A6	6.9	m	

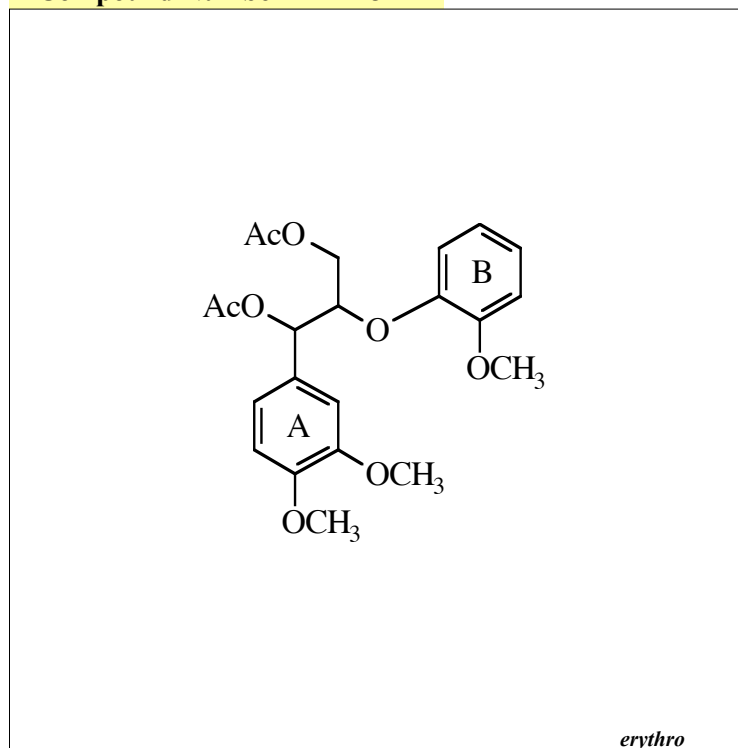
Notes:

S. Ralph III-12
60mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.45	34	26.23	49	25.86	44
OMe	55.87	100	55.97	58	55.31	52
OMe	55.87	100	56.03	51	55.43	53
B OMe	56.08	99	56.44	100	55.80	100
B OMe	56.08	99	56.44	100	55.80	100
γ	60.48	29	61.26	38	60.13	25
B α	70.11	43	69.93	51	68.17	43
α	73.98	39	73.89	45	71.36	32
β	88.94	37	89.58	47	87.10	31
B2	102.25	67	103.30	84	102.50	55
B6	102.25	67	103.30	84	102.50	55
A2	110.28	36	111.78	38	110.60	32
A5	111.02	41	112.18	47	111.08	32
A6	119.80	34	120.22	42	118.84	34
A1	132.56	38	134.74	32	134.53	63
B1	134.08	24	135.39	18	134.53	63
B4	143.04	30	144.54	29	143.01	37
A4	148.73	29	149.58	22	147.64	31
A3	148.90	29	149.86	25	148.03	34
B3	152.84	61	153.52	48	152.20	65
B5	152.84	61	153.52	48	152.20	65

Compound Number 3

¹³C



Veratrylglycerol- β -guaiacyl ether diacetate
1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-(2-methoxyphenoxy)
propane

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	34	20.61	38	20.41	22
Ac Me	21.05	38	20.89	40	20.65	27
OMe	55.78	55	56.02	63	55.38	100
OMe	55.88	100	56.08	57	55.38	100
OMe	55.88	100	56.15	54	55.54	64
γ	62.82	38	63.23	44	62.10	33
α	74.12	42	74.77	49	73.35	17
β	80.10	45	80.28	48	78.39	41
A2	110.86	51	112.24	100	110.87	20
A5	110.89	45	112.24	100	111.27	39
B2	112.55	44	113.68	57	112.80	39
B5	119.18	46	119.51	52	117.70	36
A6	120.08	44	120.79	54	119.63	38
B6	120.93	48	121.56	57	120.62	62
B1	123.41	46	123.82	64	122.70	41
A1	128.98	30	130.15	31	128.71	58
B4	147.32	24	148.36	20	146.74	50
A4	148.84	26	150.10	23	148.43	52
A3	149.09	25	150.29	19	148.65	47
B3	151.04	22	151.93	20	150.27	56
Ac C=O	169.67	24	169.85	23	169.18	45
Ac C=O	170.75	21	170.71	20	170.00	45

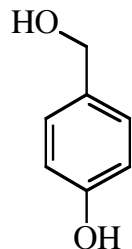
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.07	s	
OMe	3.79	s	
OMe	3.83	s	
OMe	3.86	s	
γ 1	4.23	dd	11.0, 4.0
γ 2	4.43	dd	11.9, 5.9
α	6.03	d	5.3
β	4.71	m	

Notes:

L. Landucci
51mg
threo data
in acetone
 γ 63.8
 α 75.7
 β 80.8

Compound Number 4

¹³C

p-Hydroxybenzyl alcohol
4-hydroxybenzyl alcohol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			64.54	34	62.68	43
3			115.69	99	114.66	100
5			115.69	99	114.66	100
2			129.05	100	127.92	100
6			129.05	100	127.92	100
1			133.96	13	132.61	31
4			157.23	18	156.03	35

¹H (chloroform)

Atom	H Shifts	Mult	J
α	4.62	s	
3,5	6.82	m	
2,6	7.22	m	

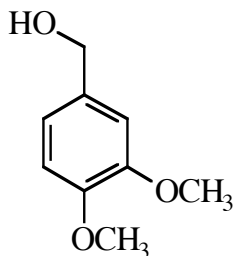
Notes:

J. Ralph: JR A91.11

50mg

Not very soluble in CDCL₃

Compound Number 5



3,4-Dimethoxybenzyl alcohol
3,4-dimethoxybenzyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.78	100	55.93	100	55.27	100
OMe	55.90	84	56.11	97	55.47	94
α	65.04	79	64.58	70	62.79	88
2	110.45	86	111.69	82	110.51	74
5	111.04	96	112.54	88	111.48	73
6	119.33	95	119.62	78	118.50	81
1	133.66	38	135.95	21	135.03	58
4	148.43	25	149.32	16	147.60	36
3	149.00	27	150.19	18	148.54	41

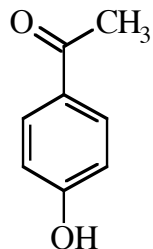
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.85	s	
OMe	3.85	s	
α	4.56	s	
2	6.82	m	
5	6.86	m	
6	6.86	m	

Notes:

J. Ralph: JR A91.14
50mg

Compound Number 6



p-Hydroxyacetophenone
4-hydroxyacetophenone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.28	51	26.25	39	26.16	39
3	115.66	100	115.89	98	115.11	100
5	115.66	100	115.89	98	115.11	100
1	129.16	17	130.38	11	128.56	23
2	131.35	97	131.48	100	130.64	91
6	131.35	97	131.48	100	130.64	91
4	161.90	19	162.54	20	161.98	35
α	199.32	12	196.40	93	195.89	21

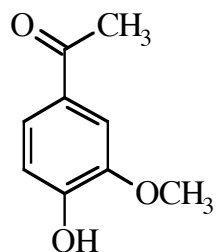
¹H (chloroform)

Atom	H Shifts	Mult	J
β	2.60	s	
3,5	7.92	m	8.8
2,6	7.00	m	8.8

Notes:

J.Ralph: JR A95.11
50mg

Compound Number 7



Acetovanillone
4-hydroxy-3-methoxyacetophenone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.16	82	26.22	74	26.14	77
OMe	56.01	81	56.17	91	55.52	92
2	109.89	62	111.40	65	111.04	76
5	113.97	85	115.26	85	114.85	100
6	124.06	100	124.22	100	123.34	98
1	130.02	20	130.65	22	128.84	59
3	146.77	29	148.16	23	147.45	61
4	150.66	34	152.12	28	151.65	82
α	197.14	23	196.30	19	195.98	57

¹H (chloroform)

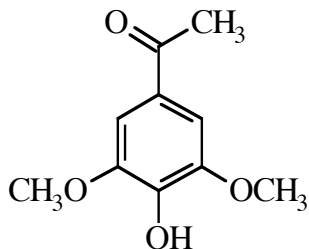
Atom	H Shifts	Mult	J
β	2.56	s	
OMe	3.91	s	
2	7.53	m	
5	6.95	d	8.7
6	7.53	m	

Notes:

J. Ralph: JR A95.12
50mg

Compound Number 8

¹³C



Acetosyringone

3,5-dimethoxy-4-hydroxyacetophenone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.21	44	26.30	41	26.22	45
OMe	56.45	100	56.63	100	56.02	100
OMe	56.45	100	56.63	100	56.02	100
2	105.81	90	106.97	84	106.13	84
6	105.81	90	106.97	84	106.13	84
1	128.21	22	129.13	16	127.33	29
4	139.89	21	141.75	16	140.86	29
3	146.79	41	148.29	34	147.44	65
5	146.79	41	148.29	34	147.44	65
α	196.64	16	196.31	14	196.06	30

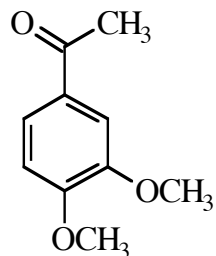
¹H (chloroform)

Atom	H Shifts	Mult	J
β	2.57	s	
OMe	3.94	s	
OMe	3.94	s	
2,6	7.24	s	

Notes:

J. Ralph: JR A95.13
46mg

Compound Number 9



Acetoveratrone
3,4-dimethoxyacetophenone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.17	63	26.25	72	26.23	78
OMe	55.95	92	55.96	91	55.43	100
OMe	56.04	100	56.10	100	55.68	90
2	109.99	86	111.17	56	110.17	91
5	110.09	70	111.30	77	110.74	87
6	123.27	95	123.73	94	123.04	98
1	130.48	30	131.24	17	129.88	55
3	148.99	26	150.00	17	148.55	41
4	153.30	27	154.38	17	153.06	43
α	196.70	23	196.34	17	196.22	33

¹H (chloroform)

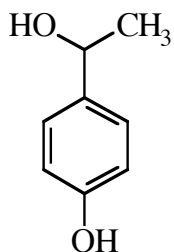
Atom	H Shifts	Mult	J
β	2.56	s	
OMe	3.93	s	
OMe	3.94	s	
2	7.52	d	2.0
5	6.90	d	8.4
6	7.57	dd	8.4, 2.0

Notes:

J. Ralph: JR A95.14
55mg

Compound Number 10

¹³C



1-(4-Hydroxyphenyl)ethanol

1-(4-hydroxyphenyl)ethanol

¹H (chloroform)

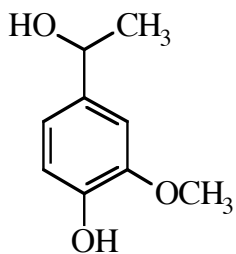
Atom	H Shifts	Mult	J
β	1.48	d	6.5
α	4.85	q	6.5
3,5	6.81	m	8.6
2,6	7.25	m	8.6

Notes:

J. Ralph: JR A97.11
34mg Almost insoluble in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			26.10	54	25.83	91
α			69.61	28	67.70	101
3	115.28	100	115.55	89	114.54	180
5	115.28	100	115.55	89	114.54	180
2	126.91	95	127.31	100	126.31	180
6	126.91	95	127.31	100	126.31	180
1			138.90	12	137.56	61
4			156.98	15	155.86	75

Compound Number 11



Apocynol

1-(4-hydroxy-3-methoxyphenyl)ethanol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.07	95	26.22	87	25.88	78
OMe	55.88	99	56.09	87	55.42	98
α	70.30	89	69.81	78	67.89	100
2	108.05	80	109.76	76	109.54	71
5	114.20	94	115.21	87	114.80	82
6	118.31	100	118.65	100	117.47	77
1	137.91	40	139.67	31	138.35	64
4	144.96	32	146.13	31	144.98	69
3	146.62	33	147.97	22	147.11	52

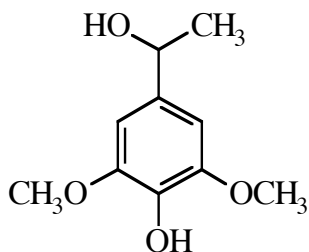
¹H (chloroform)

Atom	H Shifts	Mult	J
β Me	1.46	d	
OMe	3.87	s	
α	4.81	q	6.5
5	6.81	m	
2	6.91	m	
6	6.84	m	

Notes:

J. Ralph: JR A97.12

Compound Number 12

¹³C

1-(4-Hydroxy-3,5-dimethoxyphenyl)ethanol

1-(4-hydroxy-3,5-dimethoxyphenyl)ethanol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.22	52	26.28	45	25.94	56
OMe	56.25	100	56.49	100	55.79	100
OMe	56.25	100	56.49	100	55.79	100
α	70.50	51	70.07	43	68.16	62
2	102.15	94	103.61	87	102.65	85
6	102.15	94	103.61	87	102.65	85
1	133.90	22	135.46	14	133.93	35
4	137.22	32	138.70	20	137.53	39
3	147.01	43	148.36	24	147.56	75
5	147.01	43	148.36	24	147.56	75

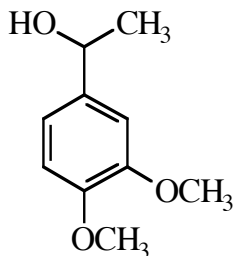
¹H (chloroform)

Atom	H Shifts	Mult	J
β	1.46	d	6.4
OMe	3.85	s	
OMe	3.85	s	
α	4.79	q	6.4
2,6	6.58		

Notes:

J. Ralph: JR A97.13

Compound Number 13



1-(3,4-Dimethoxyphenyl)ethanol

1-(3,4-dimethoxyphenyl)ethanol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.12	99	26.25	92	25.92	88
OMe	55.80	94	55.99	100	55.29	99
OMe	55.91	87	56.15	89	55.48	94
α	70.08	94	69.72	86	67.82	100
2	108.68	67	110.38	59	109.24	72
5	110.98	78	112.56	62	111.43	82
6	117.50	100	118.18	95	117.10	85
1	138.65	40	140.97	19	139.99	62
4	148.26	27	149.17	14	147.40	39
3	148.99	28	150.14	11	148.43	45

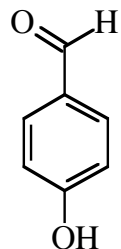
¹H (chloroform)

Atom	H Shifts	Mult	J
β	1.46	d	6.4
OMe	3.85	s	
OMe	3.87	s	
α	4.81	q	6.4
5	6.82		
6	6.85		
2	6.92	d	1.7

Notes:

J. Ralph: JR A97.14

Compound Number 14



p-Hydroxybenzaldehyde
4-hydroxybenzaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3	116.01	100	116.62	100	115.80	100
5	116.01	100	116.62	100	115.80	100
1	129.81	14	130.34	11	128.40	25
2	132.54	97	132.77	85	132.04	83
6	132.54	97	132.77	85	132.04	83
4	161.65	19	163.80	15	163.28	31
α	191.28	39	191.02	35	190.80	42

¹H (chloroform)

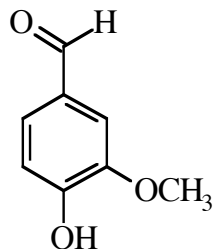
Atom	H Shifts	Mult	J
3,5	7.00	m	8.6
2,6	7.82	m	8.6
α	9.85	s	
acetone			
3,5	7.00		
2,6	7.79		
α	9.84		
OH	9.40		

Notes:

J. Ralph: JR A87.11
52mg

Compound Number 15

¹³C



Vanillin

4-hydroxy-3-methoxybenzaldehyde

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.07	100	56.24	100	55.52	100
2	109.02	50	110.82	72	110.63	69
5	114.59	67	115.87	97	115.36	100
6	127.57	89	126.98	83	126.04	81
1	129.70	22	130.62	29	128.70	64
3	147.34	20	148.86	23	148.12	53
4	151.99	20	153.45	32	153.00	61
α	191.16	47	191.07	85	190.89	82

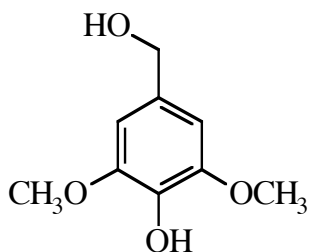
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.92	s	
2	7.41	m	
5	7.04	d	8.6
6	7.44	m	
α	9.81	s	
acetone			
OMe	3.91	s	
2	7.46	d	1.8
5	7.00	d	8.6
6	7.43	m	
α	9.81	s	
OH	8.30	bs	

Notes:

J. Ralph: JR A87.12
66mg

Compound Number 16

¹³C

Syringyl alcohol

4-hydroxy-3,5-dimethoxybenzyl alcohol

¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.88		
OMe	3.88		
α	4.60	s	
2,6	6.60	s	

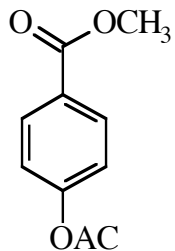
Notes:

J. Ralph: JR A91.13

20mg Almost insoluble in acetone.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.29	100	56.54	100	55.77	100
OMe	56.29	100	56.54	100	55.77	100
α	65.68	39	64.98	26	63.09	40
2	103.88	82	105.08	75	103.91	72
6	103.88	82	105.08	75	103.91	72
1	132.06	21	133.80	12	132.48	26
4	134.19	15	135.75	9	134.03	26
3	147.10	35	148.54	23	147.67	52
5	147.10	35	148.54	23	147.67	52

Compound Number 17



Methyl 4-acetoxybenzoate
4-acetoxybenzoic acid methyl ester

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.12	29	20.97	37	20.82	50
OMe	52.16	38	52.37	44	52.13	50
3	121.60	94	122.82	100	122.21	92
5	121.60	94	122.82	100	122.21	92
1	127.70	14	128.46	13	127.08	21
2	131.14	100	131.60	100	130.70	100
6	131.14	100	131.60	100	130.70	100
4	154.30	14	155.56	14	154.20	25
α	166.25	10	166.47	11	165.49	17
Ac C=O	168.79	11	169.23	11	168.72	20

¹H (chloroform)

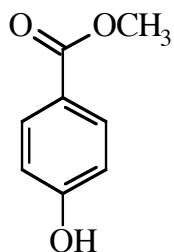
Atom	H Shifts	Mult	J
Ac Me	2.30	s	
OMe	3.90	s	
3,5	7.16	m	8.9
2,6	8.06	m	8.9

Notes:

L. Landucci
53mg

Compound Number 18

¹³C



Methyl 4-hydroxybenzoate
4-hydroxybenzoic acid methyl ester

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	52.12	43	51.86	29	51.55	32
3	115.31	97	116.00	100	115.31	100
5	115.31	97	116.00	100	115.31	100
1	122.22	15	122.33	12	120.29	15
2	131.97	100	132.37	83	131.40	100
6	131.97	100	132.37	83	131.40	100
4	160.36	23	162.58	25	161.97	24
α	167.53	10	167.07	5	166.05	14

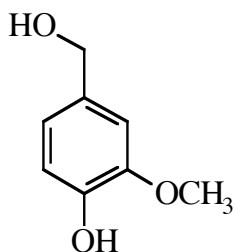
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.90	s	
3,5	6.89	m	8.9
2,6	7.95	m	8.9

Notes:

Aldrich
62mg

Compound Number 19



4-Hydroxy-3-methoxybenzyl alcohol

4-hydroxy-3-methoxybenzyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.90	100	56.11	100	55.38	100
α	65.44	79	64.76	76	62.93	95
2	109.94	90	111.37	78	110.91	72
5	114.27	92	115.37	87	114.93	83
6	120.22	100	120.29	95	119.00	93
1	132.93	31	134.62	33	133.37	62
4	145.26	33	146.37	31	145.17	64
3	146.65	23	148.10	25	147.24	49

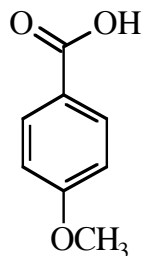
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.89	s	
α	4.60	s	

Notes:

Aldrich
54mg

Compound Number 20

¹³C

p-Anisic acid
4-methoxybenzoic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.48	45	55.86	46	55.36	51
3	113.75	97	114.50	88	113.74	99
5	113.75	97	114.50	88	113.74	99
1	121.67	11	123.67	12	122.97	22
2	132.35	100	132.48	100	131.32	100
6	132.35	100	132.48	100	131.32	100
4	164.04	18	164.39	13	162.80	26
α	171.45	16	167.54	13	167.00	29

¹H (chloroform)

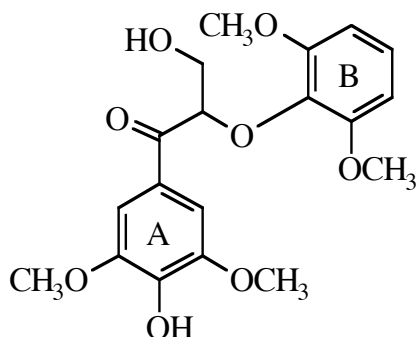
Atom	H Shifts	Mult	J
OMe	3.89	s	
3,5	6.96	m	9.0
2,6	8.07	m	9.0

Notes:

Aldrich
52mg

Compound Number 21

¹³C



2-(2,6-Dimethoxyphenoxy)-3-hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)propan-1-one

¹H (chloroform)

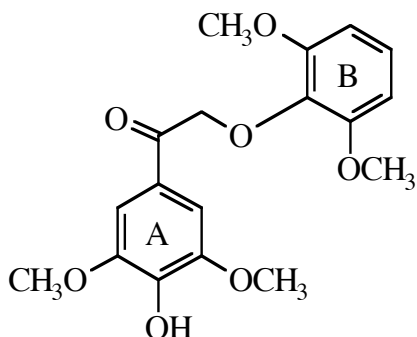
Atom	H Shifts	Mult	J
OMe	3.74	s	
OMe	3.92	s	
β	5.10	dd	6.4, 2.7
A2,6	7.42	s	
B2,6	6.59	d	8.4
B1	7.03	t	8.4

Notes:

Has acetyl piperidine in sample.
 J. Ralph JRA127.P1
 27mg
 γ - protons coupled to OH's, shifts not determined.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.97	100	56.35	92	55.73	100
OMe	55.97	100	56.35	92	55.73	100
OMe	56.49	86	56.71	100	55.97	98
OMe	56.49	86	56.71	100	55.97	98
γ	63.48	39	63.66	47	61.95	34
β	87.16	48	86.21	51	82.80	31
B2	105.27	88	106.32	91	105.46	81
B6	105.27	88	106.32	91	105.46	81
A2	106.35	82	107.69	63	106.56	63
A6	106.35	82	107.69	63	106.56	63
B1	124.34	49	124.78	46	123.51	37
A1	126.98	30	127.86	23	126.22	35
B4	136.46	18	137.37	10	135.80	27
A4	140.05	29	141.99	14	140.92	37
A3	146.79	58	148.31	37	147.30	68
A5	146.79	58	148.31	37	147.30	68
B3	152.73	49	153.86	38	152.43	73
B5	152.73	49	153.86	38	152.43	73
α	194.84	28	195.15	20	194.71	35

Compound Number 22

¹³C

2-(2,6-Dimethoxyphenoxy)-1-(4-hydroxy-3,5-dimethoxyphenyl)ethanone

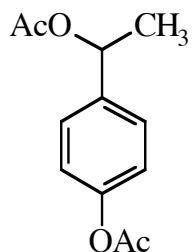
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.94	s	
β	5.11	s	
A2,6	7.43	s	
B2,6	6.59	d	8.4
B1	7.03	t	8.4

Notes:J. Ralph JRA127.P2
23mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	56.09	100	56.42	100	55.82	100
B OMe	56.09	100	56.42	100	55.82	100
A OMe	56.48	98	56.72	94	56.03	98
A OMe	56.48	98	56.72	94	56.03	98
β	75.45	41	75.90	47	74.39	30
B2	105.33	89	106.47	98	105.52	80
B6	105.33	89	106.47	98	105.52	80
A2	106.07	84	107.45	97	105.97	63
A6	106.07	84	107.45	97	105.97	63
B1	124.20	48	124.87	53	123.84	35
A1	126.68	25	127.09	19	124.92	34
B4	136.48	11	137.55	11	135.85	21
A4	139.89	22	142.15	13	141.14	33
A3	146.74	48	148.39	27	147.50	71
A5	146.74	48	148.39	27	147.50	71
B3	153.30	42	154.43	32	152.85	61
B5	153.30	42	154.43	32	152.85	61
α	193.61	24	193.69	23	192.75	29

Compound Number 23



Hydroxyphenylethanol diacetate
1-acetoxy-1-(4-acetoxyphenyl)ethane

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.10	33	20.91	39	20.74	45
Ac Me	21.30	28	21.08	31	20.89	40
β	22.14	41	22.48	55	21.95	46
α	71.68	42	72.03	51	71.01	53
3	121.57	100	122.53	99	121.70	100
5	121.57	100	122.53	99	121.70	100
2	127.31	100	127.84	100	126.99	96
6	127.31	100	127.84	100	126.99	96
1	139.18	18	140.39	18	139.13	31
4	150.16	15	151.29	14	149.79	25
A4 Ac C=O	169.41	14	169.58	14	169.11	16
α Ac C=O	170.21	13	170.16	11	169.54	15

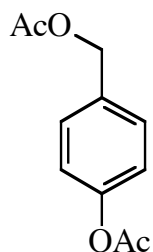
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.24	s	
β	1.48	d	6.6
α	5.84	q	6.6
3,5	7.09	m	8.6
2,6	7.40	m	8.6

Notes:

J. Ralph JRA93.5
22mg

Compound Number 24

¹³C

p-Hydroxybenzyl alcohol diacetate
4-acetoxybenzyl acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.95	24	20.76	25	20.62	32
Ac Me	21.08	31	20.92	35	20.75	40
α	65.58	38	65.80	40	64.83	37
3	121.70	100	122.59	100	121.78	94
5	121.70	100	122.59	100	121.78	94
2	129.50	97	130.02	93	129.25	100
6	129.50	97	130.02	93	129.25	100
1	133.56	22	134.84	18	133.67	29
4	150.53	16	151.60	12	150.15	21
A4 Ac C=O	169.31	15	169.53	7	169.08	18
α Ac C=O	170.72	11	170.77	6	170.14	12

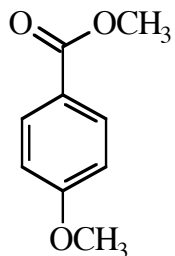
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.08	s	
Ac Me	2.29	s	
α	5.08	s	
3,5	7.08	m	8.6
2,6	7.37	m	

Notes:

S. Ralph SRIII-20
52mg

Compound Number 25



Methyl-p-anisate
methyl 4-methoxybenzoate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
4 OMe	51.82	31	51.94	32	51.73	48
α OMe	55.39	41	55.83	50	55.45	44
3	113.59	100	114.51	98	113.95	100
5	113.59	100	114.51	98	113.95	100
1	122.60	10	123.36	9	121.88	16
2	131.57	81	132.12	100	131.20	93
6	131.57	81	132.12	100	131.20	93
4	163.33	13	164.35	11	163.12	18
α	166.82	8	166.84	6	165.88	14

¹H (chloroform)

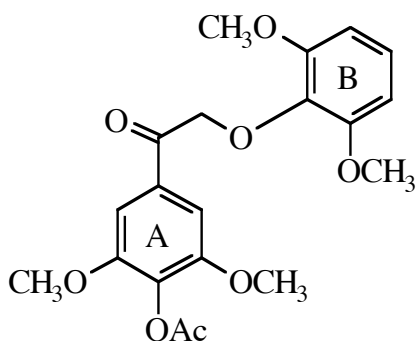
Atom	H Shifts	Mult	J
4 OMe	3.83	s	
α OMe	3.86	s	
3,5	6.89	m	8.8
2,6	7.99	m	8.8

Notes:

S. Ralph SRIII-21
50mg

Compound Number 26

¹³C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(2,6-dimethoxyphenoxy)ethanone

¹H (chloroform)

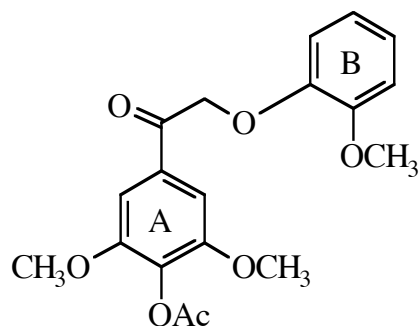
Atom	H Shifts	Mult	J
Aχ Meε	2.34	s	
B OMe	3.80	s	
A OMe	3.87	s	
β	5.13	s	
A2,6	7.40	s	
B2,6	6.58	d	8.4
B1	7.02	t	8.4

Notes:

J. Ralph GV 49.1
25mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	37	20.23	35	20.02	40
B OMe	56.08	93	56.44	100	55.82	100
B OMe	56.08	93	56.44	100	55.82	100
A OMe	56.37	100	56.71	98	56.18	100
A OMe	56.37	100	56.71	98	56.18	100
β	75.54	39	75.99	39	74.59	32
B2	105.35	90	106.34	94	104.87	80
B6	105.35	90	106.34	94	104.87	80
A2	105.54	90	106.50	96	105.53	94
A6	105.54	90	106.50	96	105.53	94
B1	124.26	49	124.95	50	123.88	45
A1	133.12	30	133.94	7	132.10	24
A4	133.12	30	134.21	19	132.64	38
B4	136.45	14	137.50	11	135.81	28
A3	152.26	52	153.30	33	151.80	72
A5	152.26	52	153.30	33	151.80	72
B3	153.27	43	154.36	31	152.74	69
B5	153.27	43	154.36	31	152.74	69
Ac C=O	168.11	23	168.15	16	167.60	32
α	194.03	28	194.58	24	193.75	40

Compound Number 27



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(2-methoxyphenoxy)ethanone

¹H (chloroform)

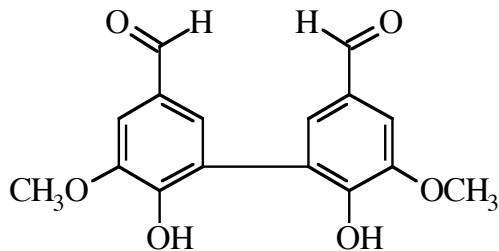
Atom	H Shifts	Mult	J
Ac Me	2.35	s	
B OMe	3.87	s	
A OMe	3.87	s	
β	5.26	s	
A2,6	7.34	s	

Notes:

J. Ralph GV 35.1
25mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	41	20.23	36	20.03	47
B OMe	55.85	47	56.25	48	55.51	60
A OMe	56.34	100	56.73	92	56.24	100
A OMe	56.34	100	56.73	92	56.24	100
β	72.53	35	72.65	40	70.85	32
A2	105.25	84	105.90	100	104.78	84
A6	105.25	84	105.90	100	104.78	84
B2	112.26	48	113.68	56	112.48	44
B5	114.95	49	115.73	48	113.80	39
B6	120.89	51	121.56	56	120.45	48
B1	122.64	49	122.80	56	121.37	43
A1	133.41	12	134.14	8	132.32	17
A4	132.58	27	133.81	20	132.38	39
B3	147.37	16	148.96	16	147.33	34
B4	149.79	17	150.90	16	148.96	29
A3	152.41	49	153.45	36	151.90	74
A5	152.41	49	153.45	36	151.90	74
Ac C=O	168.06	20	168.14	20	167.59	35
α	193.77	25	194.35	20	193.70	42



Dehydrodivanillin

6,6'-Dihydroxy-5,5'-dimethoxybiphenyl-3,3'-dicarbaldehyde

¹H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.94	s	
2	7.44	s	
6	7.44	s	
α	9.81	s	
<u>Acetone</u>			
OMe	3.95	s	
2	7.42	d	J = 1.84
6	7.55	d	J = 1.84
α	9.84	s	

Notes:

J. Ralph KM 77.1

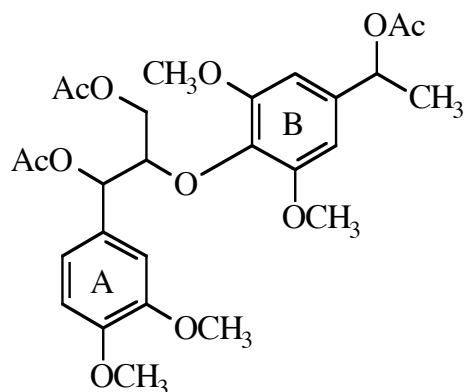
25mg

contains impurities

As this compound has a plane of symmetry

The shifts for the other half are identical.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe					55.94	100
2					109.08	53
6					124.54	47
5					127.61	75
1					128.05	53
4					148.12	59
3					152.93	16
α					190.97	72

*threo*

Veratrylglycerol- β -syringol ether triacetate
1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-(4-(1-acetoxyethyl)-
2,6-dimethoxyphenoxy)propane

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.92	s	
Ac Me	2.00	s	
Ac Me	2.07	s	
B β	1.51	d	6.6
OMe	3.86	s	
OMe	3.86	s	
B OMe	3.80	s	
γ 1	-	-	
γ 2	4.29	dd	11.7, 3.6
B α	5.79	q	6.6
α	6.11	d	7.1
β	4.59	m	
B2,6	6.55	s	
A2	6.94	m	
A5	6.81	d	8.8
A6	6.95	m	

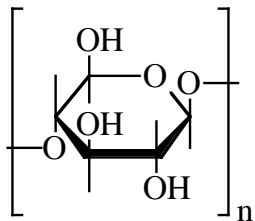
Notes:

S. Ralph III-14
65mg sample has impurities
 γ 1 proton hidden by OMe's

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.75	41	20.62	51	20.36	40
Ac Me	21.01	32	20.96	52	20.62	35
Ac Me	21.34	34	21.14	41	20.96	38
B β	22.22	34	22.58	52	22.03	27
A OMe	55.88	63	56.02	71	55.43	52
A OMe	55.97	61	56.02	71	55.50	58
B OMe	56.08	100	56.33	100	55.80	100
B OMe	56.08	100	56.33	100	55.80	100
γ	63.84	26	64.43	48	63.36	21
B α	72.38	29	72.70	49	71.70	33
α	76.01	45	76.69	51	75.65	22
β	80.76	46	81.52	52	80.30	26
B2	103.29	77	103.91	86	102.90	50
B6	103.29	77	103.91	86	102.90	50
A2	110.70	28	112.03	44	110.80	29
A5	111.02	45	112.31	51	111.51	31
A6	119.92	49	120.59	48	119.58	30
A1	129.64	40	130.68	32	129.28	39
B1	136.22	14	137.06	19	135.43	22
B4	137.37	41	138.53	25	137.28	33
A3	148.89	35	150.05	29	148.53	46
A4	149.10	33	150.25	22	148.74	38
B3	152.88	60	153.68	51	152.27	66
B5	152.88	60	153.68	51	152.27	66
Ac C=O	169.76	22	169.78	25	169.11	37
Ac C=O	170.15	24	170.14	19	169.52	34
Ac C=O	170.57	31	170.59	24	169.89	40

Compound Number 30

¹³C



Xylan
Xylan, Birch

¹H (DMSO)

Atom	H Shifts	Mult	J

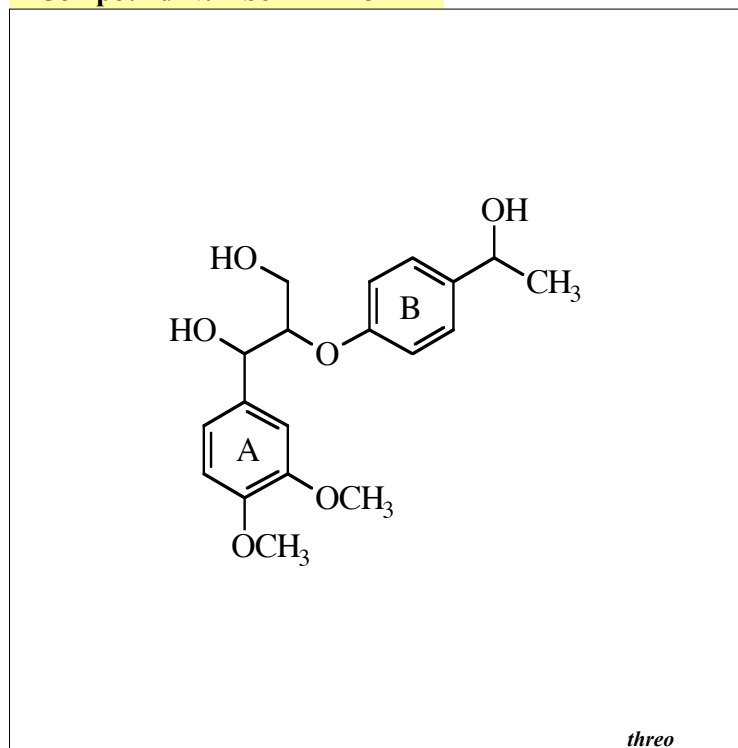
Notes:

IPC Xylan 79-7
60mg
147- Quantitative run
148- Run at 363K
shifts at 58.94 and 101.14 are for end groups

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
					58.94	35
					63.09	73
					72.56	96
					73.83	92
					75.40	92
					101.14	54
					101.65	100

Compound Number 31

¹³C



1-(3,4-Dimethoxyphenyl)-2-[4-(1-hydroxyethyl) phenoxy] propane-1,3-diol

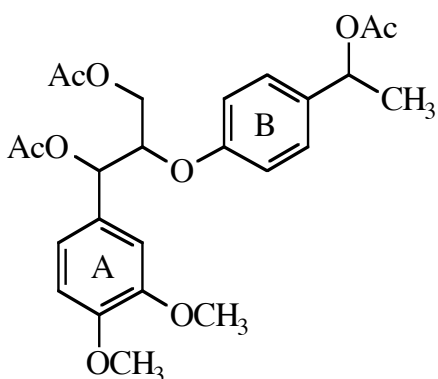
¹H (DMSO)

Atom	H Shifts	Mult	J
B β	1.28	d	
OMe	3.71	s	
OMe	3.71	s	
α	5.36	d	5.1

Notes:

S. Ralph SR111-7
 28mg
 shifts for minor erythro isomer:
 C A D
 γ 61.46,61.94,59.92
 α 73.88,73.81,71.37
 β 82.00,83.67,82.98

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.03	34	26.15	33	25.81	39
OMe	55.88	88	55.99	41	55.30	44
OMe	55.88	88	56.04	41	55.40	44
γ	61.06	32	61.60	37	59.92	24
B α	69.74	34	69.48	33	67.57	44
α	73.47	27	73.18	41	70.77	41
β	82.92	34	84.04	41	82.98	34
A2	110.00	34	111.73	37	110.57	41
A5	111.00	34	112.18	33	111.17	34
B3	116.35	88	116.61	90	115.34	93
B5	116.35	88	116.61	90	115.34	93
A6	119.26	41	119.84	43	118.62	39
B2	126.84	100	127.14	100	126.15	100
B6	126.84	100	127.14	100	126.15	100
A1	132.46	27	135.41	24	134.78	44
B1	139.26	29	140.44	20	139.27	29
A3	148.81	27	149.53	12	147.69	29
A4	148.98	29	149.91	12	148.13	29
B4	157.45	29	158.87	20	157.62	49

*threo*

1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-[4-(1-acetoxyethyl)phenoxy] propane

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.05	s	
B β	1.51	d	6.6
OMe	3.87	s	
OMe	3.87	s	
γ1	4.00	dd	11.8, 6.2
γ2	4.24	dd	11.9, 4.0
B α	5.84	q	6.6
α	6.02	d	6.6
β	4.70	m	

Notes:

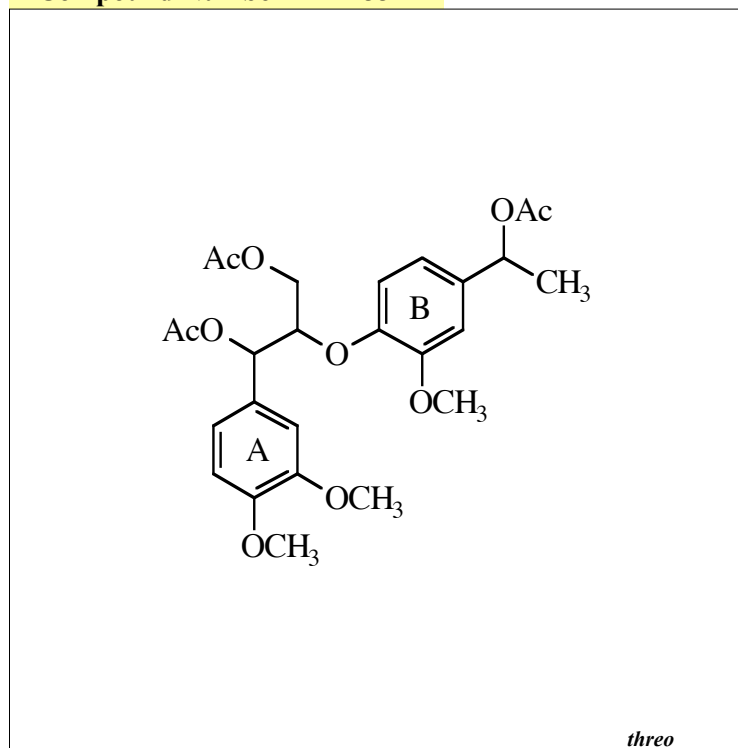
S. Ralph SR III-17AC

28mg

shifts for minor erythro isomer:

C A D
 γ 62.59,63.11,61.88
 α 73.95,74.41,72.92
 β 78.43,78.93,76.96

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.69	35	20.56	26	20.38	67
Ac Me	21.04	43	20.89	34	20.64	64
Ac Me	21.35	39	21.13	28	20.93	69
B β	22.01	38	22.35	38	21.78	51
OMe	55.91	58	56.06	54	55.41	82
OMe	55.99	49	56.17	56	55.51	72
γ	62.91	42	63.46	30	62.32	28
B α	71.86	22	72.17	38	71.14	49
α	74.34	20	75.35	34	74.25	41
β	78.43	41	79.30	34	77.67	39
A2	110.51	38	112.16	33	110.85	41
A5	111.20	42	112.54	38	111.52	38
B3	116.40	84	117.10	67	115.98	100
B5	116.40	84	117.10	67	115.98	100
A6	119.92	39	120.84	49	119.82	41
B2	127.62	100	128.22	100	127.29	95
B6	127.62	100	128.22	100	127.29	95
A1	128.58	32	130.00	25	128.62	44
B1	135.13	27	136.10	20	134.59	44
A3	149.10	27	150.34	18	148.60	46
A4	149.41	23	150.61	16	148.87	44
B4	158.17	20	159.27	20	157.76	41
Ac C=O	169.81	26	169.90	16	169.28	41
Ac C=O	170.27	18	170.11	16	169.51	46
Ac C=O	170.55	24	170.58	16	169.92	38



1,3-diacetoxy-1-(3,4-dimethoxyphenyl)-2-[4-(1-acetoxyethyl)-2-methoxy] propane

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.02	s	
Ac Me	2.06	s	
B β	1.52	d	6.5
OMe	3.85	s	
OMe	3.86	s	
OMe	3.87	s	
γ2	4.27	dd	11.9, 4.0
γ1	3.99	dd	11.9, 5.8
B α	4.82	q	6.5
α	6.07	d	6.7
β	4.63	m	

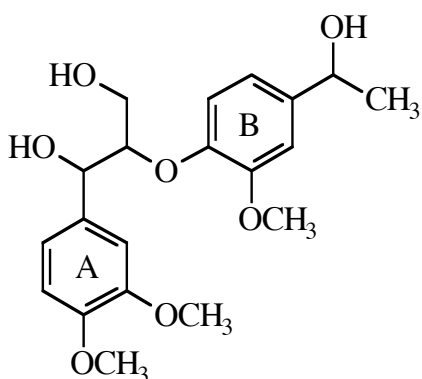
Notes:

S. Ralph SR III-15AC
 35mg
 Shifts for minor isomer:
 C A D
 γ 62.74,63.25,62.04
 α 74.08,74.76,73.25
 β 79.98,80.23,78.29

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.71	40	20.59	64	20.36	70
Ac Me	21.05	41	20.95	52	20.64	55
Ac Me	21.35	45	21.14	48	20.94	77
B β	22.09	44	22.45	70	21.87	45
OMe	55.91	97	56.06	100	55.41	100
OMe	55.95	100	56.14	76	55.46	57
OMe	55.95	100	56.32	79	55.66	68
γ	63.26	32	63.80	61	62.61	29
B α	72.06	41	72.39	76	71.36	54
α	74.87	33	75.67	64	74.54	36
β	80.44	40	80.88	70	79.23	36
B2	110.58	35	111.79	70	110.64	34
A2	110.75	29	112.17	64	110.84	38
A5	111.12	41	112.49	73	111.48	39
B5	118.23	40	118.74	67	117.02	39
B6	118.66	47	119.19	76	118.08	43
A6	119.88	42	120.73	76	119.74	39
A1	128.93	45	130.22	55	128.75	45
B1	136.59	31	137.61	45	135.92	36
B4	147.72	18	148.68	36	147.12	36
A3	149.04	29	150.28	33	148.57	46
A4	149.30	27	150.51	39	148.83	43
B3	150.65	23	151.56	30	149.86	38
Ac C=O	170.54	26	169.88	30	169.22	39
Ac C=O	170.23	21	170.14	30	169.52	41
Ac C=O	169.76	27	170.59	36	169.91	45

Compound Number 34

¹³C



threo

1-(3,4-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy] propane-1,3-diol

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	1.46	d	6.4
OMe	3.86	s	
OMe	3.86	s	
OMe	3.86	s	
B α	4.83	q	6.4
α	4.94	d	7.7
β	4.01	m	
γ1	3.46	mm	
γ2	3.60	dd	

Notes:

S. Ralph SR III-15

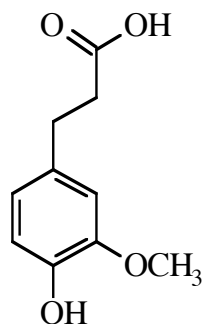
28mg

shifts for minor isomer:

C A D
 γ 60.82,61.68,59.96
 α 72.78,73.62,71.51
 β 87.01,86.50,83.82

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.22	35	26.10	95	25.83	91
OMe	55.92	100	55.93	100	55.20	92
OMe	55.92	100	56.01	90	55.41	83
OMe	55.92	100	56.17	88	55.52	100
γ	61.08	28	61.68	67	59.96	55
B α	69.98	38	69.66	90	67.79	86
α	73.84	32	73.62	67	70.72	50
β	89.01	19	88.12	52	84.56	38
B2	109.33	28	110.46	60	109.79	44
A2	110.03	32	111.67	67	110.65	47
A5	111.10	38	112.14	71	111.08	71
B5	118.40	32	118.58	64	115.57	35
B6	119.56	34	119.22	52	117.24	62
A6	120.22	17	119.99	69	118.59	56
A1	132.23	26	134.87	40	134.50	58
B1	141.94	21	142.61	33	140.50	61
B4	146.76	21	148.03	36	146.78	56
A3	148.90	22	149.54	33	147.68	55
A4	149.08	25	149.87	36	148.07	79
B3	151.00	15	151.20	33	149.33	64

Compound Number 35



Dihydroferulic Acid

3-(4-hydroxy-3-methoxyphenyl)propanoic acid

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	30.38	96	31.24	100	30.00	93
β	36.01	88	36.38	95	35.68	100
OMe	55.92	96	56.22	94	55.52	96
2	111.10	96	112.81	91	112.52	82
5	114.52	100	115.64	85	115.25	98
6	120.89	95	121.47	93	120.21	95
1	132.15	44	133.23	36	131.62	67
4	144.16	51	145.76	36	144.68	73
3	146.55	37	148.17	25	147.34	60
γ	178.88	40	174.26	18	173.77	61

¹H (chloroform)

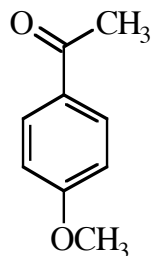
Atom	H Shifts	Mult	J
α	2.64	t	7.4
β	2.88	t	7.4
OMe	3.84	s	
2	6.71	m	
5	6.82	d	7.6
6	6.69	m	

Notes:

J. Obst
35mg

Compound Number 36

¹³C



4-Methoxyacetophenone
4-methoxyacetophenone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.28	30	26.33	31	26.29	34
OMe	55.43	60	55.85	47	55.44	50
3	113.68	86	114.45	95	113.75	100
5	113.68	86	114.45	95	113.75	100
1	130.35	15	131.28	12	129.89	18
2	130.55	100	131.18	100	130.40	97
6	130.55	100	131.18	100	130.40	97
4	163.48	11	164.31	11	163.06	20
α	196.62	12	196.23	8	196.14	14

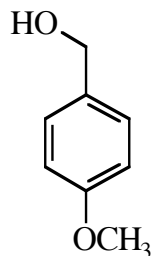
¹H (chloroform)

Atom	H Shifts	Mult	J
β	2.53	s	
OMe	3.85	s	
3,5	6.90	m	8.8
2,6	7.90	m	8.8

Notes:

Aldrich
57mg

Compound Number 37



p-Methoxybenzyl alcohol
4-methoxybenzyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.23	49	55.39	58	54.94	56
α	64.68	35	64.34	45	62.59	46
3	113.87	100	114.27	100	113.40	100
5	113.87	100	114.27	100	113.40	100
2	128.56	97	128.82	92	127.86	99
6	128.56	97	128.82	92	127.86	99
1	133.21	16	135.23	13	134.49	27
4	159.05	13	159.64	12	158.14	19

¹H (chloroform)

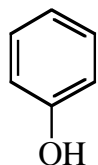
Atom	H Shifts	Mult	J
OMe	3.75	s	
α	4.51	s	
3,5	6.86	m	8.7
2,6	7.20	m	8.7

Notes:

Aldrich
65mg

Compound Number 38

¹³C



Phenol
phenol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3	115.41	100	116.03	100	115.18	100
5	115.41	100	116.03	100	115.18	100
1	120.89	47	120.13	54	118.70	49
2	129.71	85	130.16	94	129.26	89
6	129.71	85	130.16	94	129.26	89
4	155.25	18	158.16	15	157.29	23

¹H (chloroform)

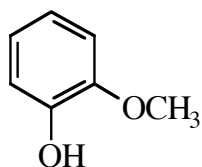
Atom	H Shifts	Mult	J
3,5	6.84	m	
1	6.93	m	
2,6	7.22	m	

Notes:

Aldrich JR 85-11
54mg

Compound Number 39

¹³C



Guaiacol
2-methoxyphenol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	100	56.16	94	55.47	99
2	110.81	95	112.48	99	112.30	97
5	114.60	83	115.84	94	115.51	85
1	120.15	94	120.39	100	119.09	91
6	121.47	85	121.94	92	120.83	100
3	145.70	21	147.48	21	146.52	49
4	146.63	17	148.33	19	147.59	37

¹H (chloroform)

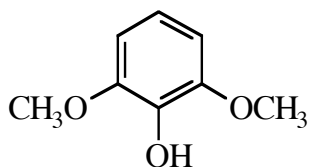
Atom	H Shifts	Mult	J
OMe	3.83	s	
OH	5.72	s	

Notes:

Aldrich JR A85.12
54mg

Compound Number 40

¹³C



Syringol
2,6-dimethoxyphenol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.27	100	56.55	100	55.89	100
OMe	56.27	100	56.55	100	55.89	100
2	105.03	100	106.57	100	105.70	95
6	105.03	100	106.57	100	105.70	95
1	119.06	49	119.16	44	118.06	42
4	134.97	12	137.08	8	135.70	21
3	147.31	23	148.86	16	148.16	39
5	147.31	23	148.86	16	148.16	39

¹H (chloroform)

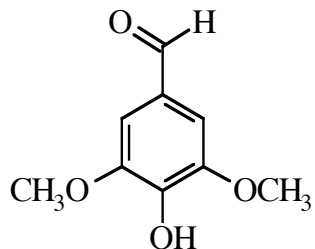
Atom	H Shifts	Mult	J
OMe	3.86	s	
OMe	3.86	s	
2,6	6.56	d	8.1
1	6.78	t	8.1

Notes:

Aldrich JR A 85.13
56mg

Compound Number 41

¹³C



Syringaldehyde

3,5-dimethoxy-4-hydroxybenzaldehyde

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.48	100	56.64	100	56.02	100
OMe	56.48	100	56.64	100	56.02	100
2	106.81	80	107.74	80	107.05	67
6	106.81	80	107.74	80	107.05	67
1	128.34	24	129.02	19	127.14	34
4	141.03	20	142.92	15	142.11	28
3	147.44	30	148.94	25	148.09	56
5	147.44	30	148.94	25	148.09	56
α	190.79	52	191.05	45	190.99	38

¹H (chloroform)

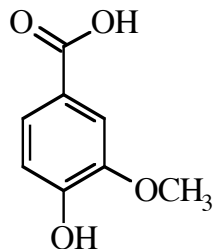
Atom	H Shifts	Mult	J
OMe	3.95	s	
2,6	7.15	s	
α	9.81	s	
acetone			
OMe	3.91	s	
2,6	7.23	s	
α	9.81	s	
OH	8.20	bs	

Notes:

J. Ralph JRA87.13
62mg
Poor solubility

Compound Number 42

¹³C



Vanillic acid

4-hydroxy-3-methoxy benzoic acid

¹H (chloroform)

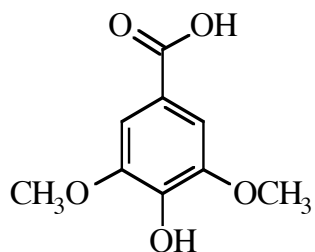
Atom	H Shifts	Mult	J
OMe	3.96	s	
2	7.59	d	1.9
5	6.97	d	8.3
6	7.72	dd	8.3, 1.9

Notes:

J. Ralph JRA89.12
55mg
not very soluble in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.28	95	55.50	100
2			113.46	87	112.73	83
5			115.43	87	115.00	84
1			122.70	33	121.62	52
6			124.90	100	123.46	83
3			147.96	31	147.17	71
4			152.03	28	151.05	69
α			167.84	33	167.16	53

Compound Number 43



Syringic acid
3,5-dimethoxy-4-hydroxybenzoic acid

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.66	98	55.92	100
OMe			56.66	98	55.92	100
2			108.20	100	106.85	82
6			108.20	100	106.85	82
1			121.40	19	120.32	29
4			141.61	14	140.17	43
3			148.30	29	147.37	81
5			148.30	29	147.37	81
α			167.68	19	167.14	38

¹H (chloroform)

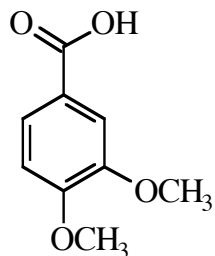
Atom	H Shifts	Mult	J
OMe	3.96	s	
2,6	7.40	s	

Notes:

J. Ralph JRA 89-13
55mg not very soluble in CDCl₃

Compound Number 44

¹³C



Veratric acid
3,4-dimethoxybenzoic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.02	100	56.08	100	55.41	100
OMe	56.06	86	56.12	91	55.58	93
2	110.36	87	111.64	81	110.93	85
5	112.38	87	113.34	72	111.93	73
1	121.77	46	123.64	25	122.98	43
6	124.61	94	124.42	78	123.16	85
3	148.72	56	149.89	22	148.30	54
4	153.78	46	154.37	19	152.60	42
α	172.08	50	167.53	28	167.08	55

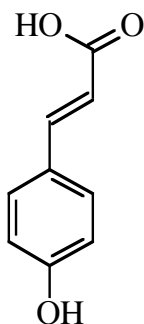
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.94	s	
OMe	3.95	s	
2	7.60	d	1.9
5	6.92	d	8.5
6	7.78	dd	8.5, 1.9

Notes:

J. Ralph JRA 89-14
55mg

Compound Number 45

¹³C*trans*

p-Coumaric acid
4-hydroxycinnamic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			115.51	45	115.30	38
3			116.66	100	115.72	100
5			116.66	100	115.72	100
1			126.95	22	125.24	34
2			130.90	91	129.98	99
6			130.90	91	129.98	99
α			145.95	45	144.11	43
4			160.49	26	159.54	43
γ			169.03	19	167.90	39

¹H (DMSO)

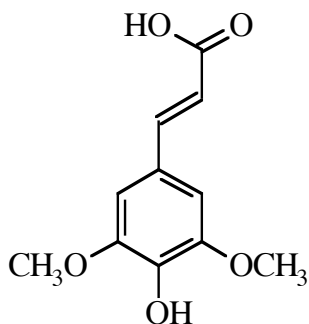
Atom	H Shifts	Mult	J
α	7.54	d	16.0
3,5	6.83	d	8.6
2,6	7.53	d	8.6
β	6.32	d	16.0

Notes:

Fluka
60mg
*not soluble in CDCl₃

Compound Number 46

¹³C



trans

Sinapinic acid

3,5-dimethoxy-4-hydroxycinnamic acid

¹H (DMSO)

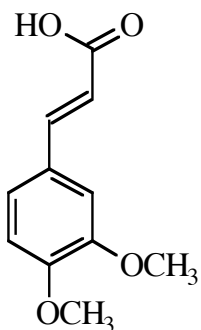
Atom	H Shifts	Mult	J
OMe	3.83	s	
2,6	7.00	s	
α	7.50	d	15.9
β	6.44	d	15.9

Notes:

Lancaster Synthesis
60mg *not very soluble in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.68	100	56.04	100
OMe			56.68	100	56.04	100
2			106.84	100	106.04	74
6			106.84	100	106.04	74
β			116.20	50	116.03	37
1			126.19	22	124.59	38
4			139.43	22	138.05	38
α			146.23	58	144.74	39
3			148.90	44	148.00	79
5			148.90	44	148.00	79
γ			168.26	28	167.90	45

Compound Number 47



trans

3,4-Dimethoxycinnamic acid
3,4-dimethoxycinnamic acid

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.92	98	56.08	90	55.49	94
OMe	55.99	92	56.13	100	55.56	100
2	109.88	94	111.20	84	110.35	74
5	111.09	96	112.40	82	111.50	71
β	114.94	94	116.60	80	116.68	75
6	123.10	100	123.43	94	122.53	76
1	127.08	72	128.31	39	127.05	72
α	146.95	91	145.64	90	144.08	71
3	149.31	53	150.61	29	148.97	68
4	151.56	47	152.48	27	150.77	55
γ	172.53	77	168.11	27	167.83	71

¹H (chloroform)

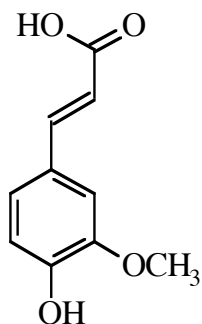
Atom	H Shifts	Mult	J
OMe	3.92	s	
OMe	3.92	s	
2	7.08	d	2.0
5	6.88	d	8.3
6	7.14	dd	8.3, 2.0
α	7.73	d	15.9
β	6.33	d	15.9

Notes:

K & K Labs
60mg

Compound Number 48

¹³C



trans

Ferulic acid
4-hydroxy-3-methoxycinnamic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.28	98	55.64	100
2			111.30	95	111.14	74
β			115.77	87	115.52	77
5			116.00	90	115.60	73
6			123.80	98	122.72	76
1			127.38	51	125.76	62
α			146.16	100	144.44	71
3			148.64	46	147.87	79
4			149.97	51	149.04	81
γ			168.88	60	167.93	76

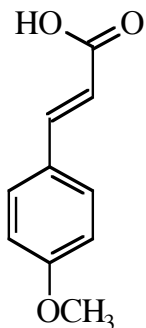
¹H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.84	s	
2	7.29	d	1.9
5	6.83	d	8.2
6	7.10	dd	8.2,1.9
α	7.53	d	15.9
β	6.39	d	15.9

Notes:

Aldrich
60mg not very soluble in CDCl₃
Note: .0238 was run in d₄-MeOH.
56.44, 111.71, 115.89, 116.46, 123.94
127.77, 146.89, 149.30, 150.43, 170.93

Compound Number 49



trans

4-Methoxycinnamic acid

4-methoxycinnamic acid

¹³C

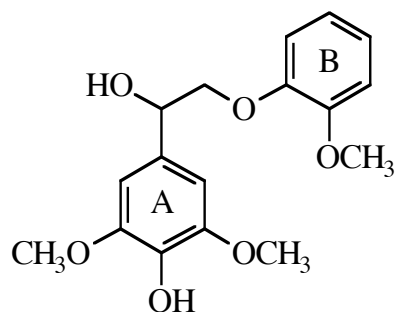
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			55.68	51	55.22	52
3			115.14	100	114.30	97
5			115.14	100	114.30	97
β			116.52	44	116.51	41
1			128.02	18	126.82	29
2			130.58	98	129.84	100
6			130.58	98	129.84	100
α			145.19	53	143.65	42
4			162.41	16	160.90	28
γ			168.11	22	167.78	35

¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.85	s	
3,5	6.92	m	8.8
α	7.75	d	15.9
2,6	7.51	m	8.8
β	6.32	d	15.9

Notes:

Aldrich
66mg not CDCl₃ soluble

Syringylglycol- β -guaiacyl ether

1-(3,5-dimethoxy-4-hydroxyphenyl)-2-(2-methoxyphenoxy) ethanol

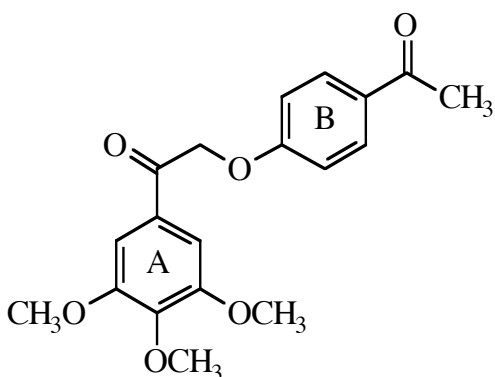
¹H (chloroform)

Atom	H Shifts	Mult	J
B OMe	3.85	s	
A OMe	3.87	s	
α	5.00	dd	9.9, 3.0
β 1	3.94	t	9.9
β 2	4.14	dd	9.9, 3.0
A2,6	6.66	s	

Notes:S. Ralph SG 100mg
33mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	55.84	50	56.24	49	55.41	52
A OMe	56.32	100	56.58	100	55.81	100
A OMe	56.32	100	56.58	100	55.81	100
α	72.47	54	72.85	51	70.97	47
β	76.39	48	76.15	45	73.98	38
A2	103.11	96	104.79	84	103.73	79
A6	103.11	96	104.79	84	103.73	79
B2	112.06	52	113.44	45	112.25	42
B5	115.96	50	115.52	38	113.40	38
B6	121.12	51	121.76	55	120.66	48
B1	122.50	56	122.29	55	120.79	47
A1	130.84	36	133.07	27	132.54	40
A4	134.46	31	136.13	24	134.51	36
A3	147.12	56	148.46	51	147.57	77
A5	147.12	56	148.46	51	147.57	77
B3	148.06	27	149.62	22	148.11	33
B4	150.11	23	150.84	18	148.94	37

Compound Number 51



2-(4-Acetylphenoxy)-1-(3,4,5-trimethoxyphenyl)ethanone

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	2.54	s	
A3,5 OMe	3.92	s	
A4 OMe	3.94	s	
β	5.32	s	
A2,6	7.26	s	
B3,5	6.96	m	8.9
B2,6	7.92	m	8.9

Notes:

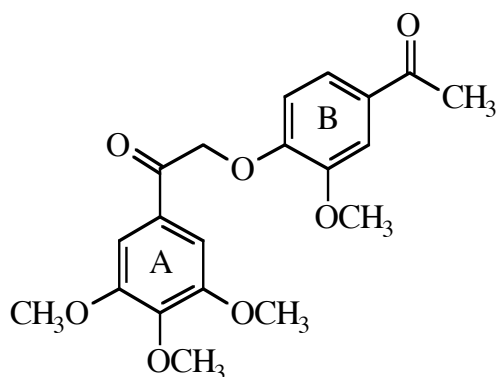
L. Landucci LLL XVII 9A
26mg contains trace impurity

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.34	46	26.37	43	26.34	60
A3 OMe	56.42	86	56.68	88	56.12	100
A5 OMe	56.42	86	56.68	88	56.12	100
A4 OMe	61.00	35	60.72	33	60.12	52
β	70.62	35	71.10	37	70.11	37
A2	105.84	81	106.60	90	105.47	87
A6	105.84	81	106.60	90	105.47	87
B3	114.44	94	115.27	96	114.45	97
B5	114.44	94	115.27	96	114.45	97
A1	129.36	26	130.72	20	129.38	38
B2	130.62	100	131.11	100	130.26	92
B6	130.62	100	131.11	100	130.26	92
B1	131.16	26	131.70	20	130.11	37
A4	143.65	12	144.27	10	142.41	25
A3	153.32	57	154.41	41	152.88	77
A5	153.32	57	154.41	41	152.88	77
B4	161.77	28	163.09	22	161.79	40
α	192.49	32	193.05	24	192.70	37
B α	196.55	19	196.23	16	196.12	35

Compound Number 52

¹³C



2-(4-Acetyl-2-methoxyphenoxy)-1-(3,4,5-trimethoxyphenyl) ethanone

¹H (chloroform)

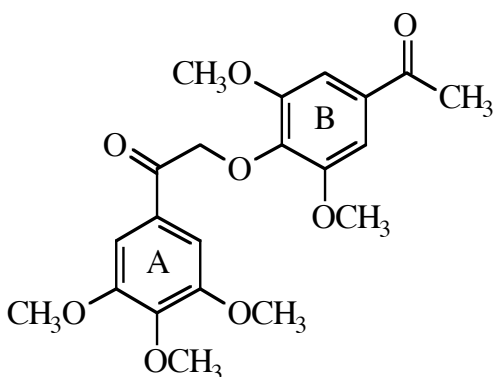
Atom	H Shifts	Mult	J
B β	2.54	s	
B OMe	3.95	s	
A3,5 OMe	3.92	s	
A4 OMe	3.93	s	
β	5.39	s	
A2,6	7.47	s	
B2	7.63	d	1.9
B5	6.80	d	8.3
B6	7.52	dd	8.3, 1.9

Notes:

L. Landucci LLL XVII 9c
28.5mg trace impurity present

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.23	55	26.30	53	26.25	49
B OMe	56.01	53	56.28	51	55.58	56
A3 OMe	56.32	100	56.64	100	56.12	100
A5 OMe	56.32	100	56.64	100	56.12	100
A4 OMe	60.96	47	60.70	33	60.13	49
β	71.57	32	71.84	42	70.48	28
A2	105.79	92	106.70	93	105.57	74
A6	105.79	92	106.70	93	105.57	74
B2	110.85	43	112.10	45	110.84	36
B5	112.27	43	113.40	48	112.24	38
B6	122.87	53	123.39	52	122.56	41
A1	129.33	28	130.74	25	129.40	36
B1	131.48	33	131.98	21	130.24	36
A4	143.44	17	144.21	12	142.45	23
B3	149.31	30	150.23	21	148.52	44
B4	151.49	27	152.98	18	151.61	44
A3	153.23	55	154.34	45	152.85	85
A5	153.23	55	154.34	45	152.85	85
α	192.68	25	193.34	22	192.76	36
Bα	196.64	25	196.32	19	196.19	36

Compound Number 53



2-(4-Acetyl-2,6-dimethoxyphenoxy)-1-(3,4,5-trimethoxyphenyl)
ethanone

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	2.59	s	
A3,5 OMe	3.92	s	
B3,5 OMe	3.88	s	
A4 OMe	3.91	s	
β	5.29	s	
A2,6	7.31	s	
B2,6	7.22	s	

Notes:

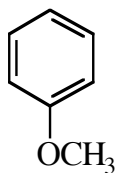
L. Landucci LLL XVII 9d
37mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.43	26	26.55	43	26.52	47
A3 OMe	56.33	100	56.61	100	56.04	100
A5 OMe	56.33	100	56.61	100	56.04	100
B3 OMe	56.33	100	56.66	75	56.09	95
B5 OMe	56.33	100	56.66	75	56.09	95
A4 OMe	60.94	22	60.67	32	60.08	43
β	74.82	22	75.43	45	74.15	28
A2	105.87	100	106.81	86	105.52	70
A6	105.87	100	106.81	86	105.52	70
B2	105.87	100	106.95	91	105.84	70
B6	105.87	100	106.95	91	105.84	70
A1	129.99	15	131.21	20	129.69	30
B1	132.67	15	133.62	19	132.05	33
B4	140.75	10	141.68	13	140.24	27
A4	142.94	8	143.88	10	142.15	20
B3	152.53	33	153.61	38	152.04	65
B5	152.53	33	153.61	38	152.04	65
A3	153.12	33	154.23	36	152.80	70
A5	153.12	33	154.23	36	152.80	70
α	193.28	15	193.81	22	193.11	35
B α	196.71	14	196.70	19	196.61	28

Compound Number 54

¹³C



Anisole
Methoxybenzene

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.08	70	55.28	73	54.86	54
3	113.92	100	114.62	98	113.84	99
5	113.92	100	114.62	98	113.84	99
1	120.64	61	121.19	64	120.39	43
2	129.52	100	130.14	100	129.39	100
6	129.52	100	130.14	100	129.39	100
4	159.60	12	160.63	14	159.24	10

¹H (chloroform)

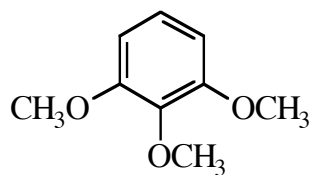
Atom	H Shifts	Mult	J
OMe	3.77	s	
3,5,1	6.90	m	
2,6	7.27	m	

Notes:

Aldrich
40mg

Compound Number 55

¹³C



1,2,3-trimethoxybenzene

¹H (chloroform)

Atom	H Shifts	Mult	J
3,5 OMe	3.85	s	
4 OMe	3.85	s	
2,6	6.57	d	8.3
1	6.98	t	8.3

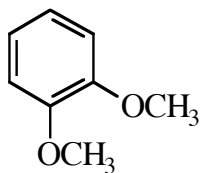
Notes:

Aldrich
40mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	56.09	100	56.35	91	55.77	100
5 OMe	56.09	100	56.35	91	55.77	100
4 OMe	60.80	38	60.43	38	59.90	48
2	105.34	88	106.54	100	105.56	95
6	105.34	88	106.54	100	105.56	95
1	123.61	51	124.30	42	123.57	49
4	138.27	8	139.52	8	137.69	10
3	153.56	23	154.67	19	153.16	33
5	153.56	23	154.67	19	153.16	33

Compound Number 56

¹³C



Veratrole
1,2-dimethoxybenzene

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.80	100	56.01	100	55.38	100
OMe	55.80	100	56.01	100	55.38	100
2	111.44	76	113.02	89	111.98	99
5	111.44	76	113.02	89	111.98	99
1	120.85	83	121.60	86	120.67	100
6	120.85	83	121.60	86	120.67	100
3	149.08	16	150.50	17	148.88	29
4	149.08	16	150.50	17	148.88	29

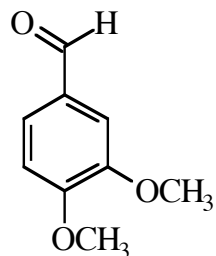
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.86	s	
2,5	6.89	m	
1,6	6.89	m	

Notes:

Aldrich
40mg

Compound Number 57



Veratraldehyde
3,4-dimethoxybenzaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.00	100	56.07	100	55.47	100
OMe	56.17	93	56.29	91	55.82	85
2	109.05	65	110.31	80	109.46	66
5	110.46	88	111.85	91	111.22	83
6	126.77	79	126.72	94	126.00	79
1	130.19	37	131.21	27	129.65	49
3	149.66	21	150.77	20	149.17	38
4	154.51	25	155.63	16	154.18	37
α	190.78	70	191.16	79	191.21	84

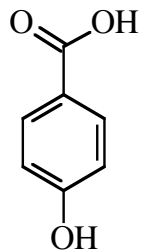
¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.94	s	
OMe	3.97	s	
2	7.41	d	1.8
5	6.98	d	8.2
6	7.46	dd	8.2, 1.8
α	9.85	s	

Notes:

Aldrich
40mg

Compound Number 58



4-hydroxybenzoic acid

¹H (DMSO)

Atom	H Shifts	Mult	J
3,5	6.85	m	8.8
2,6	7.83	m	8.8

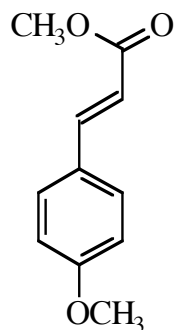
Notes:

Aldrich
40mg *CDCl₃ insoluble

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3			115.99	94	115.06	100
5			115.99	94	115.06	100
1			122.43	14	121.35	27
2			132.78	100	131.47	87
6			132.78	100	131.47	87
4			162.65	21	161.55	39
α			168.24	20	167.11	33

Compound Number 59



methyl (4-methoxy)cinnamate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.50	45	51.58	43	51.23	37
4 OMe	55.32	43	55.70	47	55.28	47
3	114.34	98	115.14	98	114.36	100
5	114.34	98	115.14	98	114.36	100
β	115.30	41	115.96	43	115.09	51
1	127.14	21	127.84	17	126.65	36
2	129.71	100	130.63	100	130.08	89
6	129.71	100	130.63	100	130.08	89
α	144.49	49	145.04	45	144.28	45
4	161.42	17	162.42	14	161.17	32
γ	167.68	18	167.81	15	166.90	23

¹H (chloroform)

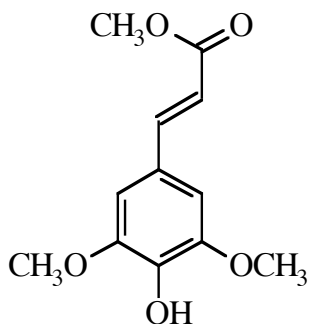
Atom	H Shifts	Mult	J
γ OMe	3.79	s	
4 OMe	3.82	s	
2,6	7.46	m	8.8
α	7.65	d	16.0
3,5	6.89	m	8.8
β	6.31	d	16.0

Notes:

J. Ralph PS 137x1
95mg

Compound Number 60

¹³C



trans

Methyl Sinapate

methyl (3,5-dimethoxy-4-hydroxy)cinnamate

¹H (chloroform)

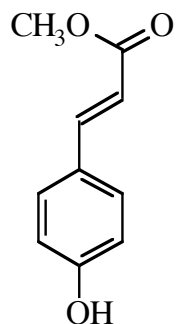
Atom	H Shifts	Mult	J
γ OMe	3.79	s	
3,5 OMe	3.90	s	
2,6	6.76	s	
α	7.60	d	15.9
β	6.30	d	15.9

Notes:

J. Ralph JRPS 135x1
52mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.60	45	51.46	24	51.13	51
3 OMe	56.34	100	56.68	88	56.06	100
5 OMe	56.34	100	56.68	88	56.06	100
2	105.17	86	106.83	100	106.26	85
6	105.17	86	106.83	100	106.26	85
β	115.50	47	115.73	47	114.58	42
1	125.85	30	126.08	22	124.34	43
4	137.30	28	139.46	19	138.36	37
α	145.15	52	145.99	38	145.32	43
3	147.29	53	148.88	43	148.00	82
5	147.29	53	148.88	43	148.00	82
γ	167.58	25	167.78	11	166.98	32

Compound Number 61



trans

Methyl p-Coumarate
methyl 4-hydroxycinnamate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.71	38	51.49	41	51.13	44
β	114.98	36	115.22	40	113.90	44
3	115.95	91	116.64	100	115.78	99
5	115.95	91	116.64	100	115.78	99
1	126.98	21	126.90	20	125.07	35
2	130.00	100	130.82	94	130.21	100
6	130.00	100	130.82	94	130.21	100
α	144.89	38	145.33	46	144.69	51
4	158.12	24	160.45	28	159.87	46
γ	168.18	14	167.87	14	166.99	30

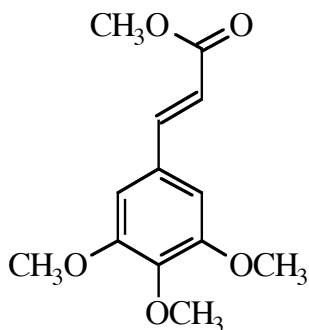
¹H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.80	s	
α	7.64	d	16.0
3,5	6.86	m	8.7
2,6	7.42	m	8.7
β	6.28	d	16.0

Notes:

J. Ralph JRPS 133.2x1
68mg

Compound Number 62

¹³C*trans*

methyl (3,4,5-trimethoxy)cinnamate

¹H (chloroform)

Atom	H Shifts	Mult	J
γ OMe	3.74	s	
3,5 OMe	3.82	s	
4 OMe	3.82	s	
2,6	6.70	s	
α	7.54	d	
β	6.29	d	15.9

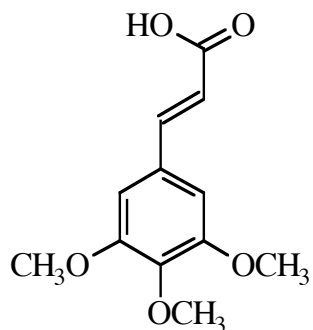
Notes:

J. Ralph JRPS 139x1
92mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.61	43	51.57	41	51.31	48
3 OMe	56.15	100	56.45	100	56.02	100
5 OMe	56.15	100	56.45	100	56.02	100
4 OMe	60.89	39	60.58	42	60.06	46
2	105.36	90	106.58	84	105.99	84
6	105.36	90	106.58	84	105.99	84
β	117.04	46	117.70	50	117.06	46
1	129.90	33	130.70	28	129.61	36
4	140.24	16	141.27	11	139.61	19
α	144.81	52	145.45	49	144.75	45
3	153.46	53	154.51	42	153.11	42
5	153.46	53	154.51	42	153.11	42
γ	167.29	25	167.51	22	166.78	34

Compound Number 63

¹³C



trans

3,4,5-trimethoxy cinnamic acid

¹H (chloroform)

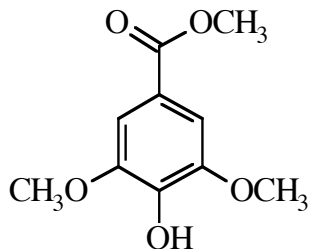
Atom	H Shifts	Mult	J
3,5 OMe	3.89	s	
4 OMe	3.89	s	
2,6	6.78	s	
α	7.70	d	15.9
β	6.36	d	15.9

Notes:

Aldrich
100mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	56.19	100	56.49	100	55.98	100
5 OMe	56.19	100	56.49	100	55.98	100
4 OMe	60.96	35	60.60	43	60.05	69
2	105.67	81	106.62	87	105.77	80
6	105.67	81	106.62	87	105.77	80
b	116.55	44	118.15	55	118.51	49
1	129.52	39	130.83	30	129.87	48
4	140.62	18	141.24	12	139.38	27
α	147.02	42	145.87	46	144.14	53
3	153.48	76	154.54	47	153.10	91
5	153.48	76	154.54	47	153.10	91
γ	172.46	32	168.33	28	167.72	52

Compound Number 64

¹³C

Syringic acid methyl ester
methyl (4-hydroxy-3,5-dimethoxy)benzoate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α OMe	52.07	47	52.11	47	51.78	50
3 OMe	56.41	100	56.67	98	56.04	100
5 OMe	56.41	100	56.67	98	56.04	100
2	106.80	99	107.87	100	106.82	82
6	106.80	99	107.87	100	106.82	82
1	120.96	24	121.07	22	119.28	34
4	139.49	27	141.65	25	140.72	37
3	146.78	54	148.33	46	147.58	66
5	146.78	54	148.33	46	147.58	66
α	166.92	18	167.16	15	166.10	29

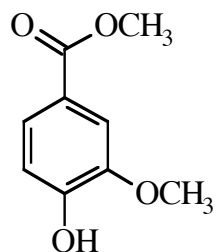
¹H (chloroform)

Atom	H Shifts	Mult	J
α OMe	3.89	s	
3,5 OMe	3.90	s	
2,6	7.31	s	

Notes:

J. Ralph JRPS 7x1
93.3mg

Compound Number 65



Vanillic acid methyl ester
methyl (3-methoxy-4-hydroxy)benzoate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α OMe	52.02	83	52.00	79	51.64	89
4 OMe	56.07	100	56.29	91	55.60	100
2	111.98	81	113.20	89	112.54	80
5	114.33	91	115.58	89	115.19	96
1	122.13	37	122.43	38	120.52	53
6	124.23	98	124.53	100	123.44	88
3	146.41	34	148.08	29	147.36	64
4	150.29	45	152.14	46	151.53	78
α	167.12	24	167.15	23	166.06	46

¹H (chloroform)

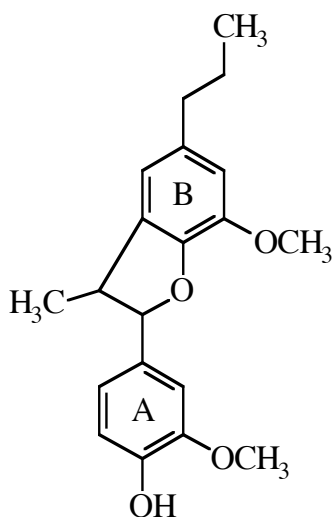
Atom	H Shifts	Mult	J
α OMe	3.88	s	
4 OMe	3.88	s	
2	7.53	d	1.8
5	6.93	d	8.3
6	7.62	dd	8.3, 1.8

Notes:

J. Ralph JRPS 3.1
101mg

Compound Number 66

¹³C



Dihydrodehydrodiisoeugenol

2-Methoxy-4-(7-methoxy-3-methyl-5-propyl-2,3-dihydro benzofuran-2-yl)phenol

¹H (chloroform)

Atom	H Shifts	Mult	J
Bγ	0.96	t	7.3
γ	1.36	d	6.8
Bβ	1.64	m	7.3
Bα	2.55	t	7.3
β	3.44	dd	9.6,6.8
OMe	3.86	s	
OMe	3.87	s	
α	5.07	d	9.6
B2	6.59	s	
B6	6.62	s	
A5	6.89	m	
A6	6.89	m	
A2	6.99	s	

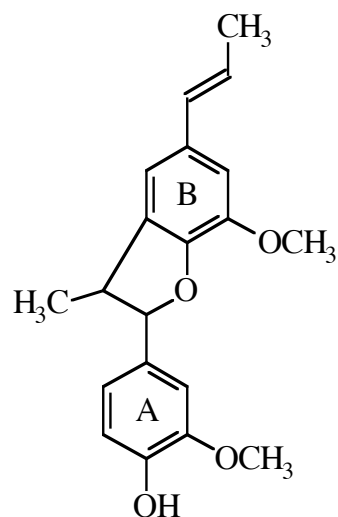
Notes:

J. Ralph JRL 109x2
44mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bγ	13.90	80	14.08	88	13.65	85
γ	17.44	72	17.83	88	17.17	81
Bβ	25.07	84	25.74	97	24.52	94
Bα	38.09	71	38.54	79	37.27	77
β	45.81	85	46.43	91	44.71	74
OMe	55.99	100	56.28	100	55.59	100
OMe	55.99	100	56.41	97	55.64	100
α	93.61	66	93.80	94	92.37	70
A2	109.04	72	110.69	85	110.56	66
B2	111.91	65	113.63	76	112.24	57
A5	114.11	63	115.55	76	115.20	66
B6	115.46	74	116.39	85	115.35	68
A6	119.94	76	120.22	91	119.25	74
A1	132.28	52	133.03	53	130.82	77
B5	132.98	45	134.12	44	132.91	68
B1	136.29	45	136.62	59	135.32	64
B4	143.86	44	144.78	41	143.30	64
A4	145.41	24	146.59	32	144.93	45
B3	145.77	43	147.52	44	146.67	77
A3	146.71	35	148.39	38	147.59	77

Compound Number 67

¹³C



Dehydrodiisoeugenol

2-Methoxy-4-(7-methoxy-3-methyl-5-propenyl-2,3-dihydro benzofuran-2-yl) phenol

¹H (chloroform)

Atom	H Shifts	Mult	J
γ	1.37	d	6.8
B γ	1.87	dd	5.3, 1.2
β	3.44	dt	9.4, 6.8
OMe	3.85	s	
OMe	3.88	s	
α	5.09	d	9.4
B β	6.11	dq	15.8, 5.3
B α	6.36	dq	15.8, 1.2
B2	6.76	s	
B6	6.78	s	
A5	6.88	m	
A6	6.80	m	
A2	6.97	s	

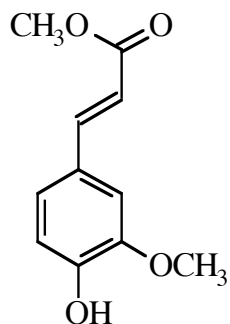
Notes:

J. Ralph JRKM 67-1
150mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.60	43	17.86	89	17.25	72
B γ	18.34	41	18.42	93	18.06	78
β	45.62	52	46.21	100	44.51	60
OMe	55.97	100	56.25	93	55.59	100
OMe	55.97	100	56.33	81	55.61	95
α	93.76	47	93.96	84	92.55	60
A2	108.97	48	110.66	86	109.74	50
B2	109.40	41	111.06	77	110.58	58
A5	113.36	46	114.30	87	113.29	58
B6	114.14	47	115.55	84	115.23	55
A6	119.91	47	120.21	93	119.25	60
B β	123.41	47	123.22	97	122.60	60
B α	130.98	51	132.05	93	130.68	52
A1	132.11	26	132.81	67	130.93	65
B5	132.22	34	132.83	61	131.39	62
B1	133.30	32	134.43	54	133.30	65
B4	144.15	28	145.03	26	143.61	60
A4	145.82	31	147.53	53	146.07	45
B3	146.62	30	147.72	20	146.71	55
A3	146.71	32	148.36	44	147.59	60

Compound Number 68

¹³C



trans

Methyl ferulate
methyl 4-hydroxy-3-methoxycinnamate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.60	80	51.47	86	51.12	90
3 OMe	55.93	90	56.32	100	55.68	100
2	109.56	92	111.34	98	111.32	71
β	114.86	96	115.51	100	114.19	72
5	115.09	85	116.03	98	115.54	81
6	123.00	100	123.78	88	122.99	81
1	126.92	58	127.38	50	125.56	66
α	145.03	92	145.65	96	145.02	78
3	146.89	51	148.66	44	147.92	65
4	148.11	58	149.99	50	149.38	72
γ	167.80	47	167.82	40	167.02	62

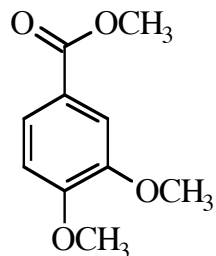
¹H (chloroform)

Atom	H Shifts	Mult	J
3 OMe	3.79	s	
γ OMe	3.89	s	
2	7.31	d	1.8
α	7.61	d	15.9
5	6.90	d	8.1
6	7.05	dd	8.1, 1.8
β	6.28	d	15.9

Notes:

J. Ralph JRKM 85.1
54mg

Compound Number 69



Methylveratrate
methyl 3,4-dimethoxybenzoate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α OMe	51.93	45	52.00	68	51.79	86
OMe	55.99	100	56.10	100	55.50	100
OMe	55.99	100	56.10	100	55.66	94
2	110.32	45	111.65	75	111.07	86
5	112.05	46	112.99	70	111.70	82
1	122.71	16	123.37	25	121.84	51
6	123.58	49	124.08	77	123.13	93
3	148.65	17	149.90	23	148.46	51
4	153.00	16	154.38	19	152.98	43
α	166.82	14	166.92	19	165.96	35

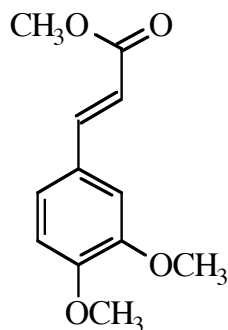
¹H (chloroform)

Atom	H Shifts	Mult	J
α OMe	3.89	s	
OMe	3.93	s	
OMe	3.93	s	
2	7.54	d	1.9
5	6.88	d	8.4
6	7.67	dd	8.4, 1.9

Notes:

J. Ralph JRPS 5.1
55mg

Compound Number 70

¹³C*trans*

methyl 3,4-dimethoxycinnamate

¹H (chloroform)

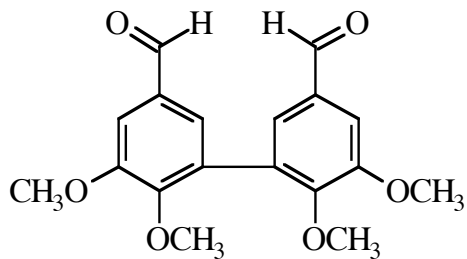
Atom	H Shifts	Mult	J
γ OMe	3.79	s	
OMe	3.90	s	
OMe	3.90	s	
2	7.04	d	1.9
5	6.86	d	8.2
6	7.09	dd	8.2, 1.9
α	7.63	d	15.9
β	6.30	d	15.9

Notes:

J. Ralph JRPS 21x1
52mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ OMe	51.55	79	51.50	77	51.20	96
3 OMe	55.89	92	56.07	100	55.52	97
4 OMe	55.96	100	56.12	96	55.59	100
2	109.77	79	111.23	88	110.49	77
5	111.12	84	112.38	88	111.51	83
β	115.53	78	116.15	89	115.26	83
6	122.56	81	123.46	93	122.81	89
1	127.41	56	128.19	43	126.85	68
α	144.74	85	145.41	88	144.67	80
3	149.27	40	150.59	32	149.00	61
4	151.18	41	152.54	32	151.02	58
γ	167.58	49	167.71	39	166.92	61

Compound Number 71



Dehydrodiveratraldehyde

5,6,5',6'-Tetramethoxybiphenyl-3,3'-dicarbaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe	56.05	100	56.40	90	55.94	100
4 OMe	60.95	79	60.98	73	60.36	93
2	110.43	86	111.92	90	111.39	63
6	127.51	83	127.15	97	125.97	74
5	131.76	48	133.01	33	131.52	58
1	132.06	60	133.21	47	131.76	82
4	152.36	35	153.02	23	151.50	44
3	153.37	50	154.27	40	152.82	72
α	190.87	100	191.51	100	191.60	75

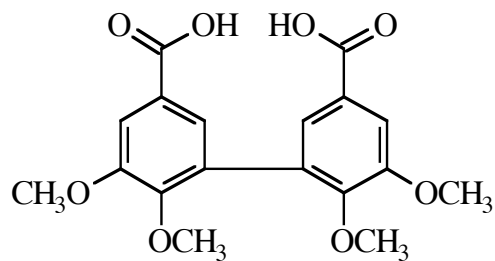
¹H (chloroform)

Atom	H Shifts	Mult	J
4 OMe	3.77	s	
3 OMe	3.99	s	
2	7.51	d	1.9
6	7.40	d	1.9
α	9.91	s	
acetone			
4 OMe	3.75	s	
3 OMe	4.01	s	
2	7.58	d	
6	7.44	d	
α	9.96	s	

Notes:

Obst
 38 mg contains impurity
 As this compound has a plane of symmetry
 The shifts for the other half are identical.

Compound Number 72

¹³C

Dehydrodiveratric acid

5,6,5',6'-Tetramethoxybiphenyl-3,3'-dicarboxylic acid

¹H (DMSO)

Atom	H Shifts	Mult	J
3 OMe	3.64	s	
4 OMe	3.93	s	
2	7.42	d	1.9
6	7.71	d	1.9

Notes:

Obst 35 mg

* only soluble in DMSO

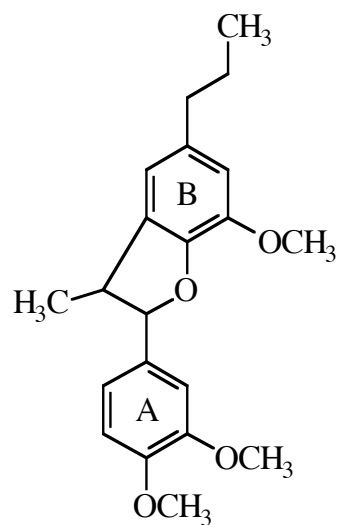
* aldehyde impurity

As this compound has a plane of symmetry

The shifts for the other half are identical.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3 OMe					55.81	98
4 OMe					60.19	100
2					112.91	48
6					124.10	65
1					125.84	73
5					131.27	62
4					150.04	67
3					152.11	94
α					166.72	60

Compound Number 73



2-(3,4-Dimethoxyphenyl)-7-methoxy-3-methyl-5-propyl-2,3-dihydrobenzofuran

¹H (chloroform)

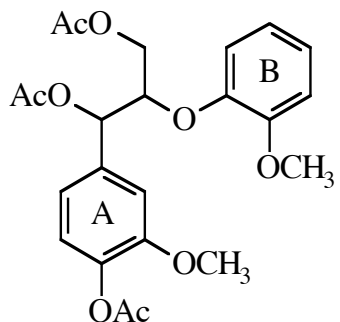
Atom	H Shifts	Mult	J
B γ	0.96	t	7.3
γ	1.37	d	6.8
B β	1.64	h	7.3
B α	2.55	t	7.3
β	4.45	dq	9.6, 6.8
OMe	3.86	s	
OMe	3.87	s	
OMe	3.88	s	
α	5.09	d	9.6
B2	6.59	s	
B6	6.62	s	
A5	6.83	d	8.2
A6	6.96	dd	8.2, 1.9
A2	7.00	dd	1.9

Notes:

Obst
45mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.90	65	14.08	55	13.66	88
γ	17.47	63	17.90	55	17.18	75
B β	25.06	67	25.74	63	24.53	81
B α	38.09	63	38.53	62	37.28	69
β	45.77	60	46.47	55	44.87	68
OMe	55.92	100	56.12	100	55.47	100
OMe	55.92	100	56.12	100	55.47	100
OMe	56.00	62	56.41	60	55.66	76
α	93.48	61	93.58	62	92.11	62
A2	109.62	57	111.03	53	110.01	60
A5	110.88	58	112.57	58	111.58	60
B2	111.90	56	113.62	53	112.28	51
B6	115.44	52	116.40	55	115.37	60
A6	119.22	63	119.68	55	118.85	64
B5	132.90	25	134.07	33	132.49	55
A1	132.95	44	134.25	33	132.86	57
B1	136.30	38	136.69	32	135.46	61
B4	143.87	32	144.80	28	143.34	54
B3	145.42	25	146.57	18	144.92	37
A3	149.10	33	150.40	22	148.83	93
A4	149.16	32	150.49	23	148.83	93

*threo*Guaiacylglycerol- β -guaiacyl ether triacetate

1-(4-acetoxy-3-methoxyphenyl)-1,3-diacetoxy-2-(2-methoxyphenoxy)propane

¹H (chloroform)

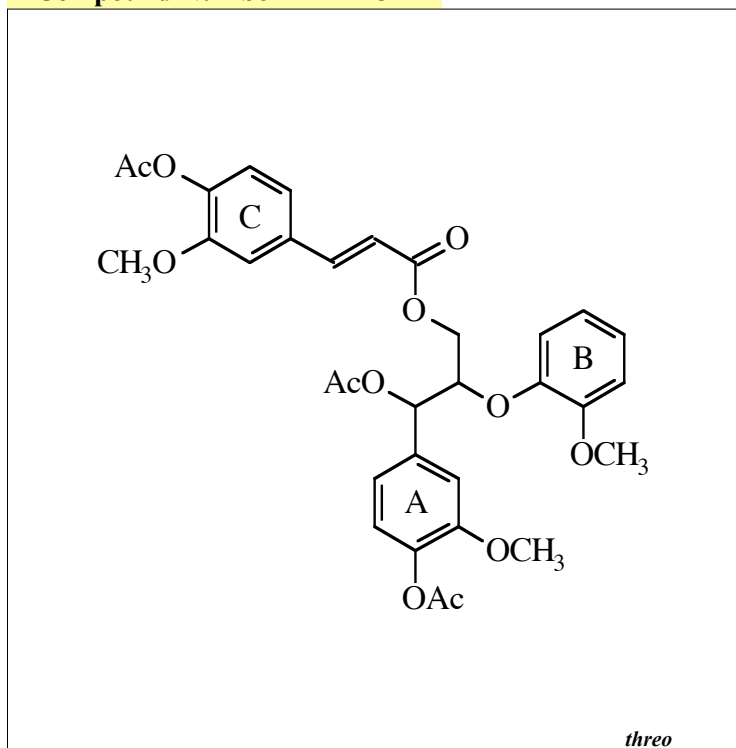
Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.05	s	
Ac Me	2.29	s	
OMe	3.80	s	
OMe	3.81	s	
γ 1	4.06	dd	11.9, 5.7
γ 2	4.32	dd	11.9, 4.5
α	6.12	d	6.3
β	4.63	m	

Notes:R. Helm RFHSC
50mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.63	86	20.45	89	20.28	94
Ac Me	20.68	78	20.58	84	20.35	100
Ac Me	21.02	88	20.91	61	20.63	82
OMe	55.81	100	56.21	92	55.54	100
OMe	55.96	94	56.30	100	55.76	91
γ	63.09	75	63.58	79	62.47	52
α	74.52	86	75.37	87	74.28	67
β	80.26	87	80.68	87	79.05	67
A2	111.75	86	112.66	87	111.62	64
B2	112.58	90	113.76	79	112.75	76
B5	118.79	91	119.22	95	117.47	73
A6	119.58	84	120.27	95	119.36	64
B6	121.00	90	121.66	87	120.64	76
A5	122.79	78	123.52	79	122.57	58
B1	123.31	91	123.75	87	122.62	58
A1	135.35	68	136.66	61	135.40	79
A4	139.93	49	140.88	37	139.19	58
B4	147.96	54	149.05	37	147.54	61
B3	150.84	54	151.81	39	150.13	73
A3	151.12	55	152.18	47	150.67	73
A4 Ac C=O	168.71	48	168.83	34	168.31	58
α Ac C=O	169.65	49	169.94	39	169.30	61
γ Ac C=O	170.52	51	170.62	42	169.89	67

Compound Number 75

¹³C



3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (chloroform)

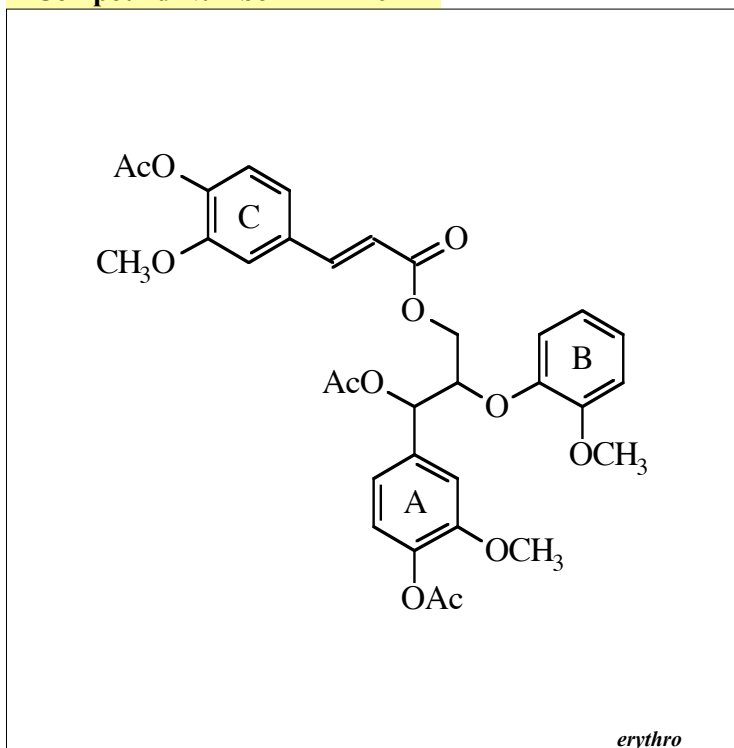
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
Ac Me	2.31	s	
Ac Me	2.07	s	
OMe	3.80	s	
OMe	3.80	s	
OMe	3.87	s	
γ1	4.20	dd	11.9, 5.2
γ2	4.42	dd	11.9, 4.2
β	4.70	m	
α	6.20	d	6.5
C β	6.35	d	15.9
C α	7.54	d	15.9

Notes:

R. Helm RFH101D1
 40mg
 Vinyl C's at 124.08 and 145.16 in acetone.
 In CDCl₃ 123.23 and 144.62

 Acetone ¹H data in J. Ag. Food Chem. 41(4)
 570-576, 1993

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	93	20.46	100	20.30	100
Ac Me	20.61	93	20.46	100	20.30	100
Ac Me	21.06	42	20.95	48	20.67	58
OMe	55.80	53	56.21	54	55.55	67
OMe	55.95	100	56.29	54	55.75	62
OMe	55.95	100	56.41	54	55.96	71
γ	63.35	28	63.94	39	62.87	21
α	74.64	35	75.54	39	74.44	33
β	80.51	37	80.85	41	79.20	33
C2	111.27	37	112.46	50	111.68	33
A2	111.74	35	112.70	43	111.86	46
B2	112.54	44	113.74	43	112.75	50
C β	117.58	35	118.62	48	117.53	54
B5	119.01	44	119.32	52	117.68	54
A6	119.55	40	120.29	43	119.38	33
B6	120.99	51	121.67	50	120.66	58
C6	121.44	44	122.25	46	121.62	46
A5	122.85	35	123.57	46	122.58	42
B1	123.23	49	123.78	48	122.67	38
C5	123.35	40	124.08	61	123.15	58
C1	133.16	30	134.09	30	132.81	46
A1	135.34	33	136.65	30	135.41	46
A4	139.93	26	140.91	26	139.21	50
C4	141.61	28	142.73	26	141.10	42
C α	144.62	42	145.16	48	144.30	42
B4	147.96	33	149.08	26	147.57	46
B3	150.93	33	151.87	26	150.16	46
A3	151.14	30	152.20	28	150.68	50
C3	151.42	40	152.64	35	151.13	54
C γ	166.24	28	166.62	35	165.74	50
Ac C=O	168.67	37	168.75	35	168.22	54
Ac C=O	168.70	33	168.82	26	168.29	50
Ac C=O	169.70	33	169.99	28	169.34	46

Compound Number 76
¹³C

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.32	s	
Ac Me	2.29	s	
Ac Me	2.10	s	
OMe	3.77	s	
OMe	3.82	s	
OMe	3.87	s	
γ1	4.44	dd	11.9, 4.2
γ2	4.53	dd	11.9, 5.3
β	4.75	m	
α	6.14	d	5.5
C β	6.35	d	16.0
C α	7.54	d	16.0

Notes:

R. Helm RFH101D2

30mg

Vinyl C's at 124.09 and 145.13 in acetone

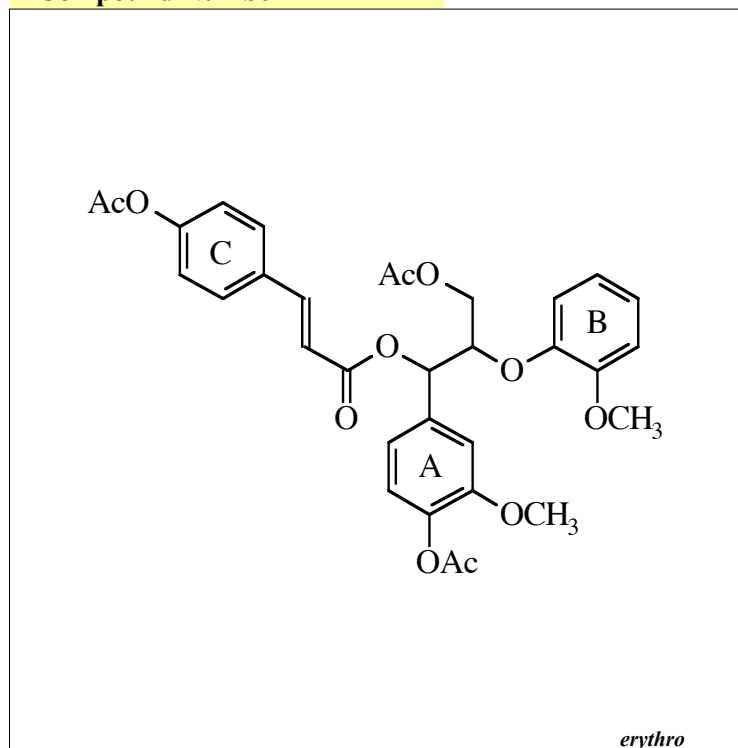
Acetone 1H data in J. Ag. Food Chem. 41(4)

570-576, 1993

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	70	20.46	100	20.32	100
Ac Me	20.64	70	20.46	100	20.32	100
Ac Me	21.05	41	20.90	42	20.66	44
OMe	55.81	48	56.22	48	55.60	76
OMe	55.96	100	56.30	56	55.73	42
OMe	55.96	100	56.41	62	55.97	62
γ	62.88	30	63.34	36	62.26	31
α	73.96	31	74.72	42	73.28	30
β	80.46	38	80.52	44	78.58	41
C2	111.31	38	112.47	46	111.72	23
A2	112.05	33	112.77	46	111.86	34
B2	112.63	39	113.80	46	112.91	58
C β	117.70	36	118.62	40	117.70	41
B5	119.74	75	119.97	50	118.08	54
A6	119.74	75	120.44	44	119.41	32
B6	121.00	45	121.65	48	120.67	54
C6	121.44	38	122.22	48	121.60	31
A5	122.60	38	123.37	44	122.50	44
B1	123.23	44	124.09	86	122.90	44
C5	123.66	42	124.09	86	123.16	55
C1	133.22	31	134.09	32	132.80	56
A1	135.53	34	136.71	38	135.37	52
A4	139.80	30	140.79	28	139.11	44
C4	141.58	20	142.74	20	141.11	49
C α	144.61	34	145.13	48	144.28	48
B4	147.23	33	148.30	30	146.70	61
B3	151.00	30	152.11	36	150.38	38
A3	151.20	34	152.11	32	150.58	61
C3	151.42	31	152.65	32	151.16	39
C γ	166.40	34	166.64	32	165.77	45
Ac C=O	168.68	31	168.75	32	168.20	34
Ac C=O	168.75	28	168.86	28	168.31	45
Ac C=O	169.50	23	169.89	28	169.20	35

Compound Number 77

¹³C



3-(4-Acetoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

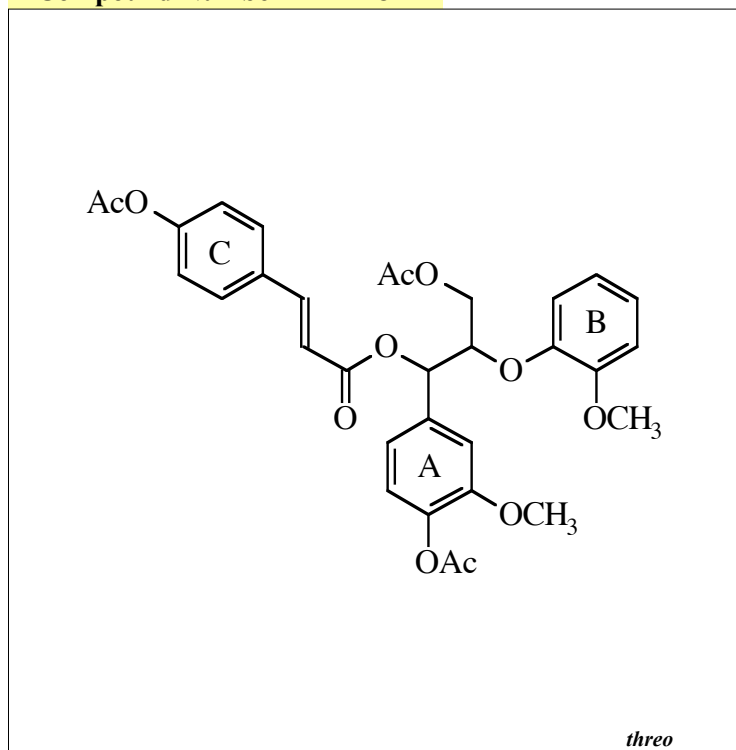
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.02	s	
Ac Me	2.28	s	
Ac Me	2.30	s	
OMe	3.77	s	
OMe	3.81	s	
γ1	4.32	dd	11.9, 4.3
γ2	4.48	dd	11.9, 5.9
β	4.77	m	
α	6.20	d	5.0
C β	6.44	d	16.0
C2,6	7.13	m	8.6
C3,5	7.53	m	8.6
C α	7.65	d	16.0

Notes:

R. Helm RFH119D1
47mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	64	20.46	67	20.30	71
Ac Me	20.75	57	20.62	48	20.39	77
Ac Me	21.09	60	20.95	48	20.79	68
OMe	55.82	55	56.24	60	55.61	74
OMe	55.94	64	56.31	54	55.74	74
γ	62.73	34	63.16	38	62.06	29
α	74.12	45	74.97	44	73.50	39
β	80.25	40	80.43	46	78.57	35
A2	111.88	45	112.82	42	111.73	42
B2	112.68	51	113.82	48	112.91	55
C β	117.66	47	118.65	40	117.55	48
B5	119.58	49	119.87	48	118.04	48
A6	119.66	47	120.45	46	119.31	39
B6	121.02	53	121.67	48	120.68	45
C3	122.15	91	123.20	100	122.31	100
C5	122.15	91	123.20	100	122.31	100
A5	122.60	43	123.38	44	122.52	42
B1	123.63	47	124.06	46	122.89	45
C2	129.31	100	130.25	92	129.65	97
C6	129.31	100	130.25	92	129.65	97
C1	131.91	34	132.79	35	131.49	48
A1	135.38	43	136.60	38	135.32	48
A4	139.78	34	140.82	27	139.12	48
C α	144.58	43	145.09	46	144.32	42
B4	147.18	36	148.38	25	146.76	52
B3	151.01	36	152.04	29	150.34	39
A3	151.15	38	152.11	29	150.57	35
C4	152.28	36	153.54	29	152.10	45
C γ	165.33	40	165.76	29	164.86	52
Ac C=O	168.74	32	168.85	29	168.32	55
Ac C=O	168.99	32	169.36	33	168.82	52
Ac C=O	170.72	36	170.71	31	169.95	55

Compound Number 78
¹³C

3-(4-Acetoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester
¹H (chloroform)

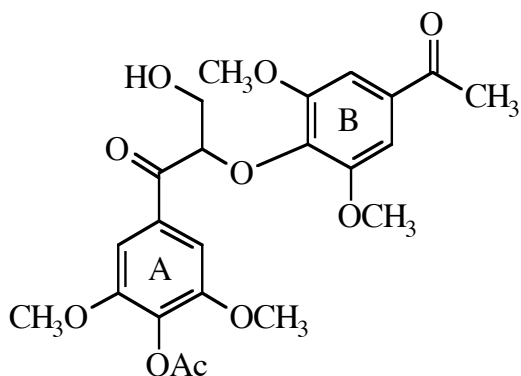
Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.28	s	
Ac Me	2.30	s	
OMe	3.77	s	
OMe	3.82	s	
γ1	4.14	dd	11.9, 5.8
γ2	4.36	dd	11.9, 4.4
β	4.72	m	
α	6.23	d	6.4
C β	6.37	d	16.0
C2.6	7.12	m	8.6
C3.5	7.49	m	8.6
C α	7.55	d	16.0

Notes:

R. Helm RFH119D2
44mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	56	20.44	44	20.29	78
Ac Me	20.72	56	20.60	34	20.38	74
Ac Me	21.10	51	20.95	47	20.78	63
OMe	55.77	59	56.17	59	55.53	85
OMe	55.97	59	56.31	51	55.80	74
γ	63.26	36	63.69	30	62.58	33
α	74.96	46	75.78	40	74.61	41
β	80.52	39	80.86	44	79.18	37
A2	111.71	43	112.73	34	111.71	41
B2	112.47	51	113.68	38	112.71	56
C β	117.78	49	118.73	43	117.56	56
B5	118.91	46	119.33	42	117.63	52
A6	119.49	43	120.27	45	119.36	37
B6	120.96	54	121.62	38	120.62	52
C3	122.14	90	123.16	100	122.28	100
C5	122.14	90	123.16	100	122.28	100
A5	122.84	38	123.56	38	122.57	52
B1	123.30	46	123.75	34	122.69	48
C2	129.26	100	130.15	69	129.56	93
C6	129.26	100	132.78	26	129.56	93
C1	131.96	39	132.78	26	131.50	56
A1	135.41	36	136.68	29	135.44	48
A4	139.94	38	140.94	23	139.25	52
C α	144.34	43	144.86	29	144.10	44
B4	148.08	38	149.10	26	147.56	59
B3	150.89	34	151.87	21	150.17	56
A3	151.14	36	152.21	21	150.69	44
C4	152.23	30	153.47	29	152.04	44
C γ	165.46	33	165.84	14	165.03	52
Ac C=O	168.70	30	168.77	19	168.27	37
Ac C=O	169.02	33	169.32	14	168.81	44
Ac C=O	170.56	30	170.62	22	169.90	48

Compound Number 79



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(4-acetyl-2,6-dimethoxy phenoxy)-3-hydroxypropan-1-one

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.35	s	
B β	2.58	s	
A3,5 OMe	3.81	s	
B3,5 OMe	3.86	s	
β	5.22	dd	7.2, 3.3
A2,6	7.36	s	
B2,6	7.21	s	

Notes:

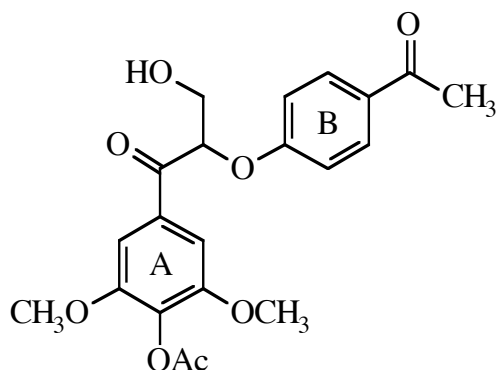
SR III - 39
45mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	49	20.22	50	20.06	54
B β	26.41	57	26.54	50	26.48	53
OMe	56.24	100	56.56	82	56.01	100
OMe	56.24	100	56.56	82	56.01	100
OMe	56.39	89	56.70	100	56.18	89
OMe	56.39	89	56.70	100	56.18	89
γ	63.36	33	63.67	32	62.39	37
β	87.06	36	86.08	39	83.67	32
A2	105.72	94	106.52	84	105.44	67
A6	105.72	94	106.52	84	105.44	67
B2	105.75	76	106.62	90	105.85	70
B6	105.75	76	106.62	90	105.85	70
A1	133.17	27	133.66	27	131.79	39
A4	133.27	48	133.80	11	132.05	25
B1	133.27	48	134.87	23	133.69	37
B4	140.52	21	141.29	16	140.22	28
A3	152.33	68	153.21	94	151.62	68
A5	152.33	68	153.21	94	151.62	68
B3	152.36	70	153.21	94	151.71	79
B5	152.36	70	153.21	94	151.71	79
Ac C=O	168.05	27	168.15	21	167.60	33
B α	194.74	29	195.71	23	195.27	35
α	196.50	24	196.65	21	196.51	35

Compound Number 80

¹³C



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(4-acetylphenoxy)-3-hydroxypropan-1-one

¹H (chloroform)

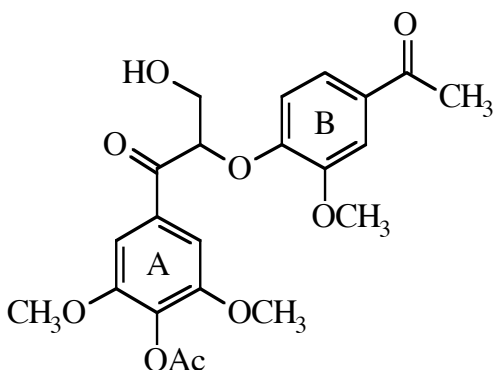
Atom	H Shifts	Mult	J
Ac Me	2.34	s	
B β	2.51	s	
A3,5 OMe	3.82	s	
γ	4.19	m	5.8, 4.2
β	5.60	dd	
A2,6	7.32	s	
B3,5	6.90	m	8.9
B2,6	7.87	m	8.9

Notes:

SR III - 37
40mg
B2,6 and A1 shifts changes places in DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	49	20.21	46	20.05	51
B β	26.33	56	26.34	50	26.28	53
OMe	56.36	100	56.76	100	56.31	100
OMe	56.36	100	56.76	100	56.31	100
γ	63.32	38	63.94	37	62.41	29
β	81.33	49	82.26	40	80.64	32
A2	105.67	89	106.40	90	105.42	64
A6	105.67	89	106.40	90	105.42	64
B3	114.83	85	115.68	96	114.78	73
B5	114.83	85	115.68	96	114.78	73
B2	130.78	92	131.20	87	130.36	66
B6	130.78	92	131.20	87	130.36	66
A1	131.38	33	131.80	23	130.19	37
B1	132.25	31	133.97	29	132.74	34
A4	133.87	18	134.34	12	132.55	24
A3	152.55	60	153.47	46	151.98	64
A5	152.55	60	153.47	46	151.98	64
B4	161.00	33	162.44	27	161.22	41
Ac C=O	168.06	24	168.11	19	167.62	34
B α	194.60	29	195.47	19	194.76	34
α	196.64	31	196.21	17	196.08	31

Compound Number 81



1-(4-acetoxy-3,5-dimethoxyphenyl)-2-(4-acetoxy-2-methoxyphenoxy)-3-hydroxypropan-1-one

¹H (chloroform)

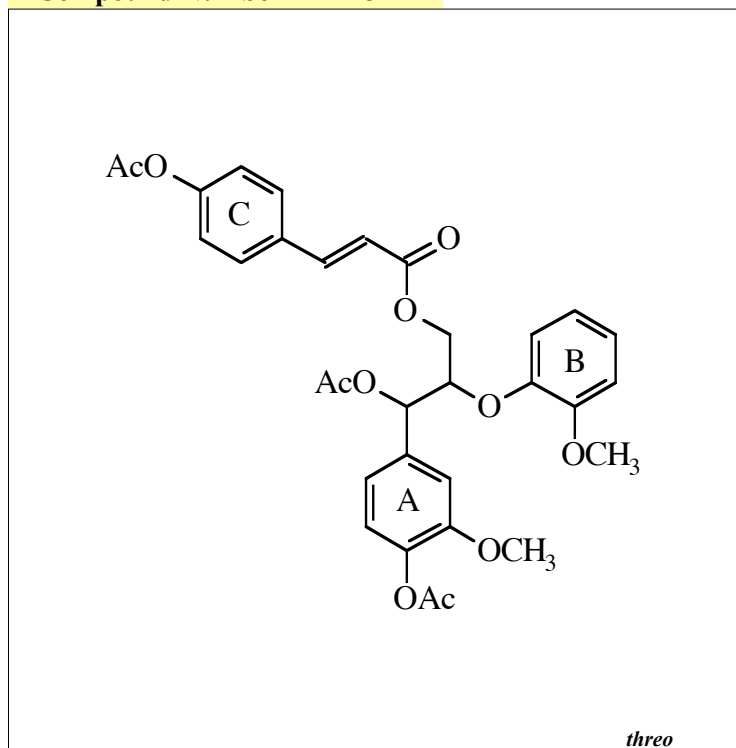
Atom	H Shifts	Mult	J
Ac Me	2.34	s	
B β	2.53	s	
B3 OMe	3.89	s	
A3,5 OMe	3.85	s	
γ	4.17	d	5.1
β	5.53	t	5.1
A2,6	7.38	s	
B2	7.53	d	2.0
B5	6.82	d	8.4
B6	7.45	dd	8.4, 2.0

Notes:

SR III - 38
17mg
B1 and A4 switch places in DMSO A4 has very low intensity and is easy to follow

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.39	38	20.21	45	20.05	38
B β	26.23	67	26.30	55	26.23	71
B OMe	55.91	56	56.28	45	55.55	41
A OMe	56.32	59	56.69	100	56.22	100
A OMe	56.32	59	56.69	100	56.22	100
γ	63.47	27	63.91	42	62.32	32
β	83.63	38	83.76	50	81.51	46
A2	105.80	100	106.56	92	105.45	66
A6	105.80	100	106.56	92	105.45	66
B2	111.17	40	112.34	45	111.05	46
B5	114.89	33	114.72	45	113.02	56
B6	123.01	41	123.46	53	122.65	41
A1	132.23	35	132.37	21	130.46	47
B1	132.38	37	134.04	21	132.75	51
A4	133.75	16	134.22	11	132.46	21
B3	149.76	33	150.40	21	148.67	47
B4	150.76	16	152.27	21	150.96	50
A3	152.47	57	153.35	45	151.87	54
A5	152.47	57	153.35	45	151.87	54
Ac C=O	168.00	16	168.08	24	167.57	24
B α	194.85	17	195.94	24	195.02	50
α	196.57	21	196.27	21	196.14	41

Compound Number 82
¹³C

4-Acetoxy-cinnamic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.07	s	
Ac Me	2.28	s	
Ac Me	2.30	s	
OMe	3.79	s	
OMe	3.80	s	
γ1	4.23	dd	11.9, 5.8
γ2	4.42	dd	11.9, 4.2
β	4.72	m	
α	6.19	d	6.3
C β	6.34	d	16.0
C2,6	7.12	m	8.6
C3,5	7.51	m	8.6
C α	7.55	d	16.0

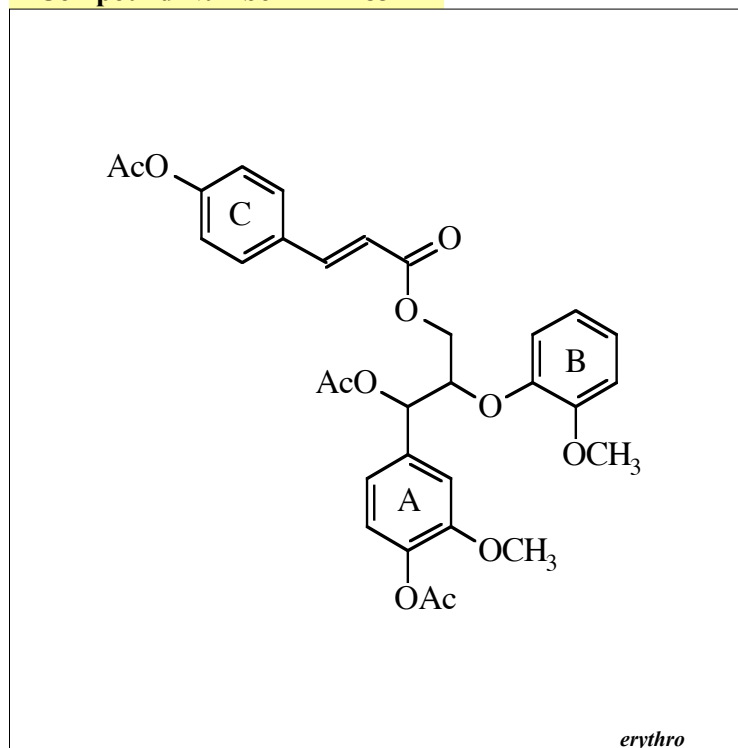
Notes:

R. Helm RFH87D1
 36.6mg
 129.85 and 129.57 for Bα and C2,6
 change places in DMSO see 1019

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.63	38	20.46	38	20.29	45
Ac Me	21.07	55	20.95	89	20.67	52
Ac Me	21.10	60	20.95	89	20.78	57
OMe	55.81	49	56.21	52	55.55	67
OMe	55.95	44	56.28	52	55.75	52
γ	63.39	28	63.93	33	62.86	21
α	74.62	36	75.53	21	74.43	33
β	80.50	36	80.88	41	79.25	33
A2	111.78	33	112.71	38	111.70	31
B2	112.55	42	113.75	42	112.76	45
C β	117.58	39	118.56	41	117.51	40
B5	118.98	47	119.36	47	117.59	50
A6	119.56	35	120.30	34	119.38	29
B6	121.01	43	121.68	51	120.66	48
C3	122.13	100	123.17	100	122.29	100
C5	122.13	100	123.17	100	122.29	100
A5	122.84	36	123.56	36	122.59	40
B1	123.35	41	123.78	48	129.85	17
C2	129.30	83	130.20	82	129.57	90
C6	129.30	83	130.20	82	129.57	90
C1	131.95	35	132.78	29	131.49	43
A1	135.36	34	136.67	30	135.43	40
A4	139.94	32	140.90	18	139.21	40
C α	144.22	44	144.71	42	143.87	40
B4	148.00	30	149.10	27	147.59	50
B3	150.92	30	151.88	21	150.18	43
A3	151.14	28	152.20	23	150.67	36
C4	152.23	27	153.48	27	152.04	40
C γ	166.28	32	166.56	30	165.66	40
Ac C=O	168.70	25	168.81	22	168.28	33
Ac C=O	169.02	32	169.35	36	168.83	45
Ac C=O	169.68	25	169.96	22	169.32	40

Compound Number 83

¹³C



4-Acetylcinnamic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

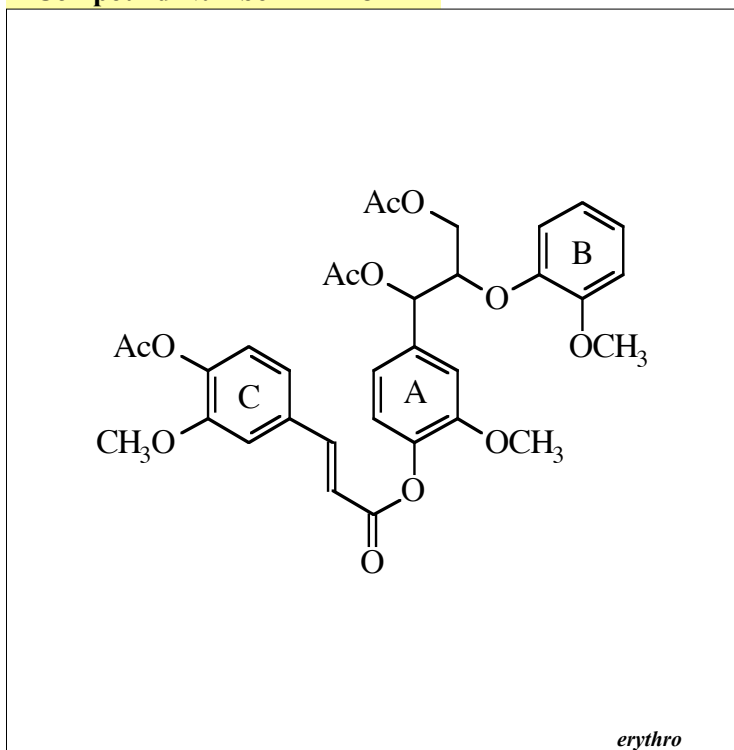
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.10	s	
Ac Me	2.29	s	
Ac Me	2.30	s	
OMe	3.76	s	
OMe	3.81	s	
γ1	4.47	dd	11.9, 4.2
γ2	4.75	dd	11.9, 5.6
β	4.75	m	
α	6.14	d	5.4
C β	6.35	d	16.0
C α	7.56	d	16.0

Notes:

Rich Helm RFH87D2
38.6mg
see 1020

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.65	50	20.47	40	20.29	65
Ac Me	21.03	50	20.90	42	20.63	58
Ac Me	21.10	51	20.95	50	20.78	62
OMe	55.80	49	56.21	50	55.58	69
OMe	55.94	54	56.28	48	55.70	58
γ	62.93	32	63.34	34	62.26	23
α	74.01	39	74.73	42	73.28	35
β	80.43	44	80.54	36	78.58	31
A2	112.04	39	112.78	36	111.71	42
B2	112.64	40	113.79	46	112.89	46
C β	117.67	46	118.54	44	117.46	46
B5	119.73	71	120.01	44	118.09	46
A6	119.73	71	120.44	44	119.39	35
B6	121.01	44	121.64	48	120.65	46
C3	122.11	100	123.17	100	122.29	100
C5	122.11	100	123.17	100	122.29	100
A5	122.59	42	123.35	42	122.48	42
B1	123.66	46	124.09	44	122.89	46
C2	129.30	90	130.18	98	129.54	96
C6	129.30	90	130.18	98	129.54	96
C1	132.00	31	132.77	46	131.46	35
A1	135.53	39	136.71	30	135.36	46
A4	139.80	33	140.78	34	139.08	46
C α	144.19	43	144.68	38	143.85	46
B4	147.25	29	148.31	22	146.69	46
B3	151.00	35	152.10	46	150.35	42
A3	151.19	33	152.10	46	150.55	50
C4	152.21	24	153.48	22	152.02	38
C γ	166.42	33	166.57	30	165.67	46
Ac C=O	168.74	25	168.84	24	168.32	46
Ac C=O	169.02	31	169.35	26	168.84	50
Ac C=O	169.50	35	169.87	24	169.21	46

Compound Number 84
¹³C

3-(4-Acetoxy-3-methoxyphenyl)acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy)propyl]phenyl ester
¹H (chloroform)

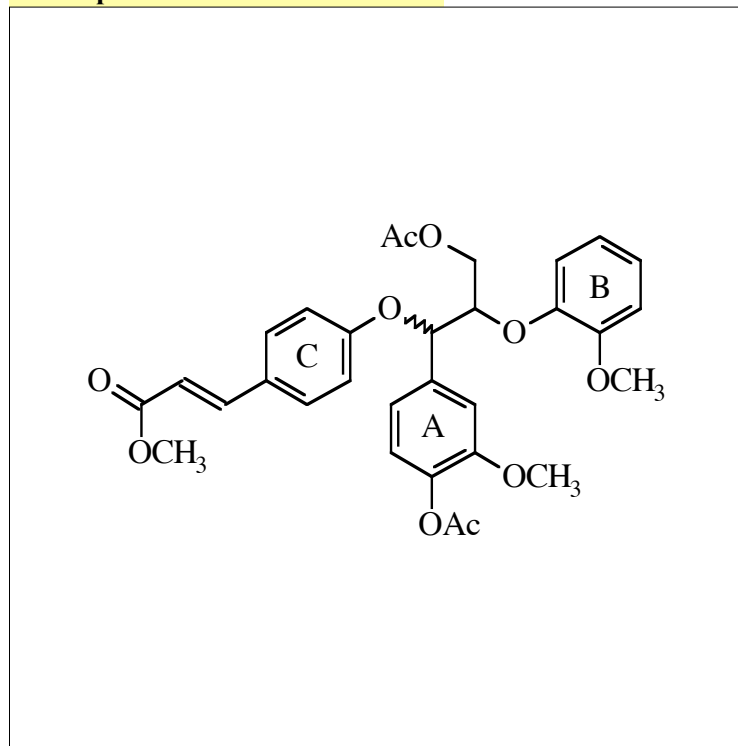
Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.10	s	
Ac Me	2.32	s	
OMe	3.79	s	
OMe	3.82	s	
OMe	3.86	s	
γ1	4.27	dd	11.9, 4.0
γ2	4.47	dd	11.9, 5.6
β	4.69	m	
α	6.11	d	5.4
C β	6.60	d	15.9
C α	7.80	d	15.9

Notes:

R. Helm RFH9D
39.4mg
see 1026

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	77	20.47	92	20.31	81
Ac Me	20.76	68	20.61	79	20.37	88
Ac Me	21.01	70	20.87	74	20.60	81
OMe	55.81	85	56.21	100	55.58	100
OMe	55.94	79	56.28	89	55.72	75
OMe	56.00	100	56.44	89	55.98	100
γ	62.59	57	63.00	68	61.89	44
α	73.84	57	74.61	74	73.17	50
β	80.22	57	80.32	71	78.40	44
C2	111.41	68	112.60	74	111.69	44
A2	112.04	57	112.79	61	112.13	56
B2	112.68	64	113.81	87	112.90	69
C β	117.16	57	118.04	71	117.09	50
B5	119.55	68	119.82	84	117.96	69
A6	119.75	55	120.45	71	119.36	44
B6	121.01	64	121.63	95	120.64	75
C6	121.54	68	122.47	79	121.90	56
A5	122.67	55	123.42	66	122.54	44
B1	123.33	68	124.04	84	122.87	56
C5	123.63	60	124.16	82	123.18	62
C1	133.17	49	134.02	63	132.77	50
A1	135.48	45	136.73	50	135.40	50
A4	139.77	40	140.70	39	139.03	50
C4	141.78	40	142.96	34	141.30	50
C α	145.85	57	146.39	66	145.79	50
B4	147.18	47	148.26	39	146.63	69
B3	151.10	57	152.04	50	150.32	62
A3	151.14	51	152.17	55	150.63	62
C3	151.49	53	152.73	61	151.17	62
C γ	164.57	42	164.96	50	164.22	50
Ac C=O	168.64	51	168.74	58	168.21	56
Ac C=O	169.50	40	169.86	50	169.20	56
Ac C=O	170.74	38	170.70	42	169.96	69

Compound Number 85



3-{4-[3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propoxy]phenyl}acrylic acid methyl ester

¹H (chloroform)

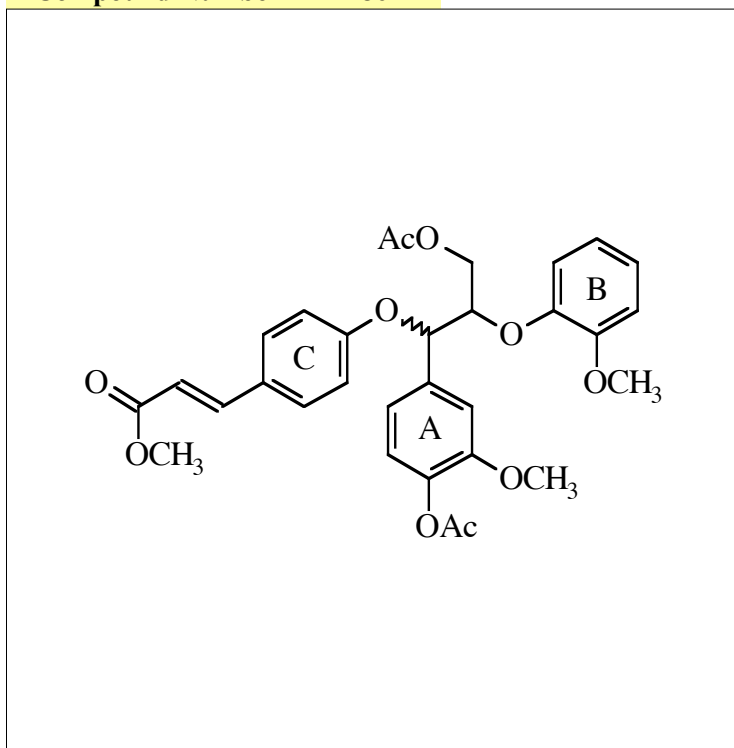
Atom	H Shifts	Mult	J
Ac Me	1.95	s	
Ac Me	2.27	s	
OMe	3.71	s	
OMe	3.76	s	
OMe	3.77	s	
γ	4.61	m	
β	4.46	m	
α	5.51	d	5.0
C β	6.27	d	16.0
C3,5	6.88	m	8.7
C2,6	7.39	m	8.7
C α	7.59	d	16.0

Notes:

R. Helm RFH111D1
39.0 mg
Isomer of 86

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	54	20.45	55	20.29	77
Ac Me	20.72	51	20.60	48	20.39	71
C γ OMe	51.54	49	51.52	52	51.19	71
OMe	55.72	56	56.17	61	55.53	87
OMe	55.96	52	56.27	61	55.70	81
γ	62.79	41	63.18	42	62.20	39
α	78.84	44	79.69	52	77.75	45
β	82.13	43	81.73	48	79.67	48
A2	110.95	47	112.62	48	111.97	45
B2	112.61	48	113.79	55	112.85	61
C β	115.75	48	116.52	52	115.50	52
C3	116.22	100	117.18	100	116.08	94
C5	116.22	100	117.18	100	116.08	94
B5	119.05	44	119.93	55	117.78	58
A6	119.92	54	120.27	45	119.39	45
B6	121.05	48	121.63	55	120.62	61
A5	122.86	49	123.50	52	122.52	45
B1	123.75	44	123.99	48	122.69	45
C1	127.82	47	128.60	35	127.21	58
C2	129.63	95	130.56	94	129.96	100
C6	129.63	95	130.56	94	129.96	100
A1	136.23	46	137.03	42	135.78	55
A4	139.65	32	140.73	26	139.00	58
C α	144.26	44	144.77	55	143.99	52
B4	147.06	34	148.41	29	146.95	61
B3	151.23	35	152.04	29	150.26	65
A3	151.32	34	152.26	32	150.58	58
C4	159.48	34	160.44	32	158.88	61
A γ C=O	167.59	32	167.59	29	166.74	65
A4 C=O	168.70	30	168.78	29	168.24	42
C γ	170.74	39	170.69	32	169.98	65

Compound Number 86
¹³C


3-{4-[3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propoxy]phenyl}acrylic acid methyl ester

¹H (chloroform)

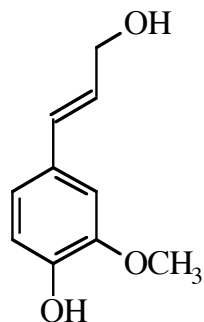
Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.28	s	
C γ OMe	3.75	s	
OMe	3.77	s	
OMe	3.79	s	
γ1	4.13	dd	11.8, 5.9
γ2	4.42	dd	11.7, 4.3
β	4.68	m	
α	5.51	d	5.3
C β	6.27	d	16.0
C2,6	7.37	m	8.7
C α	7.59	d	16.0

Notes:

Rich Helm RFH111D2
35mg
Isomer of 85

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	62	20.45	50	20.28	92
Ac Me	20.72	55	20.59	50	20.36	84
C γ OMe	51.53	51	51.52	55	51.17	72
OMe	55.69	55	56.14	50	55.45	92
OMe	55.96	59	56.30	52	55.74	80
γ	63.32	37	63.70	36	62.55	36
α	79.79	43	80.57	43	78.99	44
β	81.51	43	81.71	48	79.91	44
A2	111.00	45	112.61	48	111.77	44
B2	112.43	53	113.68	52	112.70	60
C β	115.68	51	116.43	40	115.36	52
C3	116.25	99	117.12	95	116.02	100
C5	116.25	99	117.12	95	116.02	100
B5	119.13	46	119.33	48	117.27	56
A6	119.23	50	120.27	48	119.42	44
B6	120.95	55	121.61	45	120.58	64
A5	122.93	46	123.67	64	122.35	44
B1	123.40	49	123.67	64	122.70	44
C1	127.72	38	128.47	43	127.02	60
C2	129.58	100	130.52	100	129.90	100
C6	128.58	100	130.52	43	129.90	100
A1	135.56	42	136.80	43	135.66	56
A4	139.86	29	140.88	26	139.12	52
C α	144.28	50	144.80	48	144.02	52
B4	148.03	33	149.21	29	147.68	56
B3	150.94	29	151.85	29	150.07	56
A3	151.42	33	152.37	26	150.75	52
C4	159.50	39	160.59	31	159.19	60
A γ C=O	167.60	39	167.60	29	166.74	64
A4 C=O	168.64	28	168.76	29	168.21	52
C γ	170.50	33	170.62	24	169.91	60

Compound Number 87



trans

Coniferyl alcohol
4-hydroxy-3-methoxy cinnamyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.88	100	56.20	100	55.47	100
γ	63.71	87	63.42	80	61.63	86
2	108.52	80	110.06	76	109.66	84
5	114.57	93	115.76	83	115.36	86
6	120.25	87	120.60	91	119.30	86
β	126.22	90	128.07	78	127.38	91
1	129.30	45	130.26	41	128.41	67
α	131.24	82	130.45	72	128.87	81
4	145.63	46	147.14	41	146.06	67
3	146.75	38	148.41	30	147.60	63

¹H (acetone)

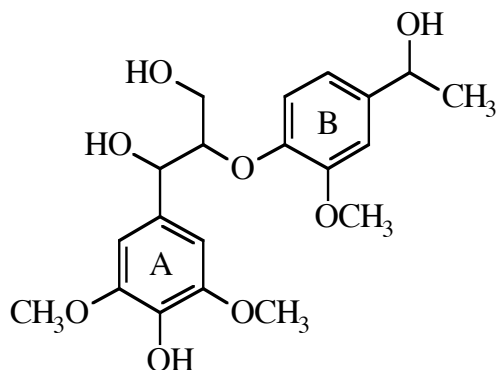
Atom	H Shifts	Mult	J
γ OH	3.78	t	5.6
OMe	3.86	s	
γ's	4.18	td	5.5, 1.5
β	6.22	dt	15.9, 5.5
α	6.49	dt	15.9, 15
5	6.76	d	8.1
6	6.84	dd	8.1, 1.9
2	7.04	d	1.9
4 OH	7.63	s	

Notes:

Aldrich
30mg
Proton data from 360 MHz spectrum in acetone..S.Q.

Compound Number 88

¹³C



threo

1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy]propane-1,3-diol

¹H (acetone)

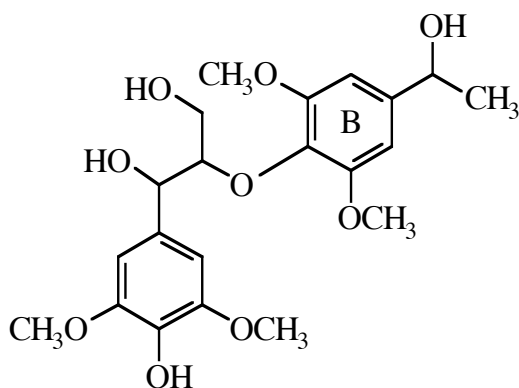
Atom	H Shifts	Mult	J
B β	1.38	d	6.4
B OMe	3.87	s	
A3,5 OMe	3.80	s	
α OH	4.50	d	3.9
A2,6	6.77	s	

Notes:

S Ralph SRIII-43
30mg Small amount of 4 Ac present.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.24	37	26.23	47	25.84	70
B OMe	55.87	47	56.27	59	55.44	69
A OMe	56.33	100	56.59	100	55.73	100
A OMe	56.33	100	56.59	100	55.73	100
γ	61.04	28	61.94	34	59.99	26
B α	69.95	48	69.73	54	67.80	63
α	74.12	33	74.05	46	70.87	28
β	89.03	30	88.50	32	84.39	21
A2	103.79	66	105.36	95	104.06	53
A6	103.79	66	105.36	95	104.06	53
B2	109.30	36	110.58	39	109.65	27
B5	118.40	35	118.65	44	115.29	27
B6	120.27	22	119.45	34	117.20	36
A1	130.71	28	132.80	22	131.93	34
A4	134.56	25	136.12	20	134.24	29
B1	142.02	29	142.85	6	140.36	31
B4	146.66	25	148.27	29	146.73	33
A3	147.09	52	148.38	43	147.30	73
A5	147.09	52	148.38	43	147.30	73
B3	150.99	18	151.38	21	149.23	37

Compound Number 89



threo

1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
B β	1.39	d	6.4
A3,5 OMe	3.80	s	
B3,5 OMe	3.89	s	
B α	4.81	m	
α	4.97	dd	7.3, 2.9
B2,5	6.77	s	
A2,6	6.76	s	
γ 2	3.31	m	
B α OH	4.27	d	4.1
α OH	4.44	d	2.9

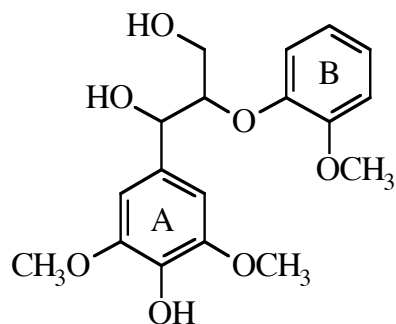
Notes:

S Ralph SR111-44
30mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.43	37	26.27	45	25.84	28
OMe	56.12	94	56.50	100	55.80	100
OMe	56.12	94	56.50	100	55.80	100
OMe	56.31	100	56.57	95	55.80	100
OMe	56.31	100	56.57	95	55.80	100
γ	60.48	31	61.41	29	60.15	12
B α	70.21	43	69.98	41	68.09	26
α	74.34	37	74.22	36	71.54	16
β	88.97	37	89.69	36	87.11	16
B2	102.27	75	103.41	87	102.49	32
B6	102.27	75	103.41	87	102.49	32
A2	104.04	70	105.46	72	104.14	30
A6	104.04	70	105.46	72	104.14	30
A1	130.99	33	132.60	25	131.97	17
B1	134.10	21	135.54	12	134.22	15
A4	134.46	31	136.11	21	134.50	17
B4	142.94	32	144.61	26	142.91	17
A3	147.02	56	148.30	36	147.25	36
A5	147.02	56	148.30	36	147.25	36
B3	152.88	56	153.58	42	152.14	35
B5	152.88	56	153.58	42	152.14	35

Compound Number 90

¹³C*threo*Syringylglycerol- β -guaiacyl ether

1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-(2-methoxyphenoxy) propane-1,3-diol

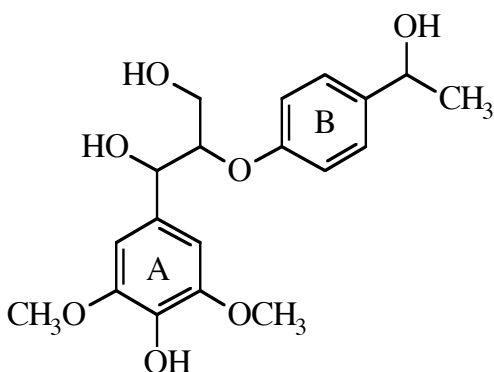
¹H (acetone)

Atom	H Shifts	Mult	J
B OMe	3.86	s	
A3,5 OMe	3.79	s	
α	4.88	dd	6.0, 3.7
β	4.22	m	
α OH	4.49	d	3.7
A2,6	6.86	s	

Notes:S. Ralph SRIII-45
30mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	55.88	56	56.24	62	55.45	75
A OMe	56.32	100	56.54	100	55.72	100
A OMe	56.32	100	56.54	100	55.72	100
γ	61.02	37	61.89	40	60.01	18
α	74.16	39	73.97	40	70.88	36
β	89.22	34	88.19	46	84.03	32
A2	103.81	64	105.28	74	104.07	59
A6	103.81	64	105.28	74	104.07	59
B2	112.16	50	113.27	39	112.38	51
B5	120.86	40	119.66	4	115.52	33
B6	121.67	53	121.91	52	120.58	51
B1	124.17	40	123.30	56	120.90	37
A1	130.71	24	132.72	23	131.89	39
A4	134.57	19	136.07	16	134.26	30
A3	147.10	49	148.34	36	147.31	72
A5	147.10	49	148.34	36	147.31	72
B4	147.58	17	149.60	18	148.18	26
B3	151.22	23	151.65	15	149.55	33

Compound Number 91



1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxyethyl)phenoxy]propane-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
B β	1.35	d	6.4
A3,5 OMe	3.79	s	
A2,6	6.77	s	
B2,6	7.23	m	8.6

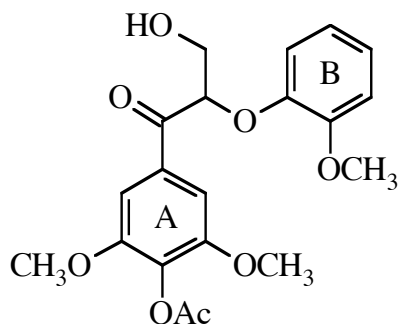
Notes:

S. Ralph SRIII-46
20mg contains 4-AC impurity.

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.07	39	26.17	58	25.81	88
A OMe	56.34	100	56.58	94	55.82	100
A OMe	56.34	100	56.58	94	55.82	100
γ	61.14	30	61.73	32	60.01	27
B α	69.75	42	69.50	58	67.57	73
α	73.85	28	73.54	34	71.09	33
β	82.97	24	84.14	32	83.01	33
A2	103.70	52	105.27	64	104.12	58
A6	103.70	52	105.27	64	104.12	58
B3	116.34	64	116.64	100	115.34	100
B5	116.34	64	116.64	100	115.34	100
B2	126.84	84	127.15	90	126.13	85
B6	126.84	84	127.15	90	126.13	85
A1	130.90	23	133.23	26	132.31	39
A4	134.56	23	136.00	14	134.31	30
B1	139.33	23	140.47	20	139.21	39
A3	147.07	44	148.32	44	147.36	76
A5	147.07	44	148.32	44	147.36	76
B4	157.42	19	158.98	18	157.69	42

Compound Number 92

¹³C

1-(4-acetoxy-3,5-dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propan-1-one

¹H (chloroform)

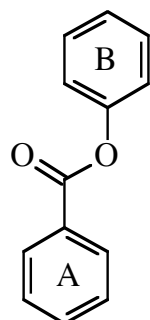
Atom	H Shifts	Mult	J
Ac Me	2.34	s	
B OMe	3.82	s	
A3,5 OMe	3.83	s	
γ	4.09	d	5.2
β	5.38	t	5.2
A2,6	7.36	s	

Notes:

S. Ralph SRIII-40
30mg *A1 + A4 switch around in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	54	20.21	44	20.04	65
B OMe	55.73	54	56.07	49	55.39	60
A OMe	56.29	100	56.60	100	56.12	100
A OMe	56.29	100	56.60	100	56.12	100
γ	63.39	40	63.88	21	62.35	38
β	84.41	47	84.02	36	81.59	32
A2	105.84	87	106.50	82	105.38	68
A6	105.84	87	106.50	82	105.38	68
B2	112.33	49	113.57	41	112.64	38
B5	117.86	42	116.84	29	114.73	32
B6	121.23	50	121.57	53	120.49	48
B1	123.61	42	123.15	40	121.67	38
A4	133.42	12	133.93	7	132.25	20
A1	132.81	28	134.31	18	132.99	37
B4	146.71	23	148.17	16	146.73	35
B3	150.24	26	150.90	16	149.13	33
A3	152.32	48	153.19	34	151.75	77
A5	152.32	48	153.19	34	151.75	77
Ac C=O	168.06	20	168.10	17	167.58	32
α	195.72	22	196.70	20	195.86	35

Compound Number 93



Phenyl benzoate
Benzoic acid phenyl ester

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3	121.70	90	122.61	89	121.85	85
B5	121.70	90	122.61	89	121.85	85
B1	125.84	52	126.51	51	125.92	43
A2	128.54	100	129.47	100	128.88	100
A6	128.54	100	129.47	100	128.88	100
B2	129.45	100	130.15	96	129.50	100
B6	129.45	100	130.15	96	129.50	100
A1	129.57	15	130.42	19	128.94	25
A3	130.13	95	130.60	98	129.72	99
A5	130.13	95	130.60	98	129.72	99
A4	133.53	48	134.39	54	133.93	42
B4	150.96	12	151.99	14	150.62	27
α	165.11	9	165.32	9	164.51	15

¹H (chloroform)

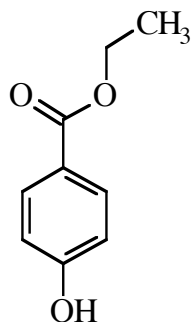
Atom	H Shifts	Mult	J
A2,6	8.21	m	8.3

Notes:

Aldrich
60mg
A1 changes position in DMSO

Compound Number 94

¹³C



Ethyl 4-hydroxybenzoate
ethyl 4-hydroxybenzoate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.30	46	14.63	47	14.24	53
CH2	61.13	44	60.84	42	60.04	44
3	115.34	100	115.92	100	115.27	91
5	115.34	100	115.92	100	115.27	91
1	122.13	21	122.69	10	120.61	20
2	131.94	90	132.30	90	131.35	100
6	131.94	90	132.30	90	131.35	100
4	160.74	26	162.44	22	161.93	40
α	167.45	17	166.49	10	165.56	21

¹H (chloroform)

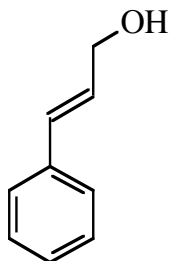
Atom	H Shifts	Mult	J
CH3	1.39	t	7.1
CH2	4.36	q	7.1
A3,5	6.91	m	8.8
A2,6	7.95	m	8.8

Notes:

Aldrich
60mg

Compound Number 95

¹³C



trans

Cinnamyl alcohol

(E)-3-phenyl-2-propen-1-ol(E)-cinnamyl alcohol

¹H (chloroform)

Atom	H Shifts	Mult	J
γ	4.25	dd	5.6, 1.1
β	6.30	dt	15.9, 5.6
α	6.54	dt	15.9, 1.1

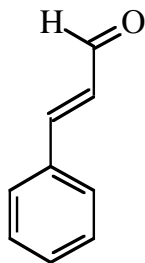
Notes:

Fluka
60mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	63.39	41	63.12	52	61.50	42
2	126.40	72	126.98	100	126.05	88
6	126.40	72	126.98	100	126.05	88
β	127.57	41	127.93	51	127.08	48
3	128.52	100	129.25	95	128.49	100
5	128.52	100	129.25	95	128.49	100
4	128.52	100	129.90	42	128.37	40
α	130.86	34	130.90	49	130.72	47
1	136.66	13	138.08	14	136.87	18

Compound Number 96

¹³C



trans

Cinnamaldehyde

(E)-3-phenyl-2-propenal(E)-cinnamaldehyde

¹H (chloroform)

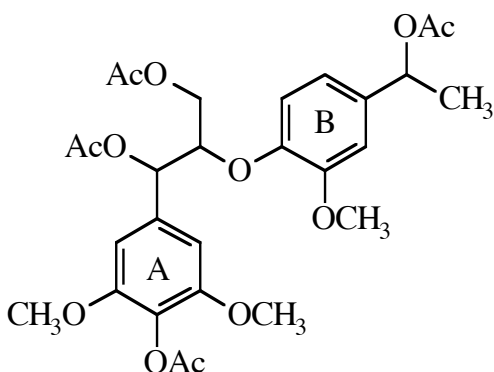
Atom	H Shifts	Mult	J
β	6.69	dd	16.0, 7.7
α	7.50	d	16.0
γ	9.68	d	7.7

Notes:

Fluka
60mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
2	128.45	100	129.30	91	128.69	100
6	128.45	100	129.30	91	128.69	100
4	128.45	100	129.40	48	128.50	48
3	129.04	92	129.81	100	129.02	96
5	129.04	92	129.81	100	129.02	96
β	131.20	41	131.78	55	131.13	48
1	133.96	12	135.19	12	134.07	23
α	152.66	21	153.19	32	153.00	35
γ	193.54	25	193.96	30	194.19	32

Compound Number 97



threo

1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxyethyl)-2-methoxyphenoxy]

¹H (chloroform)

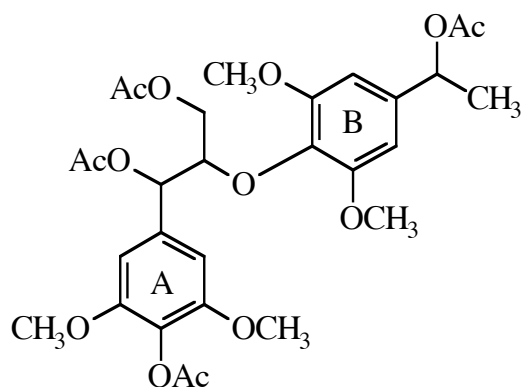
Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.06	s	
Ac Me	2.07	s	
Ac Me	2.32	s	
B β	1.52	d	6.6
B OMe	3.83	s	
A3,5 OMe	3.81	s	
γ1	4.07	dd	11.8, 5.7
γ2	4.32	dd	11.8, 4.6
β	4.60	m	
B α	5.82	q	6.6
α	6.08	d	6.2
A2,6	6.67	s	

Notes:

S. Ralph SRIII-43
40mg
ca 90% threo
*

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	42	20.23	49	20.04	58
Ac Me	20.70	32	20.62	46	20.37	67
Ac Me	21.04	37	20.93	40	20.63	50
Ac Me	21.35	42	21.15	44	20.93	67
B β	22.08	34	22.46	40	21.87	42
B OMe	55.88	50	56.29	59	55.61	54
A OMe	56.21	100	56.52	100	55.96	100
A OMe	56.21	100	56.52	100	55.96	100
γ	62.98	21	63.58	37	62.42	25
B α	72.06	26	72.40	48	71.35	42
α	74.65	24	75.64	41	74.54	29
β	80.12	24	80.68	33	79.08	29
A2	104.09	55	104.93	81	103.91	33
A6	104.09	55	104.93	81	103.91	33
B2	110.64	18	111.71	32	110.55	21
B5	118.22	24	118.71	30	117.03	33
B6	118.65	26	119.18	43	118.05	42
A4	128.83	18	129.65	10	127.78	21
A1	134.71	32	136.12	32	134.92	38
B1	136.72	26	137.72	24	136.00	33
B4	147.53	16	148.51	22	146.99	42
B3	150.58	32	151.52	25	149.82	42
A3	152.17	53	153.14	51	151.52	75
A5	152.17	53	153.14	51	151.52	75
A4 Ac C=O	168.47	26	168.40	21	167.88	33
α Ac C=O	169.66	18	169.96	19	169.32	33
B αAc C=O	170.27	24	170.17	17	169.52	38
γAc C=O	170.55	26	170.65	19	169.92	33

Compound Number 98
¹³C

threo
1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxyethyl)-2,6-dimethoxyphenoxy]propane
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.07	s	
Ac Me	2.08	s	
Ac Me	2.32	s	
B β	1.52	d	6.6
OMe	3.78	s	
OMe	3.80	s	
γ1	3.94	dd	11.8, 7.3
γ2	4.36	dd	11.8, 4.5
β	4.54	m	
B α	5.79	q	6.6
α	6.12	d	6.1
B2,6	6.55	s	
A2,6	6.70	s	

Notes:

S. Ralph SRIII-44

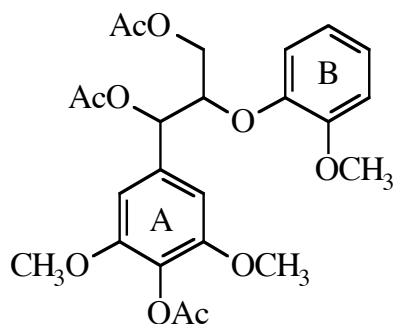
131mg

*

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	47	20.23	40	20.06	49
Ac Me	20.72	42	20.63	35	20.37	46
Ac Me	21.02	31	20.92	31	20.62	35
Ac Me	21.33	36	21.14	41	20.95	57
B β	22.25	31	22.56	29	22.02	32
OMe	56.02	96	56.36	91	55.78	100
OMe	56.02	96	56.36	91	55.78	100
OMe	56.21	100	56.45	100	55.98	95
OMe	56.21	100	56.45	100	55.98	95
γ	63.53	18	64.18	32	63.22	22
B α	72.35	25	72.68	35	71.72	37
α	75.61	31	76.62	26	75.73	18
β	80.64	35	81.44	33	80.27	23
B2	103.14	46	103.92	55	102.85	38
B6	103.14	46	103.92	55	102.85	38
A2	104.18	46	104.78	57	103.76	49
A6	104.18	46	104.78	57	103.76	49
A4	128.64	14	129.42	9	127.75	11
A1	135.46	28	136.61	29	135.39	32
B1	135.95	11	136.96	17	135.48	35
B4	137.57	32	138.68	26	137.40	35
A3	151.98	61	152.94	49	151.52	65
A5	151.98	61	152.94	49	151.52	65
B3	152.87	38	153.69	49	152.27	66
B5	152.87	38	153.69	49	152.27	66
A4 Ac C=O	168.49	19	168.37	20	167.93	29
α Ac C=O	169.70	15	169.80	22	169.27	35
B αAc C=O	170.16	19	170.11	20	169.56	40
γ Ac C=O	170.50	25	170.56	19	169.95	40

Compound Number 99

¹³C



threo

1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-(2-methoxyphenoxy)propane

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.97	s	
Ac Me	2.02	s	
Ac Me	2.21	s	
A3,5 OMe	3.80	s	
OMe	3.81	s	
γ1	4.04	dd	11.9, 5.6
γ2	4.26	dd	11.9, 4.2
β	4.79	m	
α	6.08	d	6.5
A2,6	6.85	s	
B1	6.97	m	8.2, 8.1, 1.3
B2	6.99	m	8.2, 1.0
B5	7.04	m	8.0, 1.3
B6	6.87	m	8.0, 8.1, 1.0

Notes:

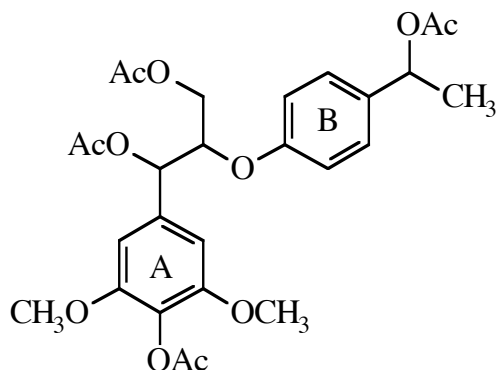
S. Ralph SRIII-45

55mg

ca 80% threo

*Chemical shift assignments for overlapping 1H patterns A2,6 and B1,B2,B5 and B6 were made with the assistance of deconvolution spectra obtained with MacNuts, Acorn NMR Inc. All patterns were complex multiplets (non-1st order) J's and CS's determined from simulation files

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	48	20.24	56	20.05	68
Ac Me	20.71	36	20.62	48	20.39	50
Ac Me	21.05	40	20.94	44	20.65	47
B OMe	55.77	54	56.20	63	55.52	59
OMe	56.20	100	56.52	100	55.97	100
OMe	56.20	100	56.52	100	55.97	100
γ	63.08	32	63.60	43	62.48	26
α	74.77	35	75.67	43	74.58	35
β	80.23	36	80.64	48	79.00	35
A2	104.08	61	104.93	81	103.92	62
A6	104.08	61	104.93	81	103.92	62
B2	112.48	34	113.71	44	112.69	41
B5	118.61	40	119.04	43	117.31	41
B6	120.98	41	121.66	48	120.63	53
B1	123.28	42	123.68	44	122.49	35
A4	128.79	10	129.65	10	127.81	21
A1	134.80	31	136.18	27	134.99	41
B4	147.92	20	149.06	17	147.54	38
B3	150.76	20	151.75	21	150.06	35
A3	152.16	50	153.14	41	151.56	74
A5	152.16	50	153.14	41	151.56	74
A4 Ac C=O	168.47	21	168.41	29	167.89	29
α Ac C=O	169.68	20	169.97	17	169.34	26
γ Ac C=O	170.55	19	170.66	19	169.94	29

Compound Number 100
¹³C

threo
1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxyethyl)phenoxy] propane
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.05	s	
Ac Me	2.05	s	
Ac Me	2.32	s	
B β	1.51	d	6.6
A3,5 OMe	3.80	s	
γ1	4.06	dd	11.8, 6.1
γ2	4.25	dd	11.8,-
β	4.69	m	
B α	5.83	q	6.6
α	6.03	d	6.3
A2,6	6.63	s	
B3,5	6.89	m	7.8
B2,6	7.28	m	7.8

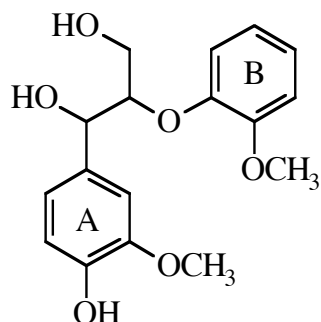
Notes:

S. Ralph SR111-46
 24mg
 CDCl₃ spectrum poor
 *

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.43	33	20.23	49	20.04	66
Ac Me	20.68	40	20.60	38	20.38	69
Ac Me	21.03	45	20.89	47	20.62	59
Ac Me	21.36	48	21.15	40	20.92	72
B β	22.01	36	22.36	36	21.76	50
OMe	56.25	100	56.58	89	56.01	100
OMe	56.25	100	56.58	89	56.01	100
γ	62.67	33	63.31	33	62.15	25
B α	71.85	45	72.19	40	71.12	22
α	74.24	21	75.45	36	74.32	28
β	78.17	26	79.23	22	77.60	25
A2	104.09	76	105.05	89	104.00	62
A6	104.09	76	105.05	89	104.00	62
B3	116.32	60	117.12	49	116.00	84
B5	116.32	60	117.12	49	116.00	84
B2	127.67	88	128.29	100	127.28	78
B6	127.67	88	128.29	100	127.28	78
A4	128.95	5	129.80	4	127.83	5
B1	134.35	31	135.98	27	134.66	56
A1	135.26	29	136.24	24	134.81	59
A3	152.28	52	153.25	47	151.57	72
A5	152.28	52	153.25	47	151.57	72
B4	158.02	19	159.20	18	157.68	34
A4 Ac C=O	168.44	21	168.39	22	167.86	28
α Ac C=O	169.69	24	170.02	20	169.37	38
B α Ac C=O	170.30	21	170.19	13	169.52	41
γ Ac C=O	170.56	24	170.68	20	169.94	31

Compound Number 101

¹³C



erythro

Guaiacylglycerol- β -guaiacyl ether

1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propan-1,3-diol

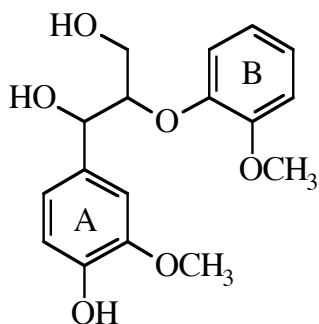
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	82	56.20	97	55.35	100
OMe	55.94	100	56.27	100	55.52	84
γ	60.75	76	61.81	81	60.04	59
α	72.78	76	73.82	81	71.60	72
β	87.02	75	86.72	100	83.67	66
A2	108.81	71	111.38	94	111.35	62
B2	112.19	75	113.50	81	112.60	69
A5	114.31	84	115.12	90	114.48	66
B5	119.07	73	119.70	90	115.86	59
A6	120.57	75	120.45	94	119.43	66
B6	121.59	90	121.85	100	120.56	78
B1	124.00	80	123.32	100	120.89	69
A1	131.95	51	134.23	55	133.15	69
A4	145.09	49	146.61	42	145.35	78
A3	146.64	45	147.93	39	146.86	72
B4	146.89	35	149.04	35	148.00	62
B3	151.40	39	151.96	35	149.68	56

¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.84	s	
α	4.95	d	4.8
β	4.16	m	

Notes:

J. Ralph JRB 178.3
30mg
J. Ralph Holzforschung
42(1988) p273-5

*threo*Guaiacylglycerol- β -guaiacyl ether

1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propane-1,3-diol

¹H (chloroform)

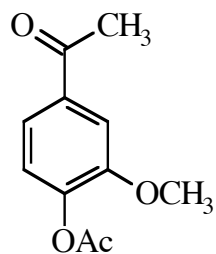
Atom	H Shifts	Mult	J
OMe	3.86	s	
OMe	3.90	s	
α	4.96	d	8.0
β	4.02	m	

Notes:

J. Ralph JRGV 135.X1
 21mg
 J. Ralph Holzforschung
 42(1988) p.273-5

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.91	92	56.21	96	55.33	97
OMe	55.97	100	56.31	100	55.53	100
γ	61.06	72	61.90	75	60.02	59
α	74.00	80	73.93	84	70.90	69
β	89.45	72	88.58	84	84.37	62
A2	109.46	86	111.41	96	110.96	66
B2	112.18	88	113.40	86	112.50	66
A5	114.35	88	115.21	78	114.57	62
B5	120.25	88	120.06	90	115.79	62
A6	120.98	75	120.57	88	118.92	62
B6	121.69	94	121.95	80	120.60	76
B1	124.21	85	123.44	88	120.96	69
A1	131.51	46	133.81	43	132.86	76
A4	145.59	48	146.82	39	145.33	79
A3	146.68	42	148.00	29	146.89	66
B4	147.63	35	149.70	31	148.32	59
B3	151.27	38	151.80	29	149.62	59

Compound Number 103



Acetylated acetovanillone
4-acetoxy-3-methoxyacetophenone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	65	20.46	64	20.29	83
β	26.49	81	26.63	84	26.62	88
OMe	56.05	100	56.37	97	55.88	100
2	111.51	97	112.44	97	111.62	77
6	121.94	88	122.38	93	121.56	83
5	122.80	95	123.77	100	123.02	84
1	135.96	37	136.93	30	135.62	51
4	143.87	26	144.80	21	143.21	35
3	151.41	33	152.40	24	150.92	41
Ac C=O	168.46	30	168.64	26	168.12	44
α	196.91	30	196.89	29	196.88	40

¹H (chloroform)

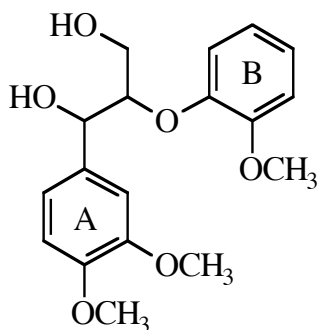
Atom	H Shifts	Mult	J
Ac Me	2.59	s	
β	2.33	s	
OMe	3.88	s	
2	7.59	d	1.9
5	7.12	d	8.1
6	7.54	dd	8.1, 1.9

Notes:

IPC
45mg

Compound Number 104

¹³C



threo

Veratrylglycerol- β -guaiacyl ether

1-(3,4-Dimethoxyphenyl)-2-(2-methoxyphenoxy)propane-1,3-diol

¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.83	s	
OMe	3.84	s	
α	4.96	d	5.0
β	4.15	m	

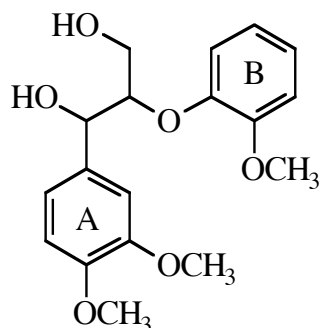
Notes:

LL Landucci
75mg Shifts reported are for threo isomer-minor isomer of this mixture.
see 105 also

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.84	76	56.03	100	55.22	72
OMe	55.88	100	56.11	97	55.42	82
OMe	55.88	100	56.27	94	55.52	100
γ	61.04	16	61.70	60	60.02	48
α	73.77	16	73.64	74	70.77	18
β	88.82	14	87.92	28	84.26	20
A2	110.05	15	111.89	67	110.67	20
A5	111.07	45	112.29	74	111.13	53
B2	112.21	43	113.36	31	112.52	23
A6	119.55	15	120.03	72	115.84	23
B5	120.52	15	119.56	32	118.62	22
B6	121.61	19	121.83	34	120.56	32
B1	123.93	17	123.30	66	120.95	23
A1	132.38	12	135.01	16	134.47	22
B4	147.65	10	148.92	25	147.72	27
A4	148.83	12	149.67	15	147.98	43
A3	149.04	12	149.96	32	148.25	20
B3	151.07	11	151.61	10	149.67	23

Compound Number 105

¹³C



erythro

Veratrylglycerol-β-guaiacyl ether

1-(3,4-Dimethoxyphenyl)-2-(2-methoxyphenoxy)-propane-1,3-diol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	73	56.07	87	55.23	92
OMe	55.91	100	56.15	87	55.44	100
OMe	55.91	100	56.30	95	55.54	97
γ	60.81	46	61.79	30	60.03	61
α	72.75	50	73.75	36	71.54	69
β	87.10	50	86.58	74	83.62	67
A2	109.41	46	111.97	80	111.03	72
A5	111.08	50	112.35	84	111.14	75
B2	112.21	53	113.55	84	112.61	75
A6	118.49	50	120.06	100	115.95	72
B5	120.68	50	119.64	85	119.18	67
B6	121.58	48	121.86	87	120.56	81
B1	124.02	45	123.32	87	120.95	72
A1	132.70	37	135.50	31	134.79	69
B4	146.96	26	149.03	31	147.76	56
A4	148.48	26	149.63	31	147.99	61
A3	149.02	27	150.04	34	148.10	67
B3	151.47	26	151.96	31	149.72	53

¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.85	s	
OMe	3.85	s	
OMe	3.85	s	
α	4.99	d	4.8
β	4.17	m	
γ1	3.69	m	
γ2	3.92	m	
A2	6.90	m	
A6	6.99	m	
<u>acetone</u>			
OMe	3.76		
OMe	3.77		
OMe	3.81		
α	4.91		
β	4.29		
γ1	3.67		
γ2	3.81		
A2	7.11	d	2.1
A6	6.86	d	8.45

Notes:

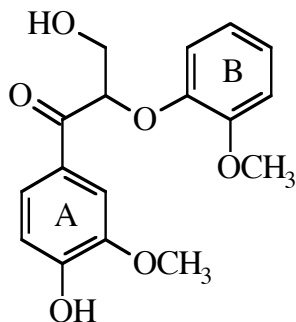
LL Landucci

30mg

alpha OH proton 4.55 in acetone

Compound Number 106

¹³C



Erone

3-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propan-1-one

¹H (chloroform)

Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.87	s	
γ	4.08	d	5.1
β	5.43	t	5.1

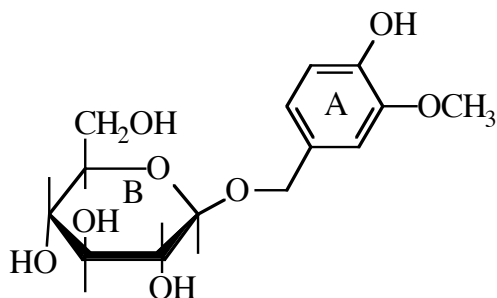
Notes:

S. Ralph
45mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.82	100	56.20	97	55.46	96
OMe	56.02	96	56.24	100	55.50	100
γ	63.70	72	64.11	41	62.52	55
β	83.94	88	83.69	82	81.32	61
A2	110.88	87	112.48	73	111.71	56
B2	112.35	89	113.65	85	112.67	60
A5	114.21	87	115.50	82	114.48	57
B5	117.56	79	116.70	81	114.98	55
B6	121.18	92	121.57	88	120.48	66
B1	123.26	88	122.94	82	121.47	60
A6	124.16	88	124.66	86	123.51	54
A1	127.68	56	128.72	42	126.79	52
B4	146.91	55	148.29	36	146.94	56
A3	146.95	59	148.36	41	147.49	61
B3	150.12	42	150.86	27	149.13	54
A4	151.28	62	152.76	41	152.22	68
α	194.91	52	195.64	42	194.69	50

Compound Number 107

¹³C



Vanillyl-β-D-Glucoside

2-(4-Hydroxy-3-methoxybenzyloxy)-6-hydroxymethyl tetrahydropyran-3,4,5-triol

¹H Not run

Atom	H Shifts	Mult	J

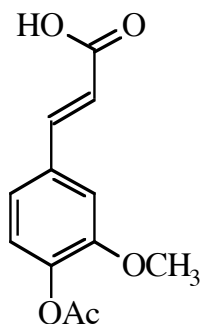
Notes:

M.Mozuch 88/71/1
20mg not soluble in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.30	100	55.46	100
B6			63.00	76	61.09	57
B4			70.98	76	69.40	61
B2			71.74	90	70.09	86
B5			74.90	86	73.40	93
α			77.48	84	76.66	89
B3			78.02	88	76.82	86
B1			102.70	79	101.52	82
A2			112.81	88	112.29	82
A5			115.41	87	114.90	82
A6			121.77	87	120.50	79
A1			130.28	50	128.57	79
A3			147.00	46	145.80	75
A4			148.21	33	147.25	71

Compound Number 108

¹³C



Acetylated ferulic acid
4-acetoxy-3-methoxycinnamic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.48	86	20.29	98
OMe			56.42	96	55.90	100
2			112.48	80	111.79	76
β			119.48	76	119.47	80
6			122.03	91	121.20	84
5			124.11	100	123.10	82
1			134.38	39	133.19	64
4			142.62	26	140.77	56
α			144.79	89	143.23	80
3			152.71	34	151.09	64
Ac C=O			167.70	41	167.50	78
γ			168.78	36	168.29	66

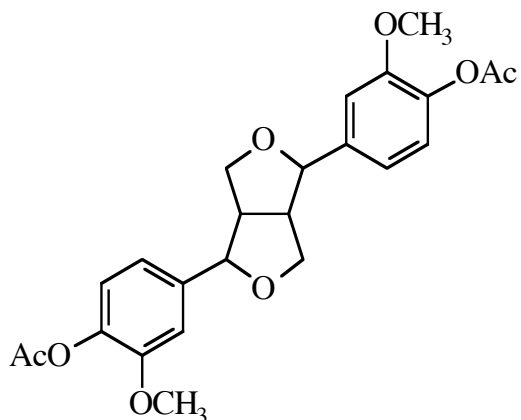
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.33	s	
OMe	3.88	s	
α	7.04	d	15.9
β	6.41	d	15.9

Notes:

R. Helm RFH 83F1
50mg not soluble in CDCL3

Compound Number 109



Pinoresinol diacetate

Acetic acid 4-[4-(4-acetoxy-3-methoxyphenyl) tetrahydrofuro[3,4-c]furan-1-yl]-2-methoxyphenyl ester

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.30	s	
OMe	3.83	s	
β	3.08	m	
γ1	3.92	dd	9.0, 3.2
γ2	4.27	dd	9.0, 6.8
α	4.78	d	3.9
6	6.88	dd	8.1, 1.4
2	6.99	m	
5	7.00	m	

Notes:

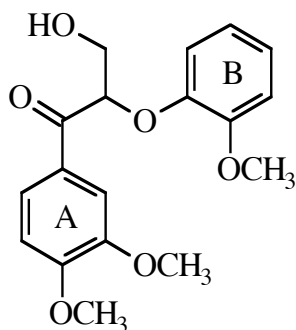
J. Pew
As this compound has a plane of symmetry
The shifts for the other half are identical.

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	86	20.48	76	20.28	85
β	54.36	94	55.42	92	53.75	85
OMe	55.92	100	56.23	100	55.67	100
γ	71.95	86	72.58	79	71.24	78
α	85.50	93	86.22	92	84.64	80
2	109.91	87	111.12	81	110.33	78
6	117.92	88	118.63	84	117.78	76
5	122.74	77	123.46	83	122.50	83
4	139.13	37	140.15	27	138.42	51
1	140.11	61	141.80	43	140.41	71
3	151.23	48	152.28	35	150.70	66
Ac C=O	168.99	42	168.98	25	168.44	58

Compound Number 110

¹³C



Veratrone

1-(3,4-Dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propan-1-one

¹H (chloroform)

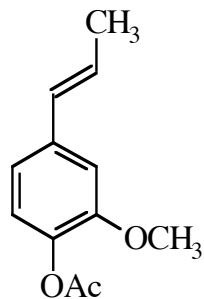
Atom	H Shifts	Mult	J
OMe	3.84	s	
OMe	3.90	s	
OMe	3.93	s	
γ	4.08	m	
β	5.42	t	5.2
A2	7.61	d	2.0
A6	7.76	dd	8.4, 2.0

Notes:

LL Landucci
34mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.82	94	56.05	59	55.39	84
OMe	55.97	100	56.05	59	55.46	100
OMe	56.10	100	56.21	100	55.70	87
γ	63.73	77	64.11	52	62.47	68
β	84.31	89	83.88	65	81.38	71
A2	110.17	81	111.53	56	110.75	68
A5	111.04	83	112.23	57	110.87	71
B2	112.35	89	113.74	67	112.68	71
B5	117.96	74	116.95	61	114.58	71
B6	121.17	85	121.59	69	120.48	74
B1	123.40	94	123.04	65	121.56	74
A6	123.63	77	124.28	56	123.24	65
A1	128.10	42	129.44	28	127.88	61
B4	146.97	34	148.43	20	146.88	52
A3	149.20	47	150.07	22	148.50	65
B3	150.30	38	151.01	20	149.14	55
A4	153.95	40	154.89	22	153.40	58
α	195.04	49	195.92	26	195.14	55

Compound Number 111



acetylated isoeugenol
1-(3-methoxy-4-acetoxyphenyl)-1-propene

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	18.37	91	18.45	81	18.11	94
Ac Me	20.62	73	20.45	68	20.32	86
OMe	55.77	100	56.10	100	55.64	100
2	109.69	77	110.54	89	109.73	95
6	118.36	96	118.90	97	117.99	100
5	122.65	85	123.53	97	122.68	92
β	126.01	85	126.34	94	125.80	79
α	130.48	87	131.36	94	130.24	92
1	137.06	41	137.70	35	136.44	71
4	138.65	25	139.88	21	138.24	46
3	151.02	31	152.26	24	150.86	52
Ac C=O	169.04	32	168.95	23	168.46	40

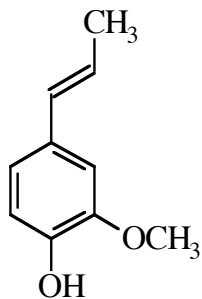
¹H (chloroform)

Atom	H Shifts	Mult	J
γ	1.85	dd	6.35, 1.4
Ac Me	2.28	s	
OMe	3.81	s	
β	6.17	dq	15.7, 6.35
α	6.35	dd	15.7, 1.4

Notes:

J. Ralph JRPS115.1
50mg

Compound Number 112



Isoeugenol

1-(3-methoxy-4-hydroxyphenyl)-1-propene

¹H (chloroform)

Atom	H Shifts	Mult	J
γ	1.83	dd	6.5, 1.6
OMe	3.84	s	
β	6.05	dq	15.7, 6.5
α	6.30	dd	15.7, 1.6

Notes:

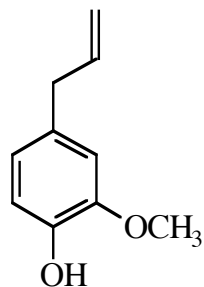
Aldrich
50mg contains an impurity

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	18.30	86	18.38	88	18.05	98
OMe	55.82	100	56.13	100	55.50	100
2	108.01	81	109.64	83	109.41	87
5	114.43	95	115.66	89	115.41	91
6	119.30	98	119.89	100	118.78	95
β	123.34	86	122.97	89	121.98	95
1	130.66	42	130.93	30	129.11	56
α	130.78	96	131.86	85	130.87	88
4	144.79	44	146.61	37	145.80	72
3	146.61	26	148.28	27	147.64	61

Compound Number 113

¹³C



Eugenol
4-Allyl-2-methoxyphenol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	39.88	84	40.32	90	39.08	99
OMe	55.86	100	56.16	100	55.49	100
2	111.17	94	112.83	81	112.58	82
γ	114.31	98	115.31	71	115.11	82
5	115.46	86	115.61	93	115.35	100
6	121.19	96	121.66	86	120.48	76
1	131.90	36	132.07	27	130.39	56
β	137.83	72	139.05	68	138.13	82
4	143.93	32	145.68	32	144.72	63
3	146.47	27	148.13	25	147.43	50

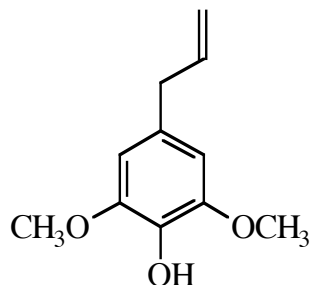
¹H (chloroform)

Atom	H Shifts	Mult	J
α	3.30	d	6.6
OMe	3.84	s	
γ	5.04	m	
β	5.94	ddt	6.6
5	6.83	d	8.5

Notes:

Aldrich
50mg

Compound Number 114



4-Allyl-2,6-dimethoxyphenol

¹H (chloroform)

Atom	H Shifts	Mult	J
α	3.30	d	6.7
OMe	3.85	s	
2,6	6.40	s	
γ1	5.04	m	
β	5.94	ddt	16.8, 10.2, 6.7

Notes:

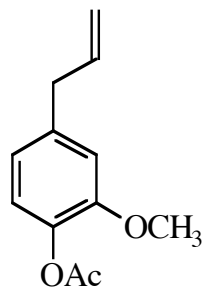
Aldrich 50mg Extraneous peaks
around 106 and 119

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	40.31	49	40.73	53	39.53	66
OMe	56.26	97	56.58	99	55.89	100
OMe	56.26	97	56.58	99	55.89	100
2	105.26	100	106.83	100	105.83	83
6	105.26	100	106.83	100	105.83	83
γ	115.65	46	115.42	45	115.26	48
1	131.06	23	131.13	19	129.63	30
4	133.10	16	135.19	15	133.81	28
β	137.60	43	138.95	36	137.98	47
3	147.03	36	148.60	28	147.93	54
5	147.03	36	148.60	28	147.93	54

Compound Number 115

¹³C



acetylated eugenol

1-(3-methoxy-4-acetoxyphenyl)-2-propene

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	76	20.45	73	20.30	69
α	40.08	100	40.51	100	39.26	100
OMe	55.81	89	56.08	100	55.57	81
2	112.76	89	113.66	87	112.82	67
γ	116.12	76	116.03	79	115.87	68
5	120.66	100	121.10	92	120.15	76
6	122.51	100	123.37	92	122.48	68
β	137.03	78	138.32	69	137.34	68
4	138.05	24	139.24	21	137.53	31
1	138.98	43	139.72	37	138.66	43
3	150.89	28	152.10	25	150.61	33
Ac C=O	169.12	32	168.95	25	168.47	33

¹H (chloroform)

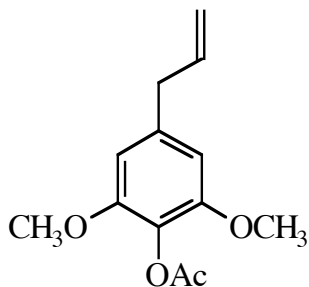
Atom	H Shifts	Mult	J
Ac Me	2.29	s	
α	3.36	d	6.7
OMe	3.80	s	
2			
γ	5.07	m	
β	5.95	ddt	16.8, 10.2, 6.7
A6	6.75	m	
A2	6.77	m	
A5	6.94	d	7.9

Notes:

J. Ralph JRC91.1
50mg

Compound Number 116

¹³C



1-(3,5-dimethoxy-4-acetoxyphenyl)-2-propene

¹H (chloroform)

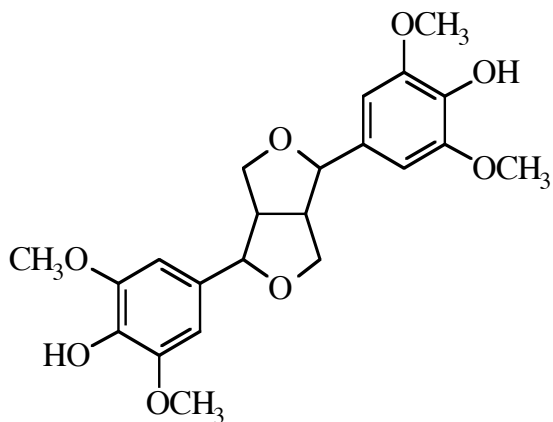
Atom	H Shifts	Mult	J
Ac Me	2.31	s	
α	3.34	d	6.7
OMe	3.79	s	
2,6	6.43	s	
γ	5.09	m	
β	5.95	ddt	16.8, 10.1, 6.7

Notes:

J. Ralph JRPS143.1
50mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.43	40	20.24	38	20.09	52
α	40.64	45	41.06	47	39.89	100
OMe	56.07	100	56.32	94	55.80	97
OMe	56.07	100	56.32	94	55.80	97
2	105.16	88	105.93	100	105.01	88
6	105.16	88	105.93	100	105.01	88
γ	116.22	39	116.11	44	115.97	47
4	126.99	8	128.10	6	126.33	12
β	136.90	38	138.24	37	137.27	47
1	138.52	25	139.32	20	138.31	35
3	151.97	34	153.06	25	151.58	57
5	151.97	34	153.06	25	151.58	57
Ac C=O	168.81	13	168.56	15	168.06	27

Compound Number 117



Syringylresinol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	54.38	49	55.33	61	53.59	39
OMe	56.41	100	56.69	100	55.95	100
OMe	56.41	100	56.69	100	55.95	100
γ	71.83	47	72.37	57	70.99	41
α	86.08	44	86.81	54	85.26	41
2	102.78	79	104.52	100	103.59	78
6	102.78	79	104.52	100	103.59	78
1	132.13	29	133.24	26	131.36	35
4	134.38	25	136.23	17	134.81	33
3	147.19	50	148.69	26	147.82	69
5	147.19	50	148.69	26	147.82	69

¹H (chloroform)

Atom	H Shifts	Mult	J
β	4.28	m	
OMe	3.90	s	
γ2	4.28	m	
α	4.73	d	4.3
2,6	6.58	s	

Notes:

IPC - Pearl

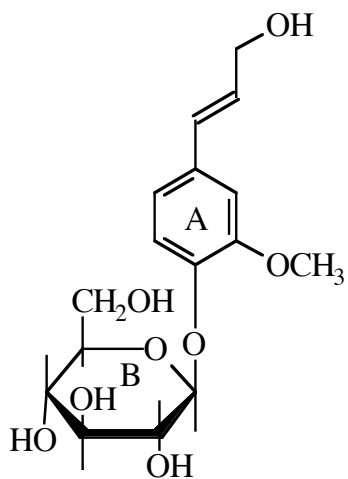
14mg

As this compound has a plane of symmetry

The shifts for the other half are identical.

Compound Number 118

¹³C



Coniferin

4-(3-hydroxy-1-propenyl)-2-methoxyphenyl- β -D-glucopyranoside

¹H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.78	s	
γ , γ 2	4.10	dd	5.03
β	6.28	dt	15.9,5.0
α	6.47	d	15.9
A2	7.06	d	1.8
A5	7.02	d	8.4
A6	6.89	dd	8.4,1.8
B1	4.89	d	7.3
B2,3,4,5	3.34-3.18	nr	
B6 α	3.46	m	
B6 β	3.67	ddd	
B6 OH	4.54	t	5.7
γ OH	4.83	t	5.6

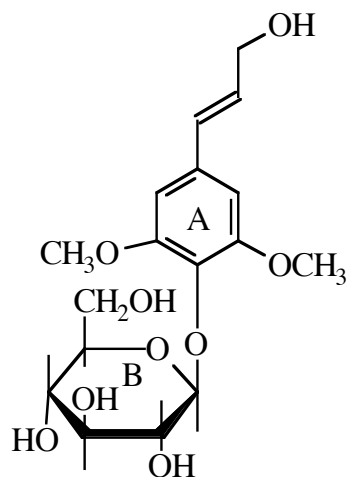
Notes:

IPC - Pearl
 53mg
 only soluble in DMSO
 Terashima, Ralph, Landucci
 Holzforschung
 50(1995)p. 151-155

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe					55.57	100
B6					60.60	49
γ					61.51	88
B4					69.60	68
B2					73.12	68
B5					76.76	67
B3					76.91	70
B1					100.00	65
A2					109.84	56
A5					115.25	58
A6					118.89	63
α					128.31	79
β					128.87	70
A1					130.95	70
A4					145.89	67
A3					148.94	70

Compound Number 119

¹³C



Syringin

4-(3-hydroxy-1-propenyl)-2,6-dimethoxy-β-D-glucopyranoside

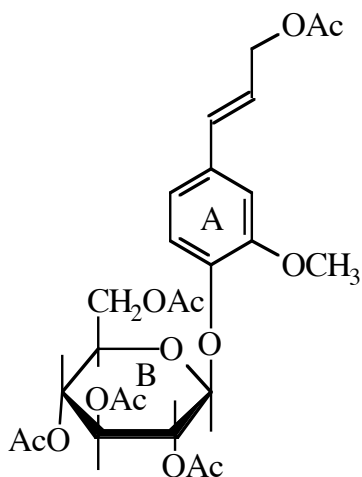
¹H (DMSO)

Atom	H Shifts	Mult	J
OMe	3.77	s	
γ1	4.11	dd	5.0
β	6.63	dt	15.9,4.7
α	6.47	d	15.9
A2,6	6.73	s	
B1	4.91	d	4.8
B2,3,4,5	3.18-3.04	nr	
B6 α	3.4	m	
B6 β	3.59	ddd	
B6 OH	4.29	t	5.4
γ OH	4.85	t	5.5

Notes:

IPC - Pearl
 50mg
 only soluble in DMSO
 Terashima, Ralph, Landucci
 Holzforschung
 50(1995)p. 151-155

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe					56.27	100
OMe					56.27	100
B6					60.82	29
γ					61.37	45
B4					69.86	37
B2					74.09	37
B5					76.45	37
B3					77.08	37
B1					102.51	35
A2					104.39	62
A6					104.39	62
α					128.35	37
β					130.05	37
A1					132.52	35
A4					133.80	26
A3					152.60	77
A5					152.60	77

Compound Number 120
¹³C

Coniferin acetate
4-(3-hydroxy-1-propenyl)-2-methoxy phenyl-1 β-D-glycopyranoside pentaacetate
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03		
Ac Me	2.03		
Ac Me	2.07		
Ac Me	2.07		
Ac Me	2.09		
OMe	3.80	s	
γ	4.70	d	6.4
β	6.20	dt	15.8, 6.3
α	6.59	d	15.8
A6	6.89	bd	8.2
A2	6.94	bs	
A5	7.07	d	8.2

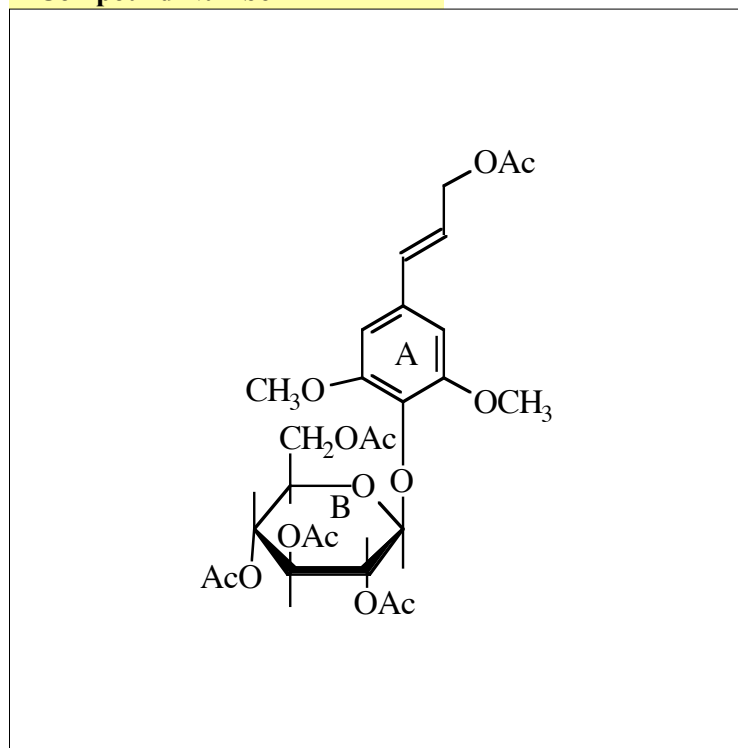
Notes:

 S. Ralph III-58
 50mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.60	100	20.51	50	20.23	75
Ac Me	20.60	100	20.59	100	20.28	100
Ac Me	20.60	100	20.59	100	20.30	100
Ac Me	20.66	66	20.59	100	20.41	77
Ac Me	20.95	46	20.78	43	20.65	92
OMe	56.07	57	56.47	50	55.90	77
B6	61.97	38	62.69	36	61.66	33
γ	64.93	52	65.23	45	64.32	67
B4	68.46	47	69.33	43	68.15	46
B2	71.24	47	71.96	39	70.77	48
B5	72.02	45	72.56	41	70.86	52
B3	72.61	48	73.23	38	71.92	46
B1	100.67	47	100.79	48	98.76	46
A2	110.58	44	111.55	38	110.61	52
A5	119.57	46	119.77	37	118.05	46
A6	119.93	48	120.26	40	119.34	54
β	122.83	56	123.86	44	123.02	58
A1	133.02	37	133.63	30	132.14	54
α	133.58	48	133.82	40	132.67	60
A4	146.09	32	147.19	26	145.66	56
A3	150.69	38	151.44	26	149.91	58
Ac C=O	169.26	34	169.58	24	168.91	50
Ac C=O	169.36	32	169.96	25	169.24	52
Ac C=O	170.15	34	170.22	28	169.49	56
Ac C=O	170.47	34	170.58	26	169.90	58
Ac C=O	170.71	22	170.69	16	170.07	44

Compound Number 121

¹³C



Syringin acetate

4-(3-hydroxy-1-propenyl)-2,6-dimethoxy phenyl-β-D-glucopyranoside penta acetate

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.03	s	
Ac Me	2.09	s	
OMe	3.84	s	
γ	4.71	d	6.4
β	6.22	dt	16.8, 6.4
α	6.57	d	16.8
A2,6	6.61	s	

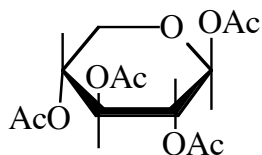
Notes:

S. Ralph III - 58
50mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.60	52	20.56	100	20.25	51
Ac Me	20.68	100	20.56	100	20.36	75
Ac Me	20.68	100	20.56	100	20.36	75
Ac Me	20.68	100	20.67	49	20.36	75
Ac Me	20.95	39	20.77	43	20.64	54
OMe	56.32	89	56.69	97	56.13	100
OMe	56.32	89	56.69	97	56.13	100
B6	62.35	32	62.91	40	61.82	25
γ	64.84	41	65.14	49	64.19	42
B4	68.56	36	69.47	48	68.26	31
B2	71.99	42	72.51	46	70.73	31
B5	72.08	42	72.81	48	71.54	31
B3	73.11	40	73.61	48	72.14	29
B1	101.21	36	101.69	43	100.48	31
A2	104.09	72	105.10	89	104.09	56
A6	104.09	72	105.10	89	104.09	56
α	123.30	39	124.38	46	123.74	36
A1	133.11	31	134.02	33	132.79	56
β	133.86	42	134.11	41	132.79	56
A4	134.56	23	135.38	19	133.87	32
A3	153.07	63	154.06	54	152.68	68
A5	153.07	63	154.06	54	152.68	68
Ac C=O	169.25	29	169.59	22	168.94	34
Ac C=O	169.41	30	169.94	24	169.24	36
Ac C=O	170.31	30	170.24	29	169.48	31
Ac C=O	170.51	25	170.48	24	169.81	37
Ac C=O	170.75	20	170.64	17	170.04	32

Compound Number 122

¹³C



$\alpha + \beta$ Xylose Acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42	62	20.35	59	20.21	43
Ac Me	20.54	40	20.46	43	20.25	54
Ac Me	20.60	83	20.51	71	20.34	100
Ac Me	20.60	83	20.55	100	20.34	100
Ac Me	20.66	88	20.55	100	20.34	100
Ac Me	20.66	88	20.55	100	20.34	100
Ac Me	20.74	41	20.65	70	20.44	62
Ac Me	20.79	55	20.65	70	20.52	49
5	60.65	49	61.12	57	60.05	32
5	62.76	31	63.14	35	62.01	18
4	68.35	32	69.09	41	67.99	41
4	68.67	53	69.22	59	68.10	28
3	69.39	100	69.87	63	68.83	41
3	69.39	100	70.24	67	68.93	41
2	69.53	38	70.30	48	69.36	25
2	70.97	34	71.54	37	70.52	23
1	89.26	54	89.76	56	88.60	38
1	92.05	31	92.67	41	91.49	24
Ac C=O	168.92	37	169.35	17	168.78	19
Ac C=O	168.92	37	169.53	21	169.02	43
Ac C=O	169.22	18	169.66	17	169.02	43
Ac C=O	169.65	31	170.01	17	169.36	24
Ac C=O	169.68	35	170.10	23	169.41	33
Ac C=O	169.68	35	170.19	40	169.49	24
Ac C=O	169.75	23	170.22	36	169.54	33
Ac C=O	170.02	27	170.22	36	169.58	37

¹H (chloroform)

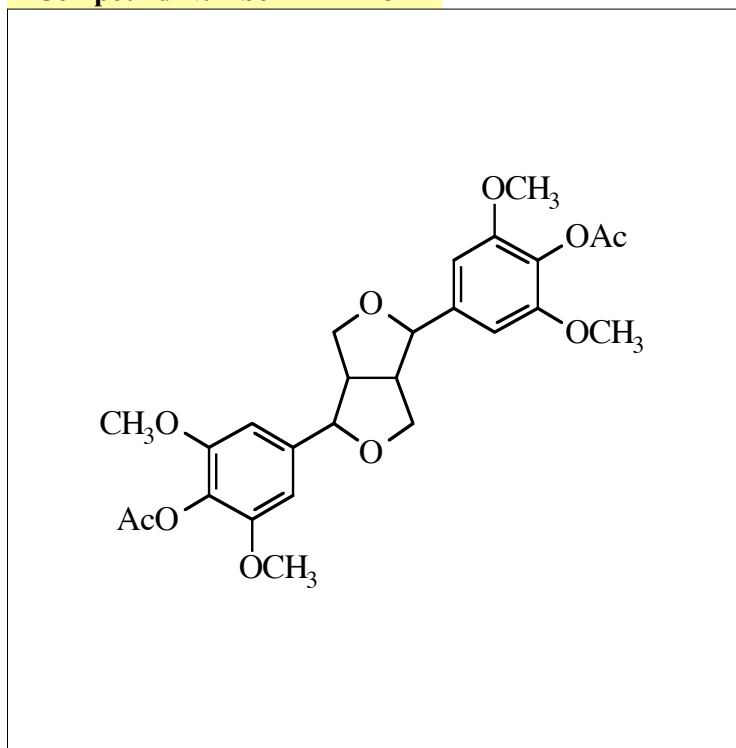
Atom	H Shifts	Mult	J
Ac Me	2.02	s	
Ac Me	2.049	s	
Ac Me	2.049	s	
Ac Me	2.052	s	
Ac Me	2.052	s	
Ac Me	2.06	s	
Ac Me	2.11	s	
Ac Me	2.17	s	

Notes:

S. Ralph III - 58
50mg mixture of $\alpha + \beta$

Compound Number 123

¹³C



Syringylresinol diacetate

Acetic acid 4-[4-(4-acetoxy-3,5-dimethoxyphenyl) tetrahydrofuro[3,4-c]furan-1-yl]-2,6-dimethoxyphenyl ester

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.33	s	
β	3.09	m	
OMe	3.83	s	
γ1	3.95	dd	9.1, 3.3
γ2	4.31	dd	9.1, 6.7
α	4.77	d	4.1
A2,6	6.59	s	

Notes:

S. Ralph III - 58

20mg

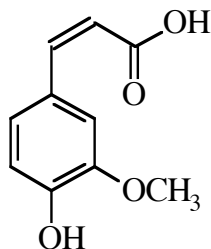
As this compound has a plane of symmetry

The shifts for the other half are identical.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.46	42	20.26	52	20.07	44
β	54.42	41	55.41	58	53.72	41
OMe	56.23	100	56.46	98	55.90	100
OMe	56.23	100	56.46	98	55.90	100
γ	72.11	47	72.71	54	71.38	36
α	85.85	47	86.51	56	84.93	34
2	102.29	85	103.30	100	102.44	63
6	102.29	85	103.30	100	102.44	63
1	128.06	12	128.91	8	127.04	19
4	139.63	30	141.41	31	140.03	31
3	152.30	50	153.23	44	151.60	68
5	152.30	50	153.23	44	151.60	68
Ac C=O	168.76	23	168.59	15	168.01	29

Compound Number 124

¹³C



cis

cis - Ferulic Acid

(Z)-4-hydroxy-3-methoxycinnamic acid

¹H (methanol)

Atom	H Shifts	Mult	J
OMe	3.85	s	
β	5.77	d	12.9
α	6.80	d	12.9
5	6.76	d	8.0
6	7.09	dd	8.1, 2.0
2	7.70	d	2.0

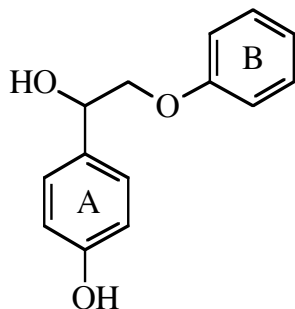
Notes:

J. Obst
 25mg 617 is a ¹³C in d4-MeOH.
 A Dept was run & marked on 617
 not saved.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.93	100	56.16	97	55.38	100
2	113.15	87	114.99	89	114.30	80
5	113.98	89	115.23	100	114.78	75
6	115.50	87	116.82	97	116.77	69
β	126.17	80	126.51	100	124.78	82
1	126.79	44	127.80	36	126.09	57
α	145.97	38	144.40	89	141.90	70
3	146.36	76	147.60	31	146.72	52
4	147.50	51	149.04	39	147.90	41
γ	171.34	44	167.85	31	167.54	51

Compound Number 125

¹³C



1-(4-hydroxyphenyl)-2-phenoxyethanol

¹H (chloroform)

Atom	H Shifts	Mult	J
α	5.05	dd	8.3, 3.6
β	4.05	m	

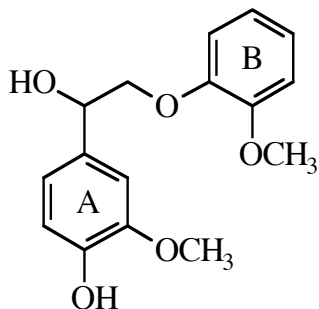
Notes:

JR C37.1
52mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	72.31	43	72.42	41	70.55	44
β	73.25	49	74.32	50	73.07	39
B3	114.73	93	115.43	90	114.49	100
B5	114.73	93	115.43	90	114.49	100
A3	115.51	98	115.76	88	114.74	92
A5	115.51	98	115.76	88	114.74	92
B1	121.33	51	121.37	46	120.38	42
A2	127.80	98	128.39	95	127.42	85
A6	127.80	98	128.39	95	127.42	85
B2	129.55	100	130.12	100	129.32	94
B6	129.55	100	130.12	100	129.32	94
A1	131.68	20	133.53	22	132.63	25
A4	155.77	28	157.61	22	156.54	38
B4	158.41	20	159.84	15	158.52	29

Compound Number 126

¹³C



1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)ethanol

¹H (chloroform)

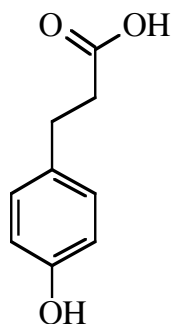
Atom	H Shifts	Mult	J
OMe	3.88	s	
OMe	3.89	s	
α	5.02	dd	9.3, 3.0
β1	3.93	dd	10.0, 9.3
β2	4.15	dd	10.0, 3.0

Notes:

JR 145.2
62mg * 76.50 shift in CDCL3
falls under solvent peak.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.90	87	56.28	95	55.52	100
OMe	55.97	87	56.35	92	55.52	100
α	72.20	67	72.71	70	70.81	61
β	76.50	100	76.32	95	74.15	51
A2	108.87	70	111.01	95	110.75	52
B2	112.16	77	113.67	88	112.51	52
A5	114.26	77	115.37	82	113.75	49
B5	116.21	73	115.93	75	114.92	57
A6	119.37	77	119.89	95	118.67	55
B6	121.13	77	121.83	100	120.74	66
B1	122.58	73	122.45	90	120.92	60
A1	131.61	33	134.17	35	133.46	47
A4	145.46	30	146.84	30	145.66	52
A3	146.68	27	148.12	22	147.21	44
B3	148.10	23	149.74	25	148.23	43
B4	150.26	20	151.06	18	149.10	38

Compound Number 127



Dihydrocoumaric acid
3-(4-hydroxyphenyl)propionic acid

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	29.94	53	30.68	43	29.58	43
β	35.75	40	36.33	46	35.70	41
3	115.46	92	115.99	100	115.04	93
5	115.46	92	115.99	100	115.04	93
2	129.36	100	130.00	79	129.00	100
6	129.36	100	130.00	79	129.00	100
1	132.10	14	132.54	17	130.92	34
4	154.55	22	156.42	18	155.46	34
γ	176.90	5	174.68	10	173.81	27

¹H (chloroform)

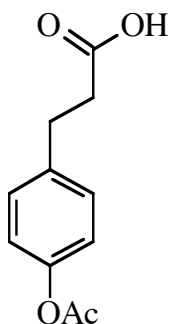
Atom	H Shifts	Mult	J
β	2.63	t	7.0
α	2.88	t	7.0
3,5	6.77	m	8.6
2,6	7.06	m	8.6

Notes:

IPC Pearl Coll.
60mg

Compound Number 128

¹³C



acetylated dihydrocoumaric acid
3-(4-acetoxyphenyl)propionic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.06	39	20.91	39	20.73	45
α	29.96	51	30.80	53	29.68	46
β	35.48	46	35.80	55	35.14	36
3	121.56	100	122.37	86	121.47	100
5	121.56	100	122.37	86	121.47	100
2	129.24	100	129.94	100	129.09	94
6	129.24	100	129.94	100	129.09	94
1	137.78	27	139.24	20	138.29	29
4	149.17	19	150.24	14	148.70	25
Ac C=O	169.78	14	169.65	13	169.14	23
γ	178.63	20	174.18	17	173.60	24

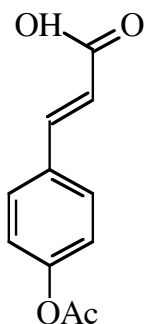
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
β	2.67	t	7.3
α	2.92	t	7.3
2,6	6.99	m	8.5
3,5	7.19	m	8.5

Notes:

IPC Pearl Coll.
60mg Contains unacetylated cmpd also

Compound Number 129



trans

acetylated coumaric acid
(E)-4-acetoxycinnamic acid

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.12	45	20.96	43	20.76	54
β	117.38	47	119.32	50	119.29	38
3	122.22	100	123.19	100	122.28	98
5	122.22	100	123.19	100	122.28	98
2	129.48	100	130.07	95	129.32	100
6	129.48	100	130.07	95	129.32	100
1	131.82	26	133.04	19	131.89	38
α	145.80	42	144.44	43	142.88	43
4	152.50	24	153.41	17	151.80	31
Ac C=O	168.98	21	167.68	21	167.48	30
γ	171.14	13	169.39	14	168.92	26

¹H (chloroform)

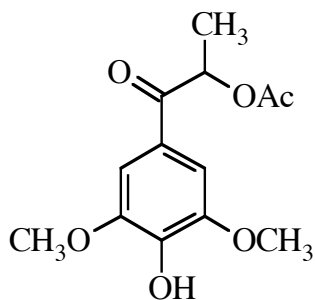
Atom	H Shifts	Mult	J
Ac Me	2.31	s	
β	6.41	d	16.0
3,5	7.15	m	8.6
2,6	7.57	m	8.6
α	7.75	d	16.0

Notes:

IPC Pearl coll.
60mg

Compound Number 130

¹³C



2-acetoxy-1-(4-hydroxy-3,5-dimethoxyphenyl)propan-1-one

¹H (chloroform)

Atom	H Shifts	Mult	J
γ	1.53	d	7.0
Ac Me	2.15	s	
OMe	3.94	s	
β	5.96	q	7.0
2,6	7.24	s	

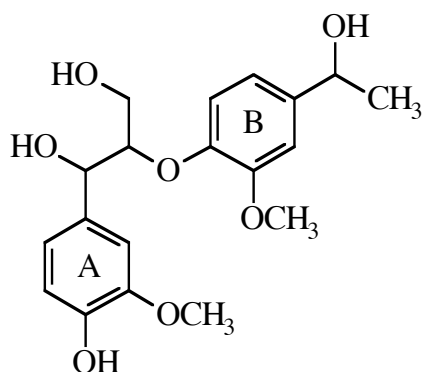
Notes:

IPC Pearl coll.
60mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.44	41	17.77	43	17.43	51
Ac Me	20.78	29	20.63	38	20.40	43
OMe	56.57	100	56.85	100	56.22	100
OMe	56.57	100	56.85	100	56.22	100
β	70.94	47	71.98	48	71.15	40
2	106.12	84	107.38	98	106.43	76
6	106.12	84	107.38	98	106.43	76
1	125.83	16	126.17	13	124.02	31
4	140.42	13	142.41	7	141.67	29
3	147.02	30	148.59	18	147.75	57
5	147.02	30	148.59	18	147.75	57
Ac C=O	170.45	13	170.42	13	169.70	29
α	195.11	16	195.30	15	194.63	29

Compound Number 131

¹³C



threo

1-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy]propane-1,3-diol

¹H (chloroform)

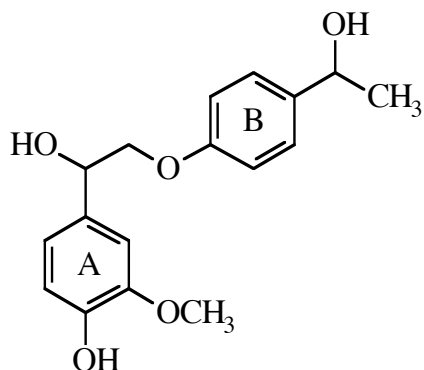
Atom	H Shifts	Mult	J
B β	1.46	d	6.4
OMe	3.84	s	
OMe	3.86	s	
B α	4.82	q	6.4
α	4.92	d	7.7
A5	7.03	d	8.2

Notes:

S. Ralph SR111-62-1
 35mg
 erythro data

	C	A	D
γ	60.8	61.9	60.0
α	72.8	73.8	71.6
β	86.9	86.9	83.9
A1	132.0	134.3	133.2

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.20	68	26.21	66	25.80	90
OMe	55.90	86	56.24	85	55.35	67
OMe	55.98	100	56.31	100	55.52	87
γ	61.09	46	61.89	61	60.02	49
B α	70.01	73	69.74	80	67.78	85
α	73.93	59	73.95	63	70.91	38
β	89.03	51	88.72	51	84.74	36
B2	109.35	54	110.67	58	109.79	36
A2	109.54	57	111.45	76	110.98	38
A5	114.42	59	115.24	64	114.57	49
B5	118.41	62	118.70	64	115.62	38
B6	120.17	65	119.68	68	117.24	49
A6	120.23	49	120.59	71	118.93	44
A1	131.56	38	133.85	34	132.89	54
B1	141.90	43	142.92	41	140.44	38
A4	145.57	51	146.83	41	145.31	59
A3	146.72	54	148.04	29	146.87	100
B4	146.78	35	148.31	31	146.87	100
B3	150.99	35	151.45	31	149.31	46



1-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2-methoxyphenoxy]ethanol

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	1.46	d	6.4
OMe	3.90	s	
β1	3.96	dd	9.7, 8.6
β2	4.06	dd	9.7, 3.5
B α	4.84	q	6.4
α	5.03	dd	8.6, 3.5

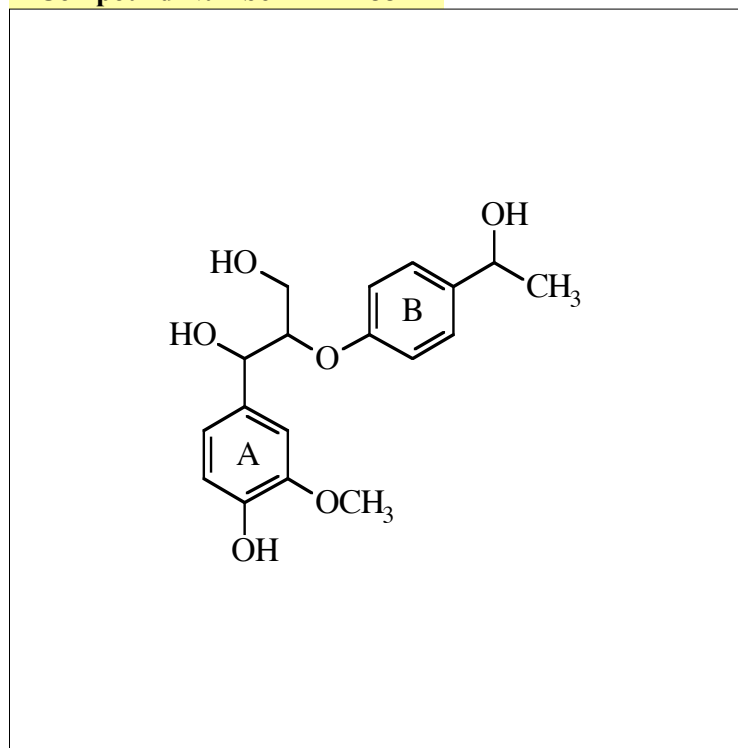
Notes:

S. Ralph SR111-63-1
50mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.05	40	26.20	40	25.83	54
OMe	55.98	52	56.27	50	55.50	62
B α	69.91	44	69.50	39	67.52	62
α	72.43	50	72.65	46	70.68	46
β	73.58	44	74.65	48	73.22	38
A2	108.82	44	110.89	39	110.55	35
B3	114.64	87	115.07	84	113.95	96
B5	114.64	87	115.07	84	113.95	96
A5	114.37	56	115.42	38	114.88	46
A6	119.33	52	119.88	41	118.63	42
B2	126.73	100	127.27	100	126.28	100
B6	126.73	100	127.27	100	126.28	100
A1	131.66	25	134.30	21	133.30	37
B1	138.66	23	140.41	21	139.30	37
A4	145.57	25	146.86	21	145.60	40
A3	146.70	25	148.16	15	147.17	38
B4	157.81	23	158.80	18	157.19	38

Compound Number 133

¹³C



1-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)phenoxy]-propane-1,3-diol

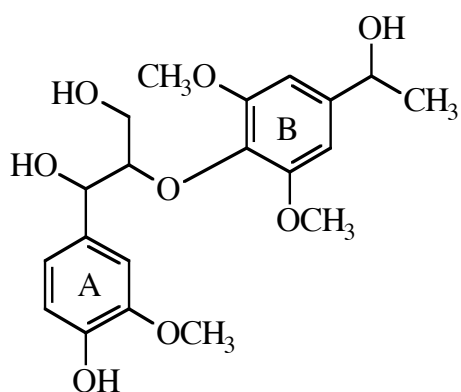
¹H (chloroform)

Atom	H Shifts	Mult	J
B β	1.47	d	6.4
OMe	3.87	s	
β	4.37	m	
Bα	4.85	q	6.4
α	4.96	d	6.7

Notes:

S. Ralph SRIII-63-3
 70mg
 2:1 isomeric mixture, minor isomer shifts
 γ 61.54, 62.04, 60.11
 a 74.04, 73.99, 71.50
 β 82.09, 83.75, 83.14
 B3,5 116.54, 116.81, 115.54
 A6 119.33, 120.47, 119.37
 B2,6 126.78, 127.10, 126.07

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.08	49	26.07	52	25.78	64
OMe	56.00	72	56.22	53	55.45	49
γ	61.24	34	61.69	34	60.00	27
B α	69.86	64	69.52	52	67.60	62
α	73.94	43	73.38	36	70.95	24
β	83.28	45	84.16	38	83.14	29
A2	109.42	45	111.37	45	110.90	22
A5	114.38	47	115.19	48	114.68	33
B3	116.47	91	116.69	81	115.39	78
B5	116.47	91	116.69	81	115.39	78
A6	119.99	49	120.34	42	118.96	29
B2	126.88	100	127.14	100	126.14	100
B6	126.88	100	127.14	100	126.14	100
A1	131.60	26	134.18	25	133.19	36
B1	139.39	26	140.38	31	139.20	44
A4	145.68	19	146.63	25	145.33	42
A3	146.72	17	147.92	25	146.93	40
B4	157.50	21	158.92	23	157.71	33

*threo*

1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propane-1,3-diol

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	1.47	d	6.4
A OMe	3.86	s	
B OMe's	3.89	s	
B α	4.83	q	6.4
α	5.00	d	8.8
B2,6	6.63	s	
A2	6.95	s	
A5	6.85	d	8.3
A6	6.91	dd	8.3, 1.7

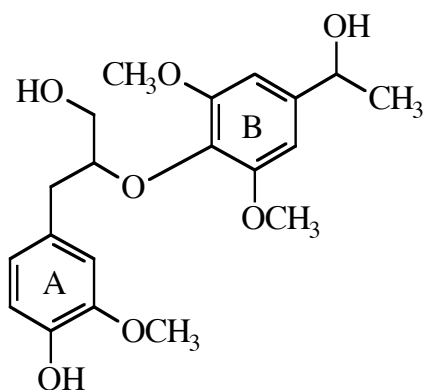
Notes:

S. Ralph SR111-64-1
35mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.39	37	26.27	42	25.81	51
A OMe	55.96	45	56.23	49	55.46	51
B OMe	56.14	100	56.54	100	55.80	100
B OMe	56.14	100	56.54	100	55.80	100
γ	60.55	30	61.35	41	60.09	27
B α	70.29	39	70.01	44	68.07	56
α	74.10	35	74.10	42	71.48	34
β	89.00	35	89.82	40	87.20	37
B2	102.32	69	103.48	87	102.53	63
B6	102.32	69	103.48	87	102.53	63
A2	109.90	36	111.51	41	110.97	24
A5	114.36	37	115.24	54	114.56	32
A6	120.34	38	120.75	48	119.14	37
A1	131.89	26	133.67	26	132.82	39
B1	134.26	15	135.57	13	134.56	24
B4	142.80	23	144.64	26	142.88	41
A4	145.44	29	146.79	24	145.23	39
A3	146.56	30	147.95	25	146.77	37
B3	152.91	50	153.64	45	152.13	73
B5	152.91	50	153.64	45	152.13	73

Compound Number 135

¹³C



3-(4-hydroxy-3-methoxyphenyl)-2-[4-(1-hydroxyethyl)-2,6-dimethoxyphenoxy]propan-1-ol

¹H (chloroform)

Atom	H Shifts	Mult	J
B β	1.47	d	6.4
α1	2.97	dd	13.6, 8.8
α2	3.20	dd	13.6, 5.4
B OMe	3.85	s	
A OMe	3.83	s	
B α	4.82	q	6.4
β	4.18	m	
B2,6	6.61	s	
A6	6.74	dd	8.0, 1.9
A2	6.80	d	1.9
A5	6.82	d	8.0

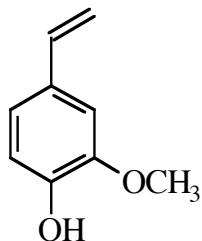
Notes:

S. Ralph SR111-64-2
30mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	25.30	35	26.26	45	25.81	54
α	37.32	36	38.03	45	36.77	26
A OMe	55.94	58	56.23	48	55.46	49
B OMe	56.11	100	56.44	100	55.74	100
B OMe	56.11	100	56.44	100	55.74	100
γ	62.31	34	62.84	36	61.58	26
B α	70.42	35	70.04	39	68.13	51
β	84.52	42	85.30	48	83.40	36
B2	102.45	62	103.53	66	102.50	56
B6	102.45	62	103.53	66	102.50	56
A2	112.31	37	113.93	38	113.55	31
A5	114.27	46	115.51	48	115.01	36
A6	122.10	37	122.80	46	121.57	38
A1	130.13	25	130.80	25	129.24	38
B1	134.64	14	135.57	11	133.95	21
B4	142.09	19	144.15	14	142.83	38
A4	144.07	25	145.80	14	144.55	36
A3	146.38	20	148.04	18	147.03	36
B3	153.29	46	154.08	39	152.61	74
B5	153.29	46	154.08	39	152.61	74

Compound Number 136

¹³C



Vinyl guaiacol
2-methoxy-4-vinylphenol
4-vinylguaiacol

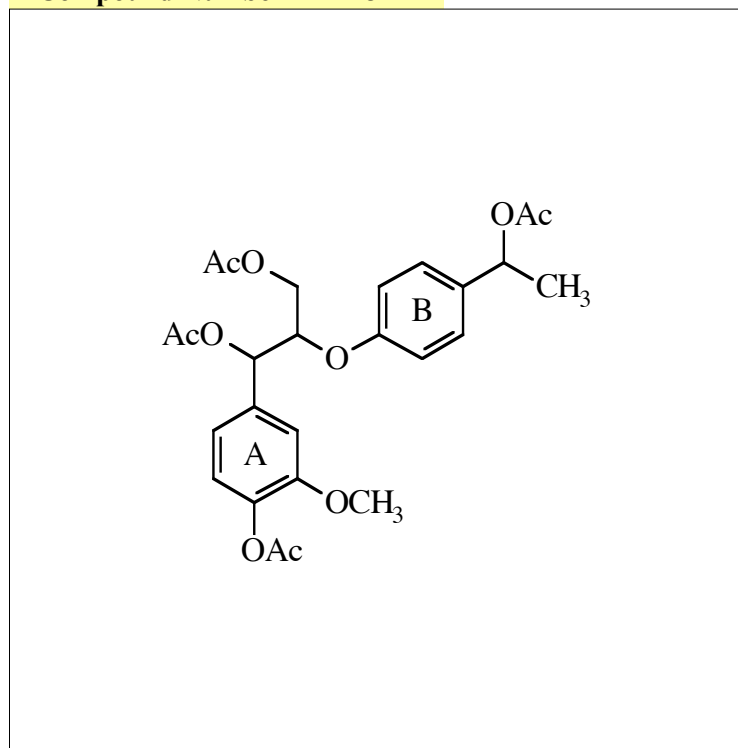
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
β1	5.04	dd	10.9, 1.1
β2	5.62	dd	17.6, 1.1
α	6.63	dd	17.6, 10.9
A5	6.78	d	8.1
A6	6.90	dd	8.1, 1.9
A2	7.07	d	1.9

Notes:

J. Ralph
30mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	100	56.17	83	55.52	77
2	108.14	51	109.85	50	109.61	47
β	111.38	78	111.09	100	110.81	73
5	114.40	85	115.69	42	115.34	74
6	120.03	88	120.58	86	119.46	93
1	130.26	24	130.59	22	128.77	44
α	136.62	78	137.70	86	136.63	100
A4	145.64	20	147.55	9	146.68	43
A3	146.63	22	148.38	14	147.64	37



1,3-diacetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxyethyl)phenoxy] propane

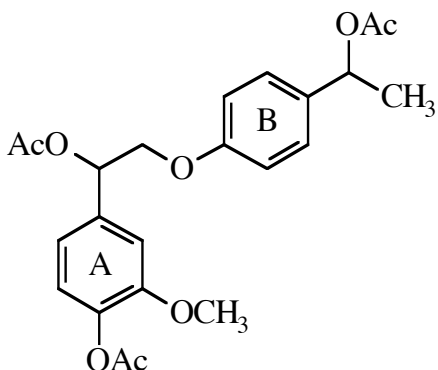
¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	2.05	s	
Ac Me	2.05	s	
Ac Me	2.29	s	
B β	1.51	d	6.6
OMe	3.81	s	
γ1	4.04	dd	11.8, 6.1
γ2	4.27	dd	11.8, 3.8
B α	5.83	q	6.6
α	6.07	d	6.3
β	4.69	m	
<u>erythro</u>			
B β	1.50	d	6.6
α	6.03	d	5.2
B α	5.82	q	6.6

Notes:

S. Ralph SR111-65-A 52mg
erythro C13 and 1H data
γ 62.32, 62.88, 61.73
B α 71.85, 72.17, 71.14
α 73.62, 74.21, 72.81
β 78.40, 78.86, 76.99
B4 157.58, 158.59, 157.03

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	65	20.45	52	20.28	100
Ac Me	20.62	65	20.56	35	20.36	93
Ac Me	20.98	54	20.86	39	20.61	81
Ac Me	21.34	50	21.14	41	20.92	100
B β	22.00	44	22.34	38	21.78	64
OMe	55.98	65	56.31	42	55.82	69
γ	62.64	36	63.24	28	62.16	31
B α	71.85	49	72.17	27	71.14	57
α	74.00	36	75.07	32	74.00	40
β	78.08	25	79.10	22	77.57	36
A2	111.64	32	112.61	32	111.65	45
B5	116.31	68	117.08	51	116.01	98
B3	116.31	68	117.08	51	116.01	98
A6	119.60	40	120.37	43	119.45	40
A5	122.96	39	123.63	32	122.71	45
B2	127.66	100	128.27	100	127.30	100
B6	127.66	100	128.27	100	127.30	100
B1	134.86	32	136.20	18	134.71	40
A1	135.22	24	136.39	22	135.25	48
A4	140.05	18	140.97	14	139.25	36
A3	151.20	22	152.25	18	150.73	45
B4	157.97	17	159.12	19	157.69	40
A4 Ac C=O	168.71	20	168.81	18	168.30	43
Ac C=O	169.69	19	169.99	14	169.35	45
Ac C=O	170.29	18	170.18	14	169.51	48
Ac C=O	170.55	22	170.65	14	169.82	45

Compound Number 138
¹³C


1-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxyethyl)phenoxy] ethane

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.11	s	
Ac Me	2.31	s	
Bβ	1.51	d	6.6
OMe	3.85	s	
β1	4.13	dd	10.4, 3.9
β2	4.25	dd	10.4, 7.8
Bα	5.83	q	6.6
α	6.12	dd	7.8, 3.9
B3,5	6.86	m	8.7
B2,6	7.28	m	8.7

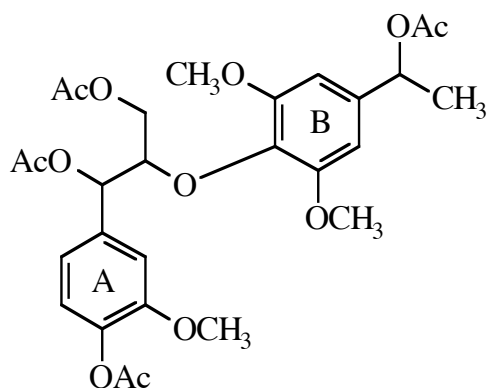
Notes:

S. Ralph SR111-65-B
14mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.65	52	20.45	46	20.28	68
Ac Me	21.12	46	20.94	42	20.73	64
Ac Me	21.37	40	21.13	36	20.92	64
B β	21.98	52	22.35	50	21.78	64
OMe	55.98	59	56.30	52	55.79	64
β	70.49	43	71.18	44	69.76	36
B α	71.92	43	72.20	47	71.13	56
α	73.52	43	74.21	47	73.01	48
A2	111.26	39	112.20	42	111.34	40
B3	114.72	87	115.45	100	114.55	100
B5	114.72	87	115.45	100	114.55	100
A5	119.09	52	119.70	43	118.71	44
A6	122.95	53	123.61	44	122.66	52
B2	127.62	100	128.27	88	127.29	100
B6	127.62	100	128.27	88	127.29	100
B1	134.50	29	135.58	24	134.09	40
A1	135.85	30	137.17	24	135.84	44
A4	139.90	16	140.87	13	139.09	32
A3	151.20	27	152.28	20	150.69	36
B4	158.09	25	159.08	20	157.55	44
A 4Ac C=O	168.88	20	168.84	8	168.38	36
Ac C=O	169.98	20	170.13	14	169.49	36
Ac C=O	170.30	16	170.13	14	169.58	32

Compound Number 139

¹³C



G-β-S5

1,3-diacetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxyethyl)-2,6-dimethoxyphenoxy] propane

¹H (chloroform)

Atom	H Shifts	Mult	J
Ac Me	1.99	s	
Ac Me	2.06	s	
Ac Me	2.07	s	
Ac Me	2.30	s	
B β	1.51	d	6.6
A OMe	3.82	s	
B OMe	3.77	s	
γ1	3.95	dd	11.8, 3.2
γ2	4.34	dd	11.8, 4.7
β	4.54	m	
B α	5.79	q	6.6
α	6.15	d	6.3
B2,6	6.54	s	
A2	7.08	bs	
A5	6.99	m	
A6	6.99	m	

Notes:

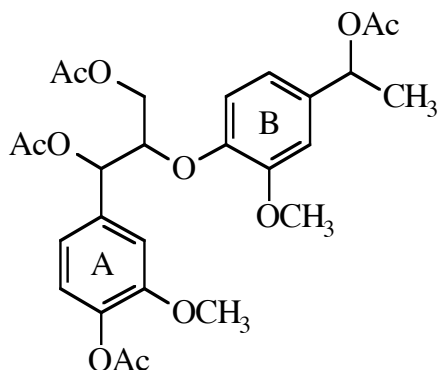
S. Ralph SRIII-65-C 51mg

S. Ralph SRIII-65-C

erythro shifts from SRVII 138BB in acetone

γ 63.28 B2,6 103.91
 Bα 72.68 2 112.17
 α 75.06 6 119.99
 β 81.26 5 123.36

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	46	20.45	53	20.30	46
Ac Me	20.70	41	20.58	43	20.60	26
Ac Me	21.00	29	20.92	38	20.95	37
Ac Me	21.34	36	21.14	43	22.01	19
B β	22.23	25	22.57	32	22.06	19
A OMe	55.99	65	56.28	57	55.78	100
B OMe	56.02	100	56.39	100	55.78	100
B OMe	56.02	100	56.39	100	55.78	100
γ	63.48	18	64.17	42	63.14	13
B α	72.38	29	72.71	48	71.70	23
α	75.25	36	76.25	32	75.28	13
β	80.59	35	81.38	42	80.11	18
B2	103.21	47	104.01	68	102.88	32
B6	103.21	47	104.01	68	102.88	32
A2	111.92	21	112.64	38	111.53	15
A6	119.65	39	120.24	50	119.25	21
A5	122.51	39	123.34	48	122.53	19
A1	135.96	26	136.92	17	135.25	19
B1	135.96	26	137.14	30	135.84	25
B4	137.54	22	138.78	32	137.44	24
A4	139.72	21	140.71	18	139.08	21
A3	150.91	26	152.02	27	150.58	26
B3	152.91	43	153.79	50	152.30	45
B5	152.91	43	153.79	50	152.30	45
A4 Ac C=O	168.80	19	168.86	20	168.37	19
Ac C=O	169.71	12	169.85	23	169.25	20
Ac C=O	170.19	15	170.16	20	169.56	20
Ac C=O	170.54	19	170.57	22	169.89	22

Compound Number 140
¹³C

threo
1,3-diacetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(1-acetoxyethyl)-2-methoxyphenoxy] propane
¹H (chloroform)

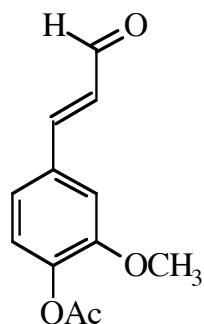
Atom	H Shifts	Mult	J
B β	1.51	d	6.6
Ac Me	1.99	s	
Ac Me	2.06	s	
Ac Me	2.065	s	
Ac Me	2.30	s	
OMe	3.82	s	
OMe	3.83	s	
γ1	4.04	dd	11.9, 5.6
γ2	4.30	dd	11.9, 4.6
β	4.61	m	
B α	5.82	q	6.6
α	6.11	d	6.3

Notes:

S. Ralph SR111-65-D
 44mg
 erythro data
 γ 63.0 62.5 61.8
 α 73.7 74.5 73.1
 β 80.1 80.2 78.3
 B4 146.7 147.7 146.1

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	89	20.45	51	20.28	92
Ac Me	20.68	71	20.58	47	20.35	100
Ac Me	21.01	63	20.91	38	20.62	74
Ac Me	21.35	64	21.15	53	20.94	87
B β	22.09	57	22.45	39	21.89	58
OMe	55.92	100	56.29	100	55.66	84
OMe	55.97	86	56.29	100	55.78	71
γ	62.99	41	63.55	37	62.43	32
B α	72.06	57	72.39	46	71.37	71
α	74.41	41	75.34	39	74.26	39
β	80.14	41	80.68	39	79.10	45
B2	110.74	29	111.76	26	110.64	37
A2	111.74	46	112.64	32	111.62	45
B5	118.35	43	118.85	28	117.18	50
B6	118.67	56	119.19	43	118.09	61
A6	119.57	64	120.28	44	119.38	50
A5	122.80	60	123.51	41	122.63	47
A1	135.24	53	136.60	37	135.36	55
B1	136.76	43	137.78	22	136.11	53
A4	139.94	39	140.88	17	139.21	47
B4	147.53	24	148.48	17	147.00	50
B3	150.65	36	151.57	20	149.92	63
A3	151.12	43	152.18	21	150.68	55
A4 Ac C=O	168.74	37	168.82	16	168.32	42
Ac C=O	169.66	29	169.94	14	169.31	47
Ac C=O	170.25	27	170.16	14	169.53	47
Ac C=O	170.53	31	170.62	18	169.91	53

Compound Number 141



acetylated coniferylaldehyde
4-acetoxy-3-methoxycinnamaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.57	57	20.43	62	20.28	86
OMe	55.98	95	56.44	91	55.99	91
2	111.55	67	112.65	62	112.08	62
6	121.82	78	122.68	71	122.04	71
5	123.49	100	124.25	100	123.32	93
β	128.74	89	129.68	98	128.72	100
1	132.97	45	134.17	38	133.00	69
4	142.30	20	143.22	18	141.55	34
3	151.66	26	152.77	24	151.22	48
α	151.74	52	152.55	51	152.29	52
Ac C=O	168.52	21	168.72	16	168.19	34
γ	193.27	50	193.89	49	194.17	60

¹H (acetone)

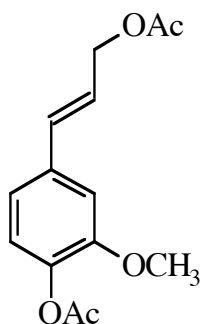
Atom	H Shifts	Mult	J
Ac Me	2.25	s	
OMe	3.89	s	
β	6.79	dd	15.9, 7.7
5	7.15	d	8.1
6	7.29	d	8.1, 1.9
2	7.49	d	1.9
α	7.64	d	15.9
γ	9.69	d	7.7

Notes:

S. Ralph SR111-76B
30mg
in acetone 3 & α switch places

Compound Number 142

¹³C



acetylated coniferyl alcohol
4-acetoxy-3-methoxycinnamylacetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.59	75	20.45	72	20.27	98
Ac Me	20.92	56	20.76	48	20.60	76
OMe	55.88	100	56.24	91	55.75	96
γ	64.84	84	65.13	82	64.12	96
2	110.34	73	111.23	51	110.41	80
6	119.37	92	119.92	100	118.99	100
5	122.88	97	123.74	96	122.83	98
β	123.61	90	124.90	93	124.16	100
α	133.52	97	133.62	97	132.29	100
1	135.30	43	136.26	39	134.97	62
4	139.76	21	140.82	18	139.08	40
3	151.21	35	152.43	25	150.94	56
A4 Ac C=O	168.83	30	168.89	22	168.37	49
γ Ac C=O	170.68	21	170.69	16	170.02	33

¹H (acetone)

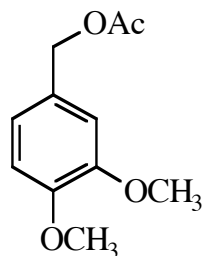
Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.23	s	
OMe	3.8	s	
γ	4.69	dd	
β	6.36	dt	
α	6.68	dt	
5	7.01	m	
6	7.01	m	
2	7.21	s	

Notes:

M.Mozuch 177/95 47mg

Compound Number 143

¹³C



Acetylated veratryl alcohol
3,4-dimethoxybenzylacetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.03	36	20.83	33	20.66	57
OMe	55.96	100	56.18	100	55.50	100
OMe	55.96	100	56.18	100	55.50	100
α	66.38	58	66.53	62	65.47	82
2	111.27	50	112.76	36	111.70	54
5	112.06	52	113.50	38	112.34	61
6	121.33	66	121.90	68	120.88	84
1	128.60	24	129.99	15	128.45	36
3	149.14	18	150.38	13	148.66	30
4	149.26	17	150.45	11	148.75	28
Ac C=O	170.82	12	170.85	10	170.15	25

¹H (acetone)

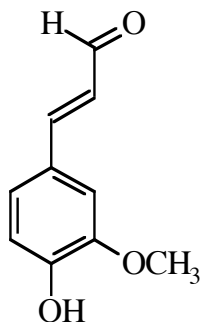
Atom	H Shifts	Mult	J
Ac Me	2.01	s	
OMe	3.79	s	
OMe	3.80	s	
α	5.00	s	
5	6.91	m	
6	6.91	m	
2	6.98	s	

Notes:

M.Mozuch 177/95 48mg

Compound Number 144

¹³C



coniferaldehyde

4-hydroxy-3-methoxycinnamaldehyde

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.05	100	56.41	92	55.74	63
2	109.75	90	111.66	70	111.59	44
5	115.06	93	116.21	100	115.68	59
6	124.03	92	124.68	78	123.86	56
β	126.35	95	127.03	92	125.69	100
1	126.66	38	127.46	32	125.69	100
4	147.11	33	148.83	27	148.02	37
3	149.12	43	150.78	35	150.15	39
α	153.16	57	153.89	57	153.83	46
γ	193.62	95	193.78	65	193.84	50

¹H (acetone)

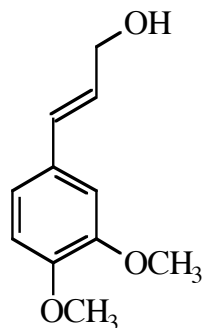
Atom	H Shifts	Mult	J
OMe	3.93	s	
β	6.67	dd	15.8, 7.8
5	6.92	d	8.2
6	7.21	dd	8.2, 2.0
2	7.38	d	2.0
α	7.57	d	15.8
γ	9.64	d	7.8

Notes:

Aldrich 40mg

Note: In DMSO β and 1 are coincident

Compound Number 145



3,4-dimethoxycinnamyl alcohol

¹H (acetone)

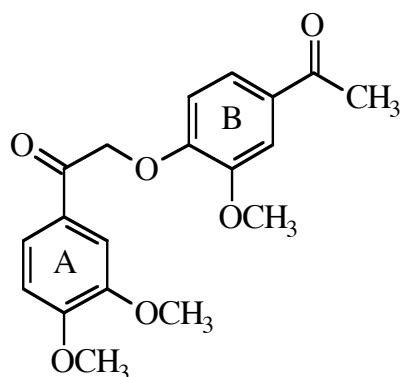
Atom	H Shifts	Mult	J
OMe	3.79	s	
OMe	3.82	s	
γ	4.20	dd	5.4, 1.5
β	6.26	dt	15.9, 5.4
α	6.49	dt	15.9, 1.5
5	6.88	m	
6	6.89	m	
2	7.06	d	1.7

Notes:

M.Mozuch 199/16 25mg
 Note: only 8 mg was used for DMSO spec.
 and 1 and α switch places in CDCl₃

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	100	56.12	100	55.50	100
OMe	55.95	97	56.18	90	55.55	86
γ	63.76	71	63.34	57	61.63	81
2	109.14	53	110.59	47	109.33	58
5	111.34	58	112.92	56	111.91	58
6	119.69	97	120.24	89	119.16	81
β	126.65	77	128.90	85	128.53	81
α	131.09	94		89	128.60	91
1	129.87	33		23	129.94	47
3	149.01	21	130.14	16	148.36	93
4	149.14	23	131.40	15	148.91	40
			150.10			
			150.55			



2-(4-Acetyl-2-methoxyphenoxy)-1-(3,4-dimethoxyphenyl)
ethanone

¹H (acetone)

Atom	H Shifts	Mult	J
B β	2.50	s	
OMe	3.87	s	
OMe	3.89	s	
OMe	3.90	s	
β	5.56	s	
B5	6.94	d	8.9
A5	7.07	d	8.4
A6	7.75	dd	8.4, 1.9

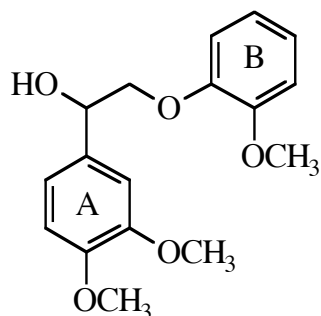
Notes:

LLL XVII-19A

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	26.16	54	26.29	56	26.22	60
OMe	56.03	77	56.21	86	55.59	96
OMe	56.10	100	56.30	100	55.63	96
OMe	56.10	100	56.36	82	55.78	80
β	71.39	48	71.71	61	70.30	56
A2	110.30	55	111.63	46	110.32	51
A5	110.54	43	111.77	68	110.92	51
B2	111.10	43	112.29	45	111.03	64
B5	112.57	38	113.55	48	112.28	56
B6	122.74	62	123.45	83	122.58	100
A6	122.85	67	123.54	90	122.58	100
A1	127.58	22	128.67	23	127.08	44
B1	131.52	26	132.02	24	130.24	40
A3	149.40	29	150.32	32	148.54	44
B3	149.40	29	150.32	32	148.69	47
B4	151.79	22	153.19	25	151.73	40
A4	154.14	23	155.19	24	153.61	38
α	192.22	29	192.90	24	192.24	44
B α	196.56	23	196.36	20	196.17	33

Compound Number 147

¹³C



1-(3,4-Dimethoxyphenyl)-2-(2-methoxyphenoxy)ethanol

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.78	s	
OMe	3.82	s	
OMe	3.82	s	
β1	4.0	dd	9.9, 7.7
β2	4.07	dd	9.9, 4.2
α	4.98	m	
A2	7.14	d	1.9

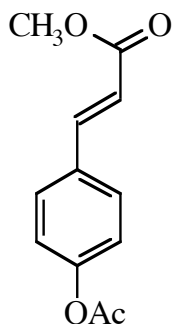
Notes:

LLL V-59B
 β-carbon in CDCl₃ was observed as shoulder on solvent.
 Very limited solubility in acetone; DEPT was run in DMSO.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.93	100	56.13	83	55.38	51
OMe	55.93	100	56.26	100	55.57	100
OMe	56.01	77	56.36	63	55.57	98
α	72.17	67	72.59	67	70.68	47
β	76.53	67	76.22	76	74.07	40
A2	109.67	41	111.63	59	110.48	36
A5	111.28	44	112.77	66	111.56	37
B2	112.21	45	113.67	64	112.55	37
B5	116.28	45	115.82	57	113.79	33
A6	118.67	64	119.44	100	118.32	48
B6	121.15	67	121.86	71	120.73	52
B1	122.61	67	122.43	84	120.94	47
A1	132.36	23	135.50	33	135.11	35
B3	148.14	17	149.71	29	147.99	25
A3	148.89	21	149.71	29	148.20	26
A4	149.23	20	149.84	29	148.46	29
B4	150.30	17	150.30	29	149.11	22

Compound Number 148

¹³C



acetylated methyl coumarate
methyl 4-acetoxycinnamate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.02	100	20.93	40	20.79	47
OMe	51.66	11	51.70	45	51.70	47
β	118.04	11	118.75	48	118.75	45
3	122.23	25	123.10	100	122.30	100
5	122.23	25	123.10	100	122.30	100
2	129.24	24	130.02	100	129.50	100
6	129.24	24	130.02	100	129.50	100
1	132.13	9	132.81	40	131.70	36
α	143.80	12	144.21	48	143.49	47
4	152.31	4	153.34	18	152.06	26
γ	167.31	4	167.36	17	166.56	26
Ac C=O	169.05	4	169.36	17	168.84	26

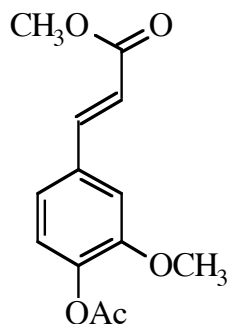
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
OMe	3.75	s	
β	6.51	d	16.0
3,5	7.18	m	8.7
α	7.67	d	16.0
2,6	7.69	m	8.7

Notes:

J. Ralph P.S. 169.1
50mg
contains 30% unacetylated

Compound Number 149



acetylated methyl ferulate
methyl 4-acetoxy-3-methoxycinnamate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.54	68	20.46	70	20.28	100
γ OMe	51.62	73	51.69	85	51.34	83
OMe	55.94	100	56.44	100	55.95	96
2	111.52	71	112.59	78	112.01	71
β	118.13	85	118.95	85	118.05	96
6	120.20	87	122.04	89	121.37	83
5	123.30	98	124.12	100	123.11	88
1	133.41	47	134.25	33	132.92	67
4	141.66	27	142.73	22	140.98	42
α	144.12	85	144.68	100	143.81	92
3	151.57	37	152.72	30	151.10	58
Ac C=O	167.15	32	167.41	33	166.52	58
γ	168.59	27	168.76	26	168.19	46

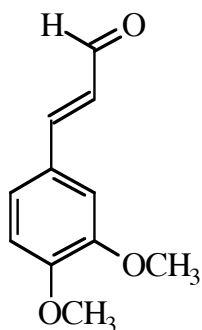
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.25	s	
γ OMe	3.74	s	
OMe	3.86	s	
β	6.54	d	16.0
5	7.09	d	8.1
6	7.23	dd	8.1, 1.7
2	7.41	d	1.7
α	7.64	d	16.0

Notes:

J. Ralph P.S. 171.1

Compound Number 150



3,4-dimethoxy cinnamaldehyde

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.88	s	
OMe	3.90	s	
β	6.70	dd	15.8, 7.7
5	7.05	d	8.3
6	7.28	dd	8.3, 7.0
2	7.38	d	7.0
α	7.62	d	15.8
γ	9.67	d	7.7

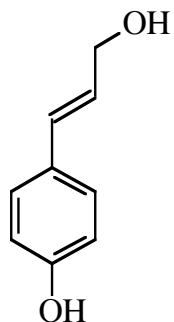
Notes:

S. Ralph SRIII-81
50mg
DMSO nmr 20mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.01	100	56.26	100	55.51	100
OMe	56.06	95	56.32	100	55.51	100
2	110.20	49	111.66	58	110.58	42
5	111.32	63	112.61	72	111.55	58
6	123.41	80	124.30	82	123.50	61
β	126.78	81	127.57	91	126.42	67
1	127.17	34	128.28	31	126.80	42
3	149.52	20	150.73	15	148.93	30
4	152.11	17	153.24	18	151.53	30
α	152.71	51	153.64	58	153.27	45
γ	193.39	56	193.83	62	193.81	55

Compound Number 151



p-Coumaryl alcohol
4-hydroxycinnamyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			63.47	36	61.66	36
3			116.19	100	115.28	96
5			116.19	100	115.28	96
β			127.67	41	127.06	42
2			128.33	89	127.27	100
6			128.33	89	127.27	100
1			129.73	14	127.86	27
α			130.29	42	128.64	45
4			157.78	22	156.70	29

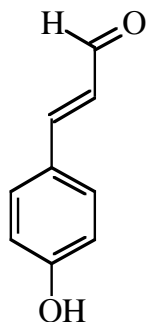
¹H (acetone)

Atom	H Shifts	Mult	J
γ	4.20	bd	5.2
β	6.21	dt	15.8, 5.5
α	6.51	bd	15.9
3,5	6.80	m	8.7
2,6	7.31	m	8.7

Notes:

S. Ralph
36mg

Compound Number 152



p-Coumaraldehyde
4-hydroxy cinnamaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
3			116.84	96	115.88	97
5			116.84	96	115.88	97
1			126.73	46	125.34	51
β			126.96	15	125.15	29
2			131.48	100	130.81	100
6			131.48	100	130.81	100
α			153.64	37	153.50	37
4			161.24	19	160.49	31
γ			193.81	40	193.80	46

¹H (acetone)

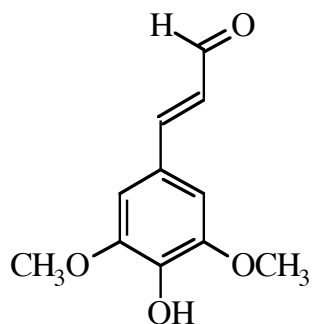
Atom	H Shifts	Mult	J
β	6.62	dd	15.8, 7.7
3,5	6.94	m	8.7
α	7.58	d	15.8
2,6	7.61	m	8.7
γ	9.64	d	7.7

Notes:

S. Ralph
35mg
order of β & 1 are reversed in DMSO

Compound Number 153

¹³C



Sinapaldehyde

3,4-dimethoxy-4-hydroxycinnamaldehyde

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.45	100	56.76	100	56.08	100
OMe	56.45	100	56.76	100	56.08	100
2	105.73	80	107.39	81	106.71	77
6	105.73	80	107.39	81	106.71	77
1	125.62	22	126.15	18	124.40	26
β	126.81	50	127.28	51	126.03	46
4	138.24	15	140.26	6	139.13	14
3	147.44	32	149.02	23	148.02	43
5	147.44	32	149.02	23	148.02	43
α	153.09	32	154.22	38	154.12	37
γ	193.32	35	193.70	26	193.75	40

¹H (acetone)

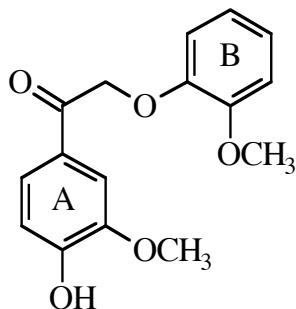
Atom	H Shifts	Mult	J
OMe	3.90	s	
β	6.69	dd	15.8, 7.7
2,6	7.08	s	
α	7.55	d	15.8
γ	9.63	d	7.7

Notes:

S. Ralph
25mg

Compound Number 154

¹³C



1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)- ethanone

¹H (acetone)

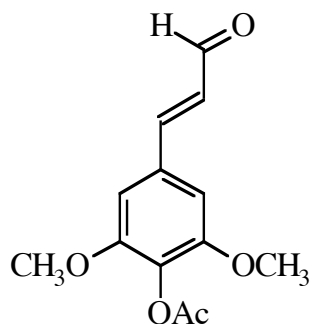
Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.92	s	
β	5.36	s	

Notes:

S. Ralph

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.95	96	56.26	100	55.54	83
OMe	56.12	100	56.26	100	55.62	100
β	72.08	67	72.42	51	70.46	58
A2	110.31	74	111.84	57	111.21	58
B2	112.31	63	113.68	46	112.50	58
A5	114.06	93	115.42	57	113.70	58
B5	114.88	56	115.71	43	115.00	83
B6	120.86	93	121.48	69	120.46	100
B1	122.38	96	122.55	66	121.19	83
A6	123.41	85	123.94	71	122.79	83
A1	127.62	37	128.24	23	126.18	58
A3	146.86	33	148.30	20	147.56	92
B3	147.69	22	149.14	17	147.56	92
B4	149.82	26	150.86	14	148.96	42
A4	151.02	48	152.69	17	152.18	67
α	193.17	37	193.27	23	192.60	42

Compound Number 155



Acetylated sinapaldehyde
4-acetoxy-3,5-dimethoxycinnamaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.39	43	20.23	40	20.05	50
OMe	56.25	100	56.68	100	56.20	100
OMe	56.25	100	56.68	100	56.20	100
2	105.13	86	106.26	88	105.63	84
6	105.13	86	106.26	88	105.63	84
β	128.79	52	129.80	48	128.93	47
1	131.23	9	132.01	8	130.20	13
4	132.30	26	133.55	22	132.39	39
α	152.20	34	153.08	36	152.77	66
3	152.63	47	153.64	33	152.05	37
5	152.63	47	153.64	33	152.05	37
Ac C=O	168.30	17	168.37	15	167.76	24
γ	193.25	36	193.94	36	194.18	39

¹H (acetone)

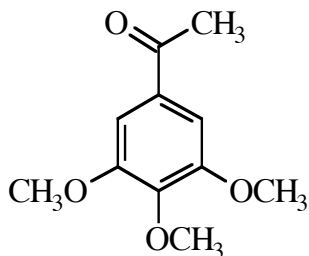
Atom	H Shifts	Mult	J
Ac Me	2.26	s	
OMe	3.87	s	
β	6.81	dd	15.9, 7.6
2,6	7.12	s	
α	7.61	d	15.9
γ	9.68	d	7.6

Notes:

Pearl Coll.
40mg
α and 3,5 change places in DMSO

Compound Number 156

¹³C



3,4,5-Trimethoxyacetophenone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	26.39	43	26.52	47	26.50	51
OMe	56.34	100	56.57	100	56.01	100
OMe	56.34	100	56.57	100	56.01	100
4 OMe	60.91	41	60.64	44	60.07	47
2	106.00	75	106.85	80	105.80	87
6	106.00	75	106.85	80	105.80	87
1	132.49	23	133.51	19	132.18	30
4	142.77	9	143.62	8	141.91	11
3	153.08	41	154.16	33	152.68	60
5	153.08	41	154.16	33	152.68	60
α	196.79	16	196.76	15	196.70	17

¹H (acetone)

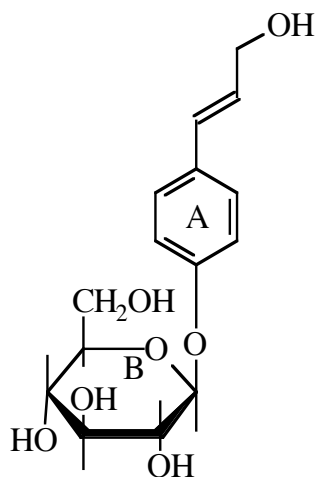
Atom	H Shifts	Mult	J
β	2.56	s	
4 OMe	3.80	s	
3,5 OMe	3.89	s	
2,6	7.29	s	

Notes:

Aldrich
48mg

Compound Number 157

¹³C



p-Gluco cinnamyl alcohol

4-(3-hydroxy-1-propenyl)phenyl-β-D-glucopyranoside

¹H (DMSO)

Atom	H Shifts	Mult	J
γ	4.09	dd	5.2
β	6.24	dt	15.9, 5.0
α	6.49	bd	16.0
A3,5	6.98	d	8.7
A2,6	7.35	d	8.7
B1	4.84	d	7.3
B2,3,4,5	3.36-3.14	nr	
B6 α	3.46	m	11.7, 6.0
B6 β	3.70	ddd	11.7
B6 OH	4.58	t	5.7
γOH	4.83	t	5.4

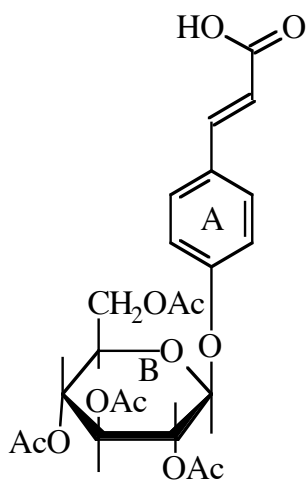
Notes:

N. Terashima
 15mg
 only DMSO soluble
 Terashima, Ralph, Landucci
 Holzforschung
 50(1995)p. 151-155

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B6					60.63	36
γ					61.49	45
B4					69.64	45
B2					73.14	41
B5					76.51	41
B3					76.94	50
B1					100.32	41
A3					116.23	91
A5					116.23	91
A2					127.02	100
A6					127.02	100
α					127.97	50
β					128.71	45
A1					130.58	36
A4					156.62	41

Compound Number 158

¹³C



acetylated p-gluco cinnamic acid

¹H (acetone)

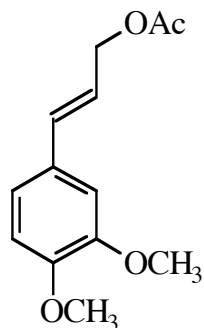
Atom	H Shifts	Mult	J
β	6.44	d	16.0
A3,5	7.13	d	8.8
α	7.64	d	8.7
A2,6	7.68	d	15.7

Notes:

N. Terashima
22mg
β + 3,5 switch places in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.58	100	18.86	100	20.22	91
Ac Me	20.58	100	18.86	100	20.22	91
Ac Me	20.58	100	20.52	70	20.28	81
Ac Me	20.58	100	20.58	70	20.37	66
B6	61.97	32	62.73	47	61.52	41
B4	68.29	42	69.29	43	67.96	47
B2	71.17	42	71.96	43	70.60	47
B5	72.23	45	72.75	43	70.84	53
B3	72.68	48	73.33	47	71.86	44
B1	98.55	39	98.86	40	96.67	44
A3	117.18	90	117.81	87	116.48	100
A5	117.18	90	117.81	87	116.48	100
β	116.31	42	117.96	47	117.80	47
A1	129.38	29	130.39	23	128.98	41
A2	129.90	81	130.60	83	129.76	100
A6	129.90	81	130.60	83	129.76	100
α	145.76	39	144.67	40	143.05	53
4	158.52	29	159.39	33	157.60	38
γ	169.25	29	167.83	27	167.50	41
Ac C=O	169.39	32	169.71	23	168.95	44
Ac C=O	170.20	29	170.02	27	169.17	44
Ac C=O	170.51	29	170.29	27	169.44	38
Ac C=O	171.26	26	170.62	27	169.82	47

Compound Number 159



3,4-dimethoxycinnamyl acetate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.01	60	20.79	44	20.64	47
OMe	55.88	100	56.08	100	55.41	100
OMe	55.94	100	56.08	100	55.41	100
γ	65.25	87	65.48	59	64.43	47
2	109.07	60	110.48	40	109.28	33
5	111.20	67	112.67	46	111.63	37
6	120.03	87	120.78	58	119.73	50
β	121.19	100	122.28	58	121.37	50
1	129.34	47	130.37	24	128.81	30
α	134.28	87	134.54	58	133.25	43
3	149.14	33	150.54	19	148.83	43
4	149.31	40	150.62	17	148.83	43
Ac C=O	170.84	27	170.72	15	170.05	20

¹H (acetone)

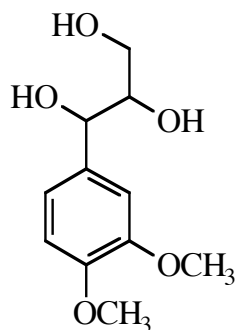
Atom	H Shifts	Mult	J
Ac Me	2.02	s	
OMe	3.79	s	
OMe	3.82	s	
γ	4.65	dd	6.5, 1.3
β	6.22	dt	15.9, 6.4
α	6.61	bd	15.9
5	6.89	d	8.3
6	6.95	dd	8.3, 1.9
2	7.10	q	1.9

Notes:

S. Ralph 15mg

Compound Number 160

¹³C



Veratryl glycerol
1-(3,4-dimethoxyphenyl)glycerol

¹H (acetone)

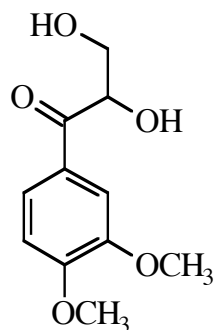
Atom	H Shifts	Mult	J
OMe	3.77	s	
OMe	3.78	s	
γ1	3.36	dd	
γ2	3.48	dd	
β	3.62	m	
α	4.58	d	
5	6.86	m	
6	6.86	m	
2	7.00	bs	

Notes:

M. Mozuch 2mg
No DEPT run and not run in DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.98	100	56.10	94		
OMe	55.98	100	56.20	94		
γ	63.41	50	63.98	100		
β	74.87	47	74.70	88		
α	75.81	53	77.21	88		
2	109.71	33	111.82	62		
5	111.25	33	112.54	69		
6	119.04	50	119.91	88		
1	133.04	27	136.24	56		
3	149.08	23	149.70	31		
4	149.28	27	150.16	31		

Compound Number 161



1-(3,4-dimethoxyphenyl)-2,3-dihydroxypropan-1-one

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.89	s	
OMe	3.92	s	
β	5.13	m	
5	7.08	d	8.4
2	7.55	d	2.0
6	7.71	dd	2.0, 8.4

Notes:

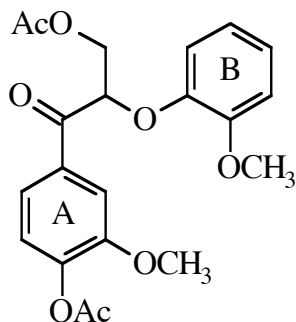
M. Mozuch 17 mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.11	100	56.20	72		
OMe	56.21	100	56.28	76		
γ	65.95	93	66.30	100		
β	74.17	93	75.28	90		
2	110.34	79	111.64	76		
5	110.77	71	112.03	48		
6	123.46	100	124.23	86		
1	126.55	43	128.45	24		
3	149.52	50	150.28	28		
4	154.42	36	155.09	28		
α	197.65	50	199.22	41		

Compound Number 162

¹³C



Erone diacetate

3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propan-1-one

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	2.27	s	
OMe	3.76	s	
OMe	3.88	s	
γ1	4.49	dd	6.5, 11.9
γ2	4.65	dd	3.9, 11.9
β	5.84	dd	3.9, 6.5
A2,6	7.81	m	
A5	7.23	d	8.8

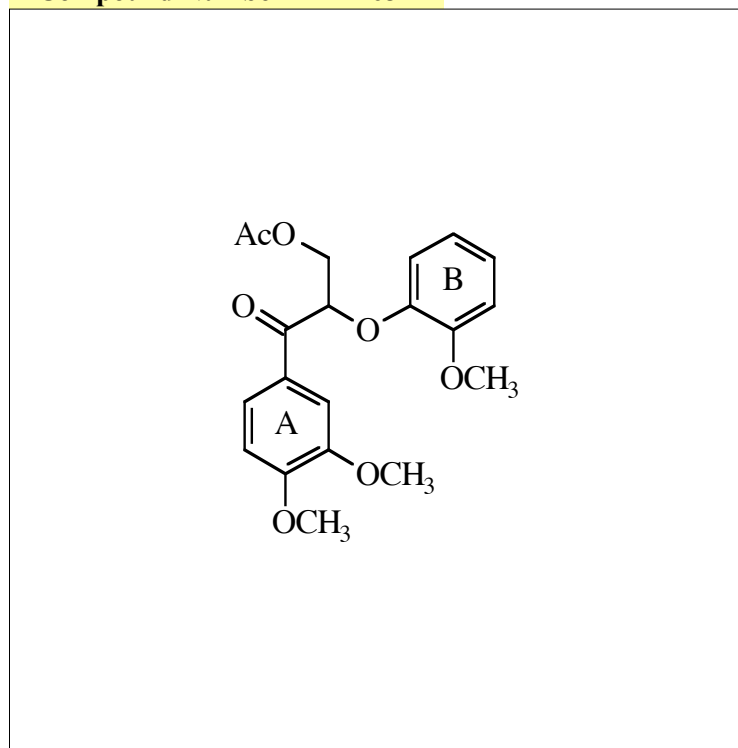
Notes:

L.Landucci 30 mg
Not run in DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.62	100	20.48	100		
Ac Me	20.75	65	20.64	70		
OMe	55.75	75	56.16	79		
OMe	56.08	85	56.46	85		
γ	64.36	70	64.66	70		
β	80.58	60	80.50	67		
A2	112.73	85	113.45	66		
B2	112.73	85	113.93	64		
B5	118.53	65	118.58	56		
B6	121.04	80	121.67	74		
A6	122.34	70	122.81	67		
B1	122.97	75	124.04	89		
A5	123.66	80	124.04	89		
A1	133.67	40	134.87	39		
A4	144.38	30	145.35	20		
B4	146.82	25	147.86	33		
B3	150.43	35	151.40	25		
A3	151.47	35	152.50	39		
A4 Ac C=O	168.30	35	168.58	28		
γ Ac C=O	170.82	30	170.90	28		
α	194.59	40	195.10	31		

Compound Number 163

¹³C



Veratrone acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	84	20.64	64	20.44	95
OMe	55.79	100	56.05	82	55.40	93
OMe	55.96	95	56.17	100	55.53	100
OMe	56.07	93	56.22	96	55.74	90
γ	64.62	86	64.85	79	63.60	67
β	80.28	89	80.00	82	79.08	67
A2	110.22	82	111.59	82	110.70	74
A5	111.10	84	112.06	82	110.98	76
B2	112.67	88	113.85	86	112.88	76
B5	118.05	88	117.99	79	115.61	74
B6	120.96	93	121.57	89	120.53	83
A6	123.33	89	123.69	82	122.28	79
B1	123.76	95	124.27	86	123.23	79
A1	128.04	47	128.96	39	127.29	57
B4	146.92	37	147.95	32	146.33	55
A3	149.04	46	150.13	36	148.58	55
B3	150.32	39	151.25	32	149.37	55
A4	153.88	44	155.11	36	153.67	57
Ac C=O	170.84	42	170.89	32	170.00	55
α	194.05	46	194.24	39	193.22	62

¹H (acetone)

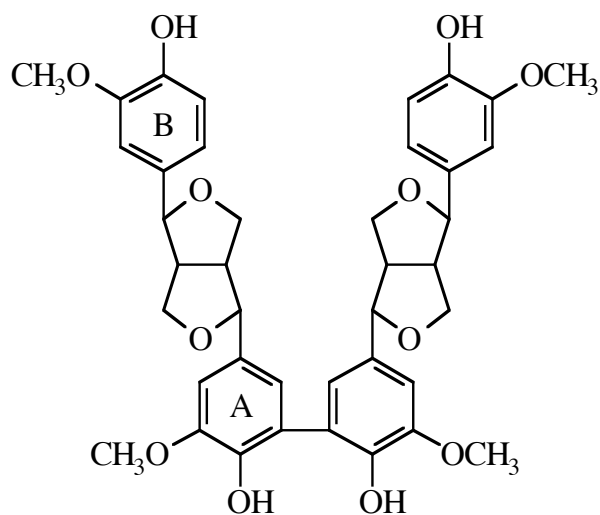
Atom	H Shifts	Mult	J
Ac Me	1.98	s	
OMe	3.77	s	
OMe	3.85	s	
OMe	3.89	s	
γ1	4.47	dd	6.8, 11.9
γ2	4.62	dd	3.9, 11.9
β	5.81	dd	3.9
A5	7.06	d	8.5
A2	7.66	d	2.0
A6	7.84	dd	2.0, 8.4

Notes:

L.Landucci
35 mg

Compound Number 164

¹³C



Pinoresinol biphenyl

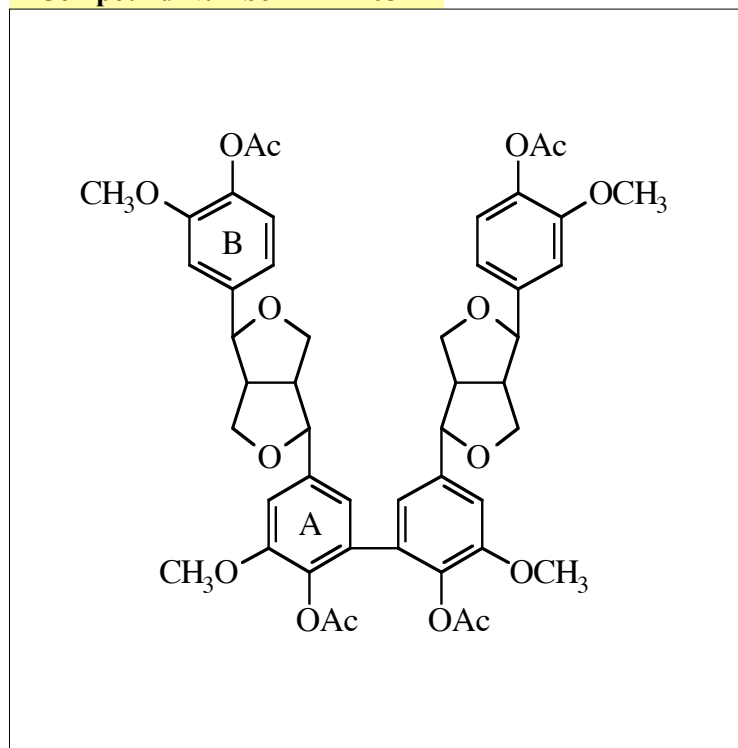
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A β	54.13	81	55.26	100	53.60	93
Bβ	54.18	81	55.26	100	53.60	93
OMe	55.97	100	56.25	69	55.57	100
OMe	56.22	91	56.48	83	55.90	77
A γ	71.66	62	72.19	60	70.86	53
B γ	71.82	62	72.33	59	70.98	51
A α	85.82	72	86.67	93	85.14	66
Bα	85.93	72	86.67	93	85.21	56
A2	108.17	47	109.38	49	108.61	34
B2	108.64	74	110.58	57	110.39	77
B5	114.28	77	115.51	58	115.08	73
B6	118.98	72	119.62	62	118.60	68
A6	120.93	51	121.96	51	120.90	36
A5	124.06	34	125.96	23	125.44	26
A1	132.82	55	133.50	41	131.28	44
B1	132.82	55	134.17	31	132.16	47
A4	142.31	47	144.01	28	142.96	38
B4	145.26	51	146.82	35	145.85	54
B3	146.73	47	148.28	33	147.46	65
A3	147.40	45	148.68	38	147.63	41

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.87	s	
A,B γ2	4.21	dd	6.8, 9.0
A,B α	4.67	d	4.5

Notes:

J.Pew
15 mg
As this compound has a plane of symmetry
The shifts for the other half are identical.



Pinoresinol biphenyl acetate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.21	s	
OMe	3.80	s	
OMe	3.84	s	
A,B β	3.14	m	
A,B γ2	4.28	m	
A,B α	4.80	m	

Notes:

J. Pew

7 mg intensities for some peaks are irregular

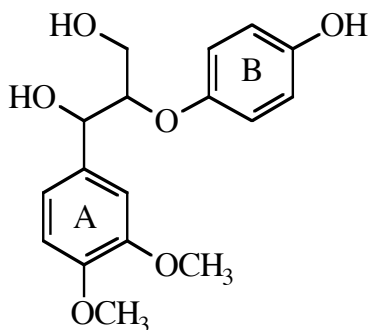
As this compound has a plane of symmetry

The shifts for the other half are identical.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.47	65	20.42	77	20.19	66
Ac Me	20.67	55	20.49	92	21.16	100
A β	54.28	65	55.40	86	54.57	74
B β	54.37	52	55.40	86	54.57	74
OMe	55.96	73	56.22	71	56.52	99
OMe	56.17	85	56.47	64	56.82	66
A γ	71.95	66	72.62	100	72.09	69
B γ	72.05	45	72.62	100	72.09	69
A α	85.49	100	86.17	72	85.32	47
B α	85.49	100	86.17	72	85.42	63
A2	109.40	41	110.55	41	110.80	20
B2	109.89	46	111.09	55	111.18	61
B6	117.96	54	118.62	53	118.63	65
A6	119.79	50	120.26	38	119.80	22
B5	122.76	58	123.47	60	123.36	63
A5	131.38	32	132.09	26	131.16	33
A4	136.93	18	137.76	20	136.84	31
B4	139.13	28	140.12	20	139.23	42
A1	139.40	28	141.07	31	140.59	43
B1	140.02	29	141.80	35	141.24	41
A3	151.24	31	152.27	34	151.52	55
B3	151.51	35	152.59	38	151.86	48
A Ac C=O	168.71	25	168.83	26	168.93	26
B Ac C=O	169.08	26	169.02	34	169.32	51

Compound Number 166

¹³C



1-(3,4-dimethoxyphenyl)-2-(4-hydroxyphenoxy)propan-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	3.49	dd	5.2, 11.3
OMe	3.77	s	
OMe	3.77	s	
β	4.26	m	
α	4.95	d	5.0

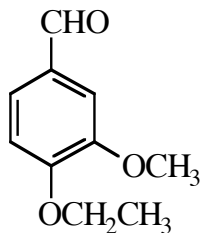
Notes:

M. Mozuch
40 mg not very soluble in CDCl₃, not run
in DMSO, minor isomer shifts: γ 61.96,
α 73.94, β 85.17 in acetone.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.03	61		
OMe			56.09	63		
γ			61.58	40		
α			73.29	40		
β			85.37	48		
A2			111.84	46		
A5			112.30	54		
B2			116.42	100		
B6			116.42	100		
B3			118.70	100		
B5			118.70	100		
A6			119.90	46		
A1			135.53	27		
A3			149.56	22		
A4			149.97	25		
B1			152.52	27		
B4			153.12	19		

Compound Number 167

¹³C



Ethyl vanillin

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Me	14.38	87	14.92	75		
OMe	55.77	100	56.00	100		
CH2	64.39	88	65.02	83		
2	108.97	59	110.36	79		
5	111.07	73	112.52	93		
6	126.53	65	126.65	70		
1	129.69	33	130.98	30		
3	149.51	23	150.72	20		
4	153.71	24	154.88	20		
α	190.60	73	191.06	72		

¹H (acetone)

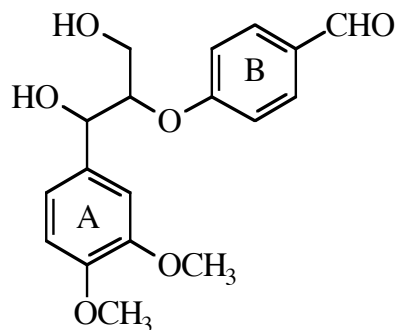
Atom	H Shifts	Mult	J
Me	1.42	t	7.0
OMe	3.89	s	
CH2	4.15	q	7.0
5	7.08	d	8.2
2	7.41	d	1.9
6	7.49	dd	1.9, 8.2
α	9.85	s	

Notes:

M. Mozuch
40 mg
Not run in DMSO

Compound Number 168

¹³C



1-(3,4-dimethoxyphenyl)-2-(4-carboxymethylphenoxy)
propan-1,3-diol

¹H (chloroform)

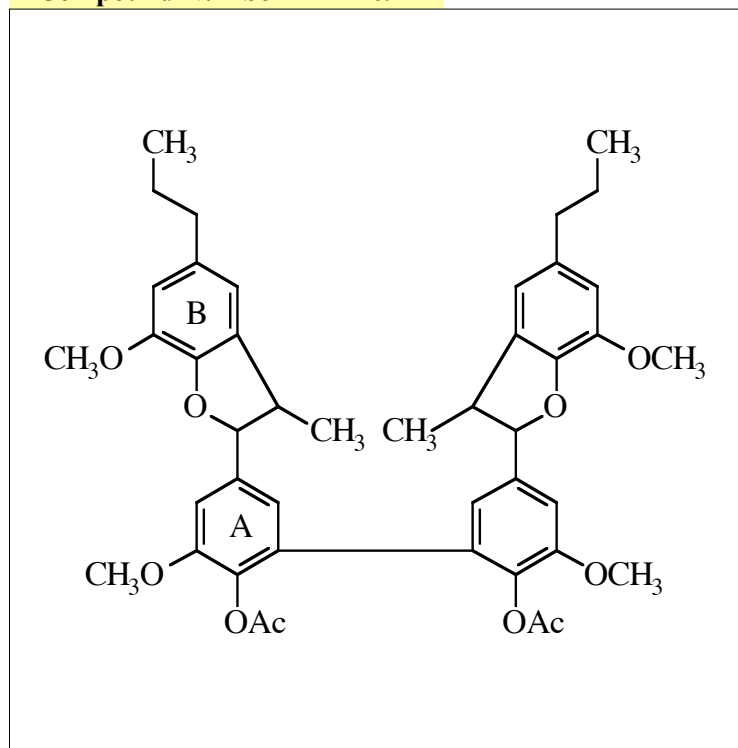
Atom	H Shifts	Mult	J
OMe	3.82	s	
β	4.54	m	
α	4.99	d	5.6
B 2,6	7.72	m	
B α	9.78	s	

Notes:

S. Kawai
50 mg

Minor isomer: γ 61.37, α 73.62, β 82.58 in
CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	100	56.03	91		
γ	61.71	37	62.00	39		
α	74.04	41	73.55	36		
β	81.49	38	83.70	38		
A2	109.66	38	111.84	44		
A5	111.06	41	112.22	45		
B3	116.00	84	116.94	100		
B5	116.00	84	116.94	100		
A6	119.16	37	120.09	36		
A1	130.24	27	130.89	27		
B2	131.94	77	132.18	80		
B6	131.94	77	132.18	80		
B1	132.82	33	135.16	23		
A3	148.82	19	149.63	17		
A4	149.00	26	149.93	19		
B4	162.93	28	164.83	20		
B α	190.78	31	191.01	47		



Phenylcoumaran biphenyl acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.75	100	14.10	97	13.71	100
γ	17.71	75	18.49	74	17.81	57
Ac Me	20.26	77	20.30	67	19.96	49
B β	24.92	85	25.73	64	24.56	83
B α	37.91	82	38.53	86	37.29	60
β	45.76	73	46.82	61	45.26	49
OMe	55.85	88	56.43	100	55.66	79
OMe	56.00	81	56.48	93	56.04	64
α	92.66	66	92.74	74	91.15	43
B2	109.60	40	110.63	68	110.13	38
A2	111.74	52	113.65	69	112.29	40
B6	115.33	68	116.42	81	115.42	45
A6	120.42	38	120.46	56	119.24	23
A1	130.96	45	132.00	46	130.33	45
B1	132.48	62	133.69	68	132.47	51
A5	136.36	59	137.00	47	135.76	53
A4	137.28	33	138.28	29	136.61	36
B5	138.51	62	140.22	46	138.84	47
B3	143.69	55	144.86	31	143.40	53
A3	145.07	40	146.36	29	144.73	43
B4	151.39	56	152.72	49	151.24	47
Ac C=O	168.36	26	168.66	28	168.02	26

¹H (acetone)

Atom	H Shifts	Mult	J
B γ	0.92	t	7.3
γ	1.41	d	6.8
B β	1.60	m	7.5
Ac Me	2.02	s	
B α	2.51	m	7.3
β	3.42	m	
OMe	3.82	s	
OMe	3.85	s	
α	5.18	d	8.7
B2	6.63	s	
B6	6.69	s	
A2	6.96	d	1.8
A6	7.25	d	1.9

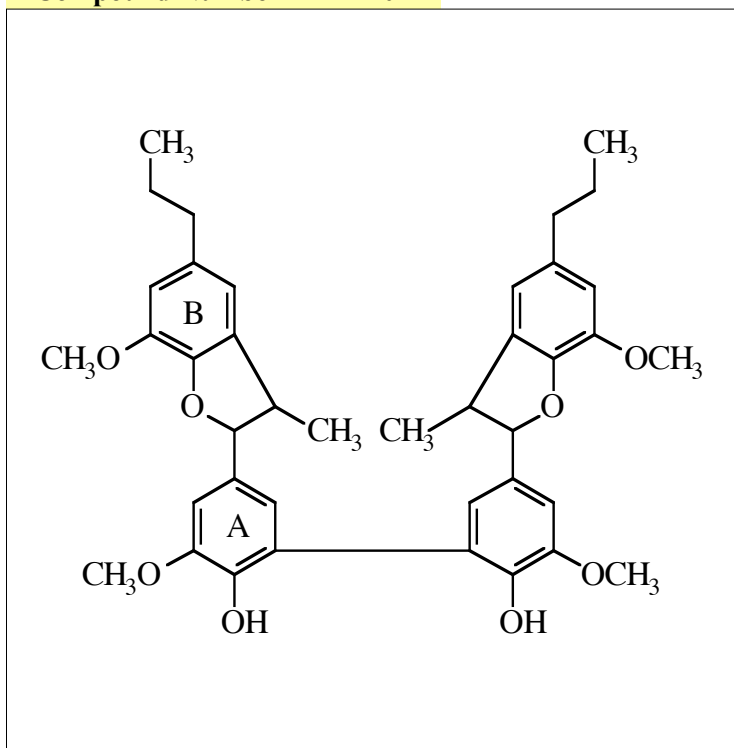
Notes:

J. Pew

50 mg

As this compound has a plane of symmetry

The shifts for the other half are identical.



Phenyl coumaran biphenyl

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.91	100	14.10	100	13.77	100
γ	17.48	70	17.87	78	17.28	76
B β	25.08	84	25.79	100	24.62	84
B α	38.07	84	38.54	93	37.32	64
β	45.68	79	46.48	74	44.80	50
OMe	56.00	80	56.40	89	55.66	84
OMe	56.20	85	56.50	93	55.94	68
α	93.52	72	93.84	81	92.39	48
B2	108.42	49	109.38	63	108.67	32
A2	111.83	54	113.57	70	112.19	46
B6	115.44	69	116.40	81	115.42	52
A6	122.01	61	122.57	74	121.57	36
A5	123.90	48	125.82	33	125.33	42
B1	132.15	64	132.38	48	129.98	46
A1	132.96	57	134.15	56	132.94	56
B5	136.28	62	136.65	48	135.41	58
B3	142.71	56	144.74	56	143.32	58
A4	143.82	49	144.79	56	143.78	48
A3	145.34	33	146.58	30	144.91	48
B4	147.41	52	148.76	56	147.74	50

¹H (acetone)

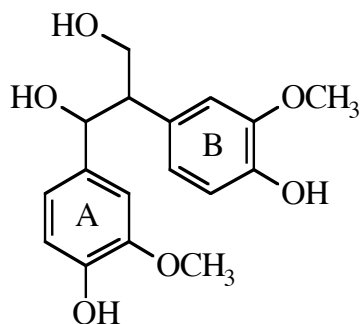
Atom	H Shifts	Mult	J
B γ	0.92	t	7.3
γ	1.37	d	6.8
B β	1.61	h	7.4
B α	2.52	t	7.4
β	3.44	m	
OMe	3.80	s	
OMe	3.89	s	
α	5.09	d	9.4
B2	6.63	s	
B6	6.68	s	
A2	7.02	d	1.8
A6	7.11	d	1.9

Notes:

J. Pew
30 mg
As this compound has a plane of symmetry
The shifts for the other half are identical.

Compound Number 171

¹³C



1,2-diguaiacylpropane-1,3-diol

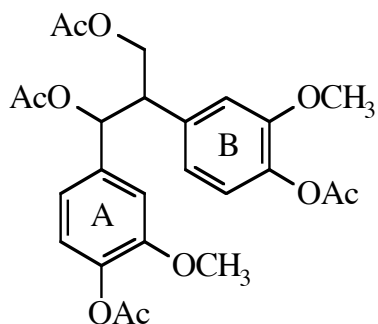
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.67	s	
OMe	3.72	s	
β	2.94	m	
α	5.02	d	

Notes:

S. Ralph
15 mg
β shifts above OME's in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	55.60	46	56.46	85	54.69	74
OMe	55.90	100	56.05	90	54.87	100
OMe	55.90	100	56.15	100	55.06	95
γ	64.25	49	64.42	78	62.20	60
α	75.78	51	74.86	70	71.96	67
A2	109.06	54	111.18	72	110.27	71
B2	111.80	51	114.18	72	113.46	74
A5	113.98	56	114.82	92	113.98	90
B5	114.58	51	115.01	88	114.03	81
A6	119.70	51	119.92	82	118.13	74
B6	121.54	51	123.00	82	121.32	71
B1	130.29	27	132.17	52	130.96	69
A1	133.99	32	136.59	60	135.49	71
B4	144.97	32	145.91	42	144.13	74
A4	145.32	29	146.12	45	144.36	64
B3	146.53	27	147.54	52	146.05	69
A3	146.63	27	147.60	45	146.24	67

Compound Number 172
¹³C

1,2-diguaiacylpropane-1,3-diol tetraacetate
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.93	s	
Ac Me	1.98	s	
Ac Me	2.21	s	
Ac Me	2.22	s	
β	3.52	m	
γ1	4.21	dd	6.6, 11.0
γ2	4.38	dd	6.8, 11.3
α	6.18	d	6.6

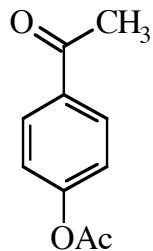
Notes:

S. Ralph
15 mg

Minor isomer in d6-acetone
β 50.70, γ 64.71, α 76.50

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.63	92	20.45	68	20.28	82
Ac Me	20.63	92	20.45	68	20.28	82
Ac Me	20.79	48	20.67	43	20.44	56
Ac Me	20.96	49	20.84	46	20.53	63
β	50.09	43	50.97	48	49.08	35
OMe	55.88	100	56.20	100	55.60	100
OMe	55.88	100	56.20	100	55.60	100
γ	64.02	42	64.86	42	63.94	28
α	74.87	42	75.56	46	74.49	35
A2	111.24	41	112.07	43	111.00	28
B2	113.32	46	114.49	42	113.38	37
A6	119.13	11	119.71	49	118.69	39
B6	120.98	47	121.91	48	120.71	39
B5	122.46	52	123.12	58	122.15	41
A5	122.58	47	123.29	51	122.38	34
B1	135.77	33	137.41	29	136.55	34
A1	136.91	33	138.70	26	137.52	35
B4	139.04	21	140.02	17	138.15	32
A4	139.58	21	140.48	17	138.71	32
B3	150.71	27	151.78	22	150.14	39
A3	150.86	24	151.97	20	150.40	34
Ac C=O	168.76	28	168.88	23	168.32	42
Ac C=O	168.84	27	168.94	22	168.32	42
α Ac C=O	169.63	26	169.64	20	169.19	32
γAc C=O	170.74	26	170.74	20	169.98	35

Compound Number 173



4-acetoxy-acetophenone

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.28	s	
β	2.57	s	
3	7.24	d	8.9
2	8.02	d	8.9

Notes:

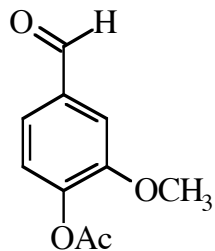
Jamie Milhaupt
JR-JMA 29.1
50 mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.11	39	20.98	40	20.51	47
β	26.55	41	20.64	45	26.62	46
3	121.75	92	122.75	100	122.02	93
5	121.75	92	122.75	100	122.02	93
2	129.91	100	130.53	94	129.78	100
6	129.91	100	130.53	94	129.78	100
1	134.72	15	135.65	11	134.39	23
4	154.35	15	155.43	11	154.08	22
Ac C=O	168.78	15	169.27	13	168.73	19
α	196.75	13	196.80	11	196.75	15

Compound Number 174

¹³C



Vanillin acetate
4-formyl-2-methoxy phenyl acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.58	72	20.45	62	20.29	90
OMe	56.06	100	56.46	86	55.96	100
2	110.92	85	112.31	79	111.84	90
6	123.40	98	124.39	100	123.46	90
5	124.59	87	124.44	100	123.63	100
1	135.23	40	136.43	25	135.00	51
4	144.93	24	145.83	18	144.19	34
3	151.96	30	153.03	20	151.50	41
Ac C=O	168.26	28	168.57	18	168.01	41
α	190.97	92	191.76	71	191.87	95

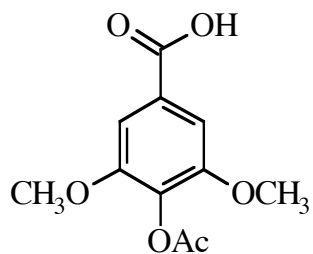
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
OMe	3.91	s	
2	7.57	d	0.8
5	7.29	d	7.8
6	7.55	dd	7.8, 0.8
α	9.97	s	

Notes:

Jamie Milhaupt
JR-JMA 23.1
50mg

Compound Number 175



Syringic Acid Acetate
4-acetoxy-3,5-dimethoxy benzoic acid

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.43	47	20.23	43	19.93	50
OMe	56.34	100	56.65	98	55.92	100
OMe	56.34	100	56.65	98	55.92	100
2	106.90	100	107.12	100	105.72	83
6	106.90	100	107.12	100	105.72	83
1	127.15	12	129.34	17	128.72	33
4	133.37	14	133.63	12	131.44	17
3	152.19	57	153.21	33	151.48	63
5	152.19	57	153.21	33	151.48	63
α	168.17	27	166.97	21	166.44	35
Ac C=O	171.25	20	168.18	19	167.52	30

¹H (acetone)

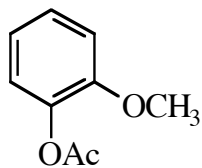
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
OMe	3.88	s	
2,6	7.37	s	

Notes:

Jamie Milhaupt
JR-JMA 25.1
25 mg

Compound Number 176

¹³C



Guaiacol acetate
2-methoxyphenyl acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.64	64	20.48	68	20.21	84
OMe	55.78	100	56.12	95	55.62	96
2	112.39	93	113.41	94	112.74	99
5	120.72	97	121.30	100	120.47	100
1	122.78	95	123.66	98	122.76	97
6	126.86	95	127.50	97	126.79	93
4	139.75	19	141.01	15	139.33	28
3	151.10	22	152.36	19	150.87	35
Ac C=O	168.99	21	168.93	17	168.43	34

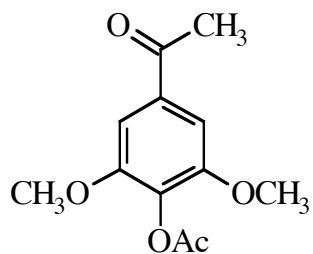
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.22	s	
OMe	3.79	s	
2	6.93	m	
5	7.20	m	
1	7.05	m	
6	7.05	m	

Notes:

Jamie Milhaupt
JR-JMA 27.1
54 mg

Compound Number 177



Acetosyringone acetate
4-acetoxy-3,5-dimethoxy acetophenone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	43	20.23	40	20.86	50
β	26.50	44	26.68	47	27.47	50
OMe	52.28	100	56.66	100	56.94	100
OMe	56.28	100	56.66	100	56.94	100
2	105.10	94	105.89	100	105.79	88
6	105.10	94	105.89	100	105.79	88
4	132.81	9	133.70	6	132.75	13
1	135.11	23	136.19	13	135.69	31
3	152.20	40	153.28	26	152.56	57
5	152.20	40	153.28	26	156.56	57
Ac C=O	168.14	17	168.21	13	168.43	27
α	196.75	17	196.92	13	197.64	28

¹H (acetone)

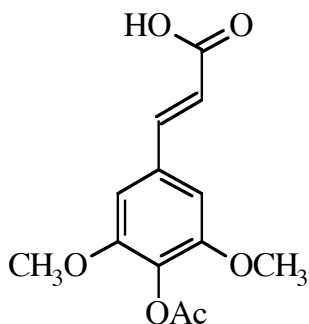
Atom	H Shifts	Mult	J
Ac Me	2.25	s	
β	2.58	s	
OMe	3.87	s	
2,6	7.31	s	

Notes:

Jamie Milhaupt
JR-JMA 31.1
50 mg

Compound Number 178

¹³C



Sinapic acid acetate
4-acetoxy-3,5-dimethoxy cinnamic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	51	20.23	48	20.03	60
OMe	56.27	100	56.66	100	56.20	100
OMe	56.27	100	56.66	100	56.20	100
2	105.19	87	106.42	100	105.93	68
6	105.19	87	106.42	100	105.93	68
b	116.92	41	117.90	48	117.16	38
4	131.30	11	132.15	10	130.30	19
1	131.93	31	132.95	25	131.78	34
α	148.34	44	149.06	45	148.37	34
3	152.60	57	153.60	40	151.97	66
5	152.60	57	153.60	40	151.97	66
γ	162.19	25	163.11	15	162.61	28
Ac C=O	168.33	25	168.35	20	167.74	32

¹H (acetone)

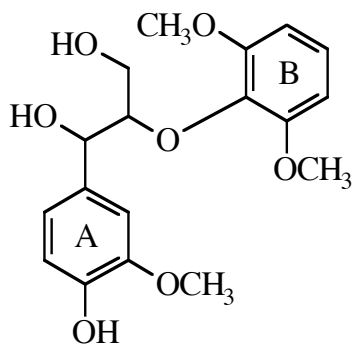
Atom	H Shifts	Mult	J
Ac OMe	2.29	s	
OMe	3.86	s	
2,6	7.13	s	
β	6.66	d	5.9
α	7.79	d	5.9

Notes:

20 mg
sample has a minor impurity

Compound Number 179

¹³C



threo

Guaiacylglycerol- β -syringyl ether
1-(4-hydroxy-3-methoxyphenyl)-2-(2,6-dimethoxyphenoxy)
propane-1,3-diol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.97	58	56.23	37	55.45	49
OMe	56.16	100	56.58	100	55.85	100
OMe	56.16	100	56.58	100	55.85	100
γ	60.49	42	61.31	46	60.08	31
α	74.13	45	74.07	44	71.40	39
β	89.06	47	89.76	51	86.96	34
B2	105.36	98	106.53	93	105.64	72
B6	105.36	98	106.53	93	105.64	72
A2	109.91	44	111.51	46	110.93	36
A5	114.33	45	115.23	49	114.55	39
A6	120.40	47	120.76	53	119.10	37
B1	124.50	47	124.90	53	123.26	39
A1	132.00	26	133.71	23	132.86	36
B4	135.38	15	137.16	11	136.18	22
A4	145.46	27	146.81	23	145.20	36
A3	146.58	24	147.95	18	146.76	33
B3	153.26	35	154.19	35	152.69	58
B5	153.26	35	154.19	35	152.69	58

¹H (acetone)

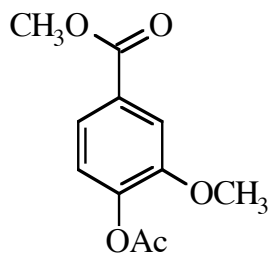
Atom	H Shifts	Mult	J
γ 1	3.29	m	
γ 2	3.64	m	
α	5.00	dd	7.5, 2.6
β	3.51	m	
B2	6.73	d	8.4
A2	7.07	d	1.8
A5	6.78	d	8.0
A6	6.92	dd	8.0, 1.8
B1	7.04	t	8.4
A4	7.46	s	
α OH	4.36	dd	2.6, 1.1

Notes:

S. Lemke
 SLI 75B
 17.7mg
 erythro isomer shifts

	C	A	D
γ	60.59	60.94	59.71
α	72.52	73.35	72.04
β	87.03	87.83	86.12

Compound Number 180



4-acetoxy-3-methoxy methyl benzoate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.27	s	
α OMe	3.89	s	
OMe	3.88	s	
2	7.65	d	1.9
5	7.18	d	8.0
6	7.63	dd	8.0, 1.9

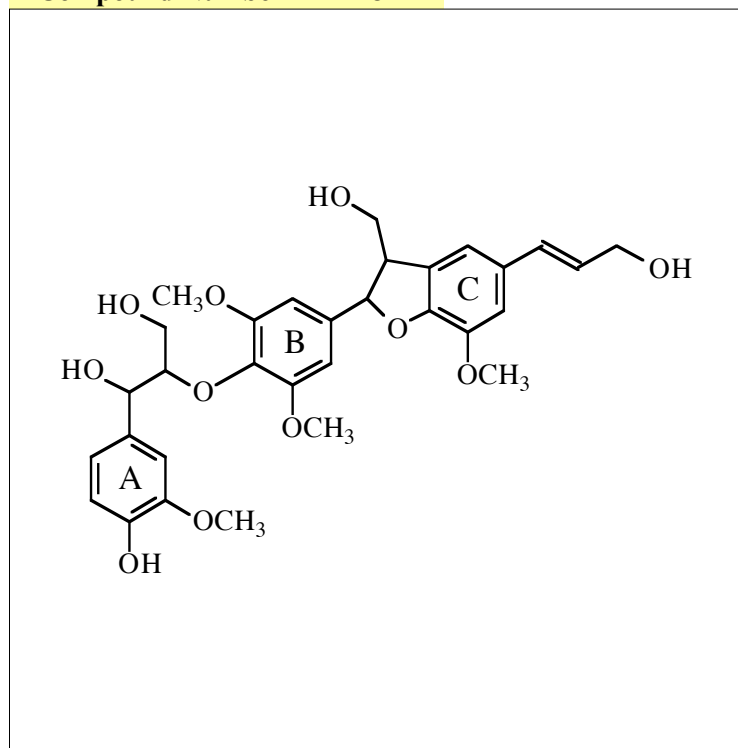
Notes:

Jamie Milhaupt
JR-JMA 43.1
50 mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	73	20.45	72	20.33	96
α OMe	52.26	77	52.45	74	52.60	91
OMe	56.07	96	56.40	100	55.95	91
2	113.44	88	113.96	82	112.96	77
6	122.60	93	123.05	88	122.06	100
5	122.78	100	123.85	88	123.24	93
1	128.82	34	129.67	30	128.32	52
4	143.64	22	144.81	20	143.28	41
3	151.07	28	152.30	24	150.93	49
α	166.33	33	166.53	20	165.56	46
Ac C=O	168.43	29	168.59	22	168.14	46

Compound Number 181



G-b-S-c-CA

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.82	s	
OMe	3.84	s	
OMe	3.89	s	
α	5.00	m	
B α	5.62	d	6.5
B2,6	6.83	s	
C β	6.25	dt	15.8, 5.4
C α	6.54	d	15.9

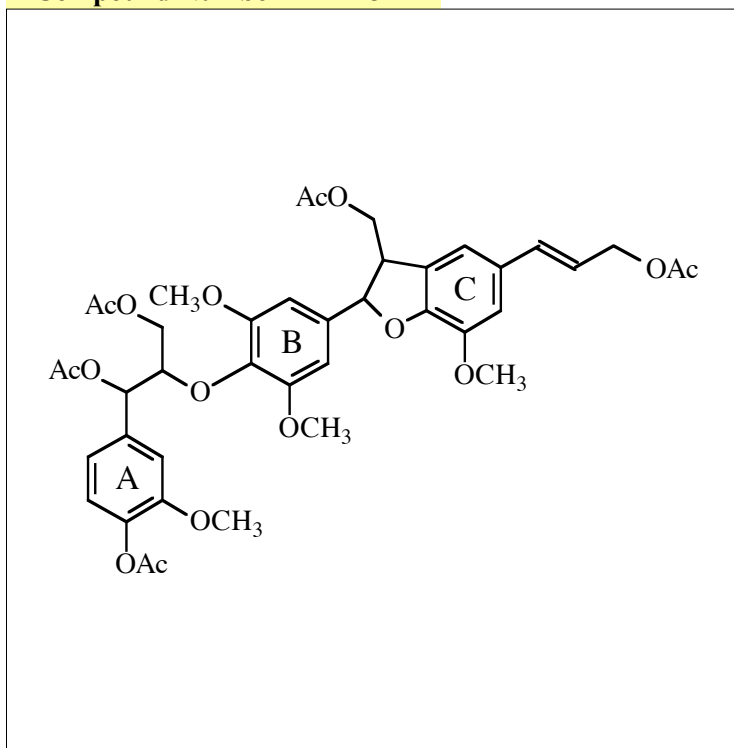
Notes:

S. Luque
SLL 11C
7mg
Assignments from 360 MHz expts in acetone
spectrum in CDCl₃ weak 3's,4's, and 1's
uncertain

Landucci, Luque and Ralph
J. Wood Chem. Tech.

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	53.94	48	54.91	35	52.93	27
OMe	56.10	86	56.24	61	55.42	55
OMe	56.10	86	56.50	52	55.90	73
OMe	56.34	80	56.61	100	55.71	100
OMe	56.34	80	56.61	100	55.71	100
γ	60.66	33	60.97	38	59.64	24
C γ	63.81	28	63.36	41	61.52	31
B γ	64.21	16	64.62	34	62.71	28
α	72.64	20	73.37	41	71.98	33
β	87.19	29	87.87	38	86.14	31
B α	88.18	15	88.36	28	86.93	19
B2	103.26	45	104.10	66	103.24	40
B6	103.26	45	104.10	66	103.24	40
A2	108.53	29	110.89	41	110.81	39
C2	110.67	21	111.89	31	110.88	39
A5	114.29	40	115.20	42	114.56	30
C6	114.89	33	116.06	35	114.82	22
A6	118.84	30	120.01	39	119.19	21
C β	126.87	23	128.57	35	128.02	22
C5	130.15	13	130.15	15	128.78	24
C α	131.51	27	130.40	35	129.22	21
C1	131.34	31	132.20	18	130.63	19
A1	131.34	31	133.73	18	133.15	27
B4	134.75	13	136.10	8	134.79	15
B1	137.86	25	139.09	14	136.59	21
C3	144.57	12	145.22	11	143.59	25
A4	144.94	23	146.44	20	145.18	31
A3	146.71	17	147.97	17	146.86	36
C4	148.76	10	148.82	7	146.86	36
B3	153.53	39	154.26	30	152.60	43
B5	153.53	100	154.26	30	152.60	43



G-b-S-c-CA (acetate)

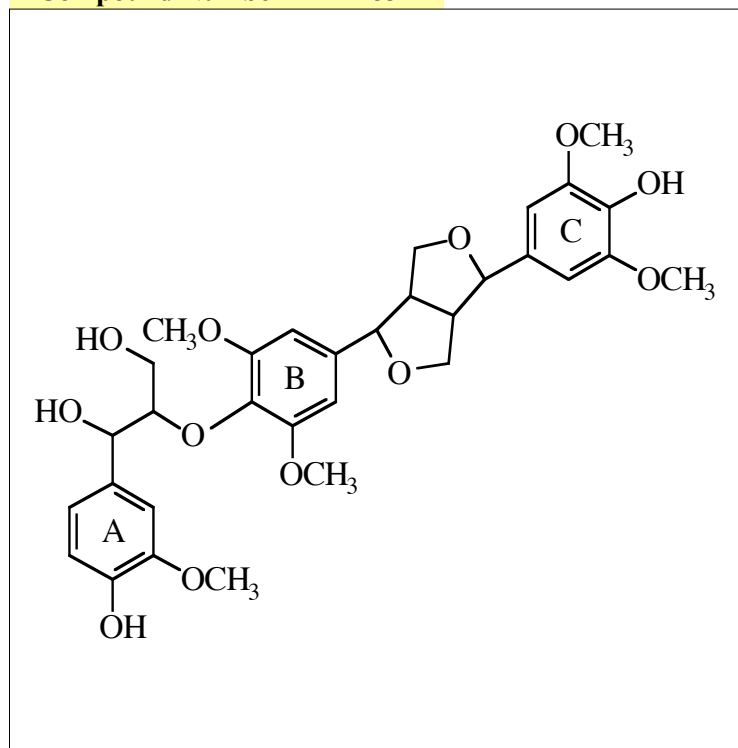
¹H (acetone)

Atom	H Shifts	Mult	J
γl	4.16	dd	11.9, 4.0
C γ	4.65	dd	6.5, 1.2
α	6.06	d	4.5
β	4.73	m	
B α	5.54	d	7.1
B2,6	6.76	s	
C2	7.14	m	
C β	6.24	dt	15.8, 6.5
C α	6.64	d	15.9

Notes:

L. Landucci
 SR VII-9, 8mg
 assignments in d6-acetone
 based on 360MHz cosy df br
 HMBC and HMQC experiments
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.68	56	20.49	56	20.33	80
Ac Me	2078	52	20.61	51	20.31	80
Ac Me	20.85	49	20.77	58	20.55	43
Ac Me	21.07	56	20.82	64	20.67	50
Ac Me	21.07	56	20.93	54	20.71	51
B β	50.51	30	51.32	36	49.37	22
OMe	55.96	48	56.28	56	55.73	53
OMe	56.10	100	56.45	100	55.82	100
OMe	56.10	100	56.45	100	55.82	100
OMe	56.10	100	56.51	78	55.82	100
γ	62.64	24	63.29	26	62.06	15
C γ	65.19	39	65.51	40	64.51	35
B γ	65.33	28	65.96	36	64.76	21
α	74.00	26	75.03	32	73.68	18
β	80.95	21	81.37	33	79.94	22
B α	88.55	28	88.86	32	87.60	21
B2	103.08	57	103.94	65	103.13	39
B6	103.08	57	103.94	65	103.13	39
C2	110.72	26	112.19	29	111.07	24
A2	111.50	29	112.30	42	111.07	24
C6	115.33	29	116.33	36	115.24	20
A6	119.18	24	120.01	35	118.79	22
C β	121.37	33	122.30	35	121.41	25
A5	122.44	31	123.29	44	122.54	25
C5	127.52	24	129.08	24	127.99	25
C1	130.74	23	131.60	23	130.13	27
C α	134.28	31	134.70	35	133.48	27
B4	135.16	11	136.15	12	134.30	23
A1	136.12	16	137.09	22	135.63	22
B1	136.62	24	138.02	26	136.41	23
A4	139.51	21	140.56	21	138.89	22
C3	144.46	23	145.41	22	143.89	24
C4	148.19	17	149.31	14	147.55	19
A3	150.86	21	152.03	23	150.57	27
B3	153.38	47	154.19	45	152.65	47
B5	153.38	47	154.19	45	152.65	47
Ac C=O	168.88	21	168.97	21	168.44	25
Ac C=O	169.50	22	169.95	28	169.32	25
Ac C=O	170.71	24	170.70	24	169.94	28
Ac C=O	170.85	37	170.79	23	170.12	23
Ac C=O	170.85	37	170.98	24	170.25	30



G-b-S-r-S

¹H (acetone)

Atom	H Shifts	Mult	J
B β	3.11	m	
C β	3.11	m	
γ 2	3.44	dd	72.0, 3.4
β	4.17	m	
C γ	4.22	m	
B γ	4.22	m	
C α	4.67	d	4.0
B α	4.73	d	4.0
α	4.98	d	3.4
B2	6.76	s	
C2	6.67	s	
A2	7.03	s	

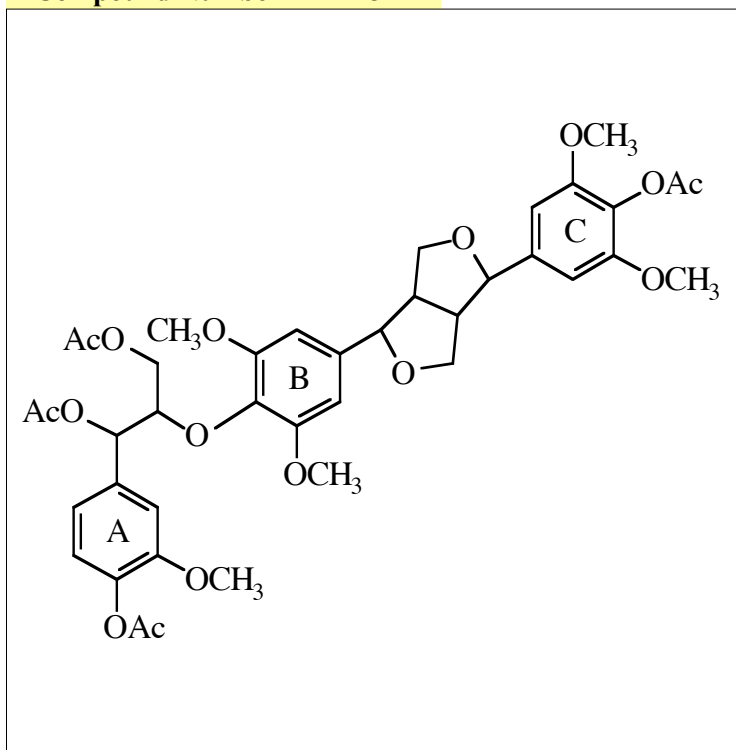
Notes:

S. Luque
 SR VII 9
 34mg
 assignments in d6-acetone based on 360MHz HMBC and HMQC experiments
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	54.32	27	55.23	32	53.61	22
C β	54.48	26	55.39	36	53.76	27
OMe	56.00	66	56.28	54	55.53	53
OMe	56.27	80	56.60	100	55.99	100
OMe	56.27	80	56.60	100	55.99	100
OMe	56.44	62	56.67	79	55.99	100
OMe	56.44	62	56.67	79	55.99	100
γ	60.57	36	60.97	34	59.84	22
C γ	71.76	22	72.38	33	71.13	22
B γ	72.08	25	72.57	33	71.27	25
α	72.56	29	73.38	39	72.12	27
B α	85.98	41	86.57	41	85.12	33
C α	85.98	41	86.72	30	85.32	23
β	87.03	27	87.78	42	86.14	32
B2	102.88	100	104.09	70	103.29	46
B6	102.88	100	104.09	70	103.29	46
C2	102.88	100	104.50	55	103.68	51
C6	102.88	100	104.50	55	103.67	51
A2	108.61	34	110.93	38	110.96	28
A5	114.28	39	115.21	41	114.65	28
A6	118.80	33	120.04	39	119.36	28
C1	131.37	22	133.10	18	131.38	22
A1	131.91	18	133.74	20	133.26	23
B1	134.36	14	135.67	17	134.77	20
C4	134.52	15	136.20	16	134.89	20
B4	137.80	19	139.05	24	136.89	23
A3	144.94	28	146.43	29	145.32	35
A4	146.71	27	147.96	28	146.96	34
C3	147.29	33	148.67	33	147.90	44
C5	147.29	33	148.67	33	147.90	44
B3	153.45	44	154.15	47	152.61	47
B5	153.45	44	154.15	47	152.61	47

Compound Number 184

¹³C



G-b-S-r-S (acetate)

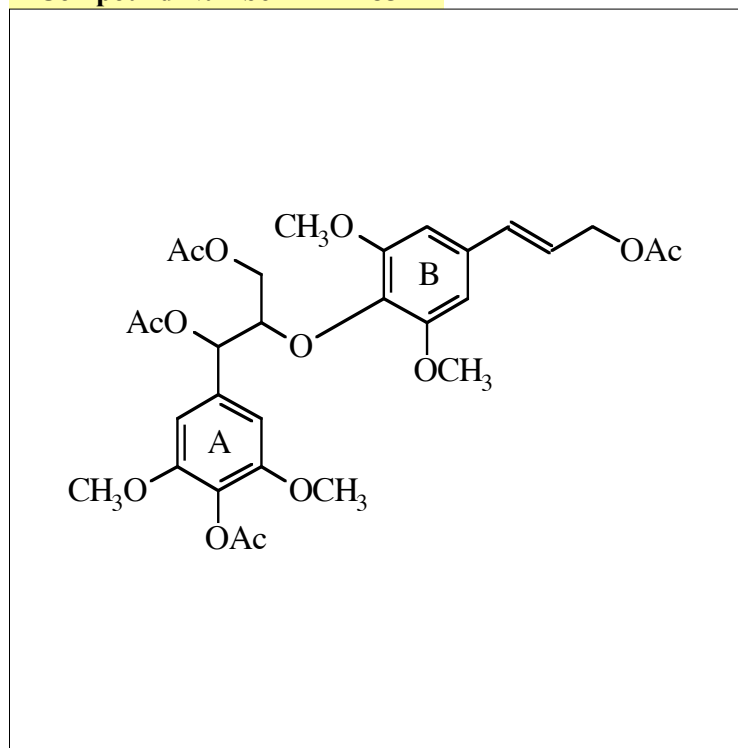
¹H (acetone)

Atom	H Shifts	Mult	J
B,C γ1	3.90	dd	
γ 1	4.18	ddd	11.9, 4.1, 1.8
B,Cγ2	4.27	dd	
γ2	4.39	ddd	11.8, 5.9, 0.8
B α	4.72	d	4.4
C α	4.76	d	4.4
α	6.05	dd	4.7, 2.6
B2,6	6.68	s	
C2,6	6.74	s	
A6	6.96	dd	8.1, 1.8
A2	7.14	d	1.8
A5	7.01	d	7.4

Notes:

L. Landucci
 XXI 36
 40mg
 Assignments in d6-acetone based on the HMBC exp't
 H assignments for 360 MHz spectra
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.32	42	20.24	33	20.11	45
Ac Me	20.51	46	20.48	63	20.31	81
Ac Me	20.63	46	20.61	52	20.31	81
Ac Me	20.93	46	20.94	56	20.66	45
B β	54.16	25	55.33	30	53.67	39
C β	54.33	35	55.43	33	53.81	35
OMe	55.79	44	56.26	57	55.69	45
OMe	55.96	89	56.38	90	55.78	100
OMe	55.96	89	56.38	90	55.78	100
OMe	56.09	100	56.46	100	55.94	97
OMe	56.09	100	56.46	100	55.94	97
γ	62.50	26	63.29	36	62.10	26
B γ	71.87	25	72.65	53	71.36	45
C γ	71.98	25	72.65	53	71.36	45
α	73.82	21	75.05	30	73.72	23
β	80.62	21	81.28	22	79.86	16
B α	85.63	33	86.45	31	84.92	32
C α	85.77	30	86.54	33	85.06	32
C2	102.12	75	103.23	55	102.44	68
C6	102.12	75	103.23	55	102.44	68
B2	102.64	51	103.73	54	102.80	42
B6	102.64	51	103.73	54	102.80	42
A2	111.37	28	112.21	34	110.95	23
A6	119.09	26	120.04	25	118.80	16
A5	122.26	33	123.26	37	122.49	23
C4	127.87	14	128.85	8	127.06	19
B4	134.41	18	135.48	13	133.63	23
A1	135.97	18	137.12	18	135.71	19
B1	137.13	26	138.89	17	137.53	32
A4	139.35	26	140.54	21	138.86	26
C1	139.58	28	141.44	17	140.14	35
A3	150.68	26	152.00	23	150.53	29
C3	152.16	49	153.21	31	151.64	68
C5	152.16	49	153.21	31	151.64	68
B3	153.19	49	154.04	37	152.54	48
B5	153.19	49	154.04	37	152.54	48
Ac C=O	168.64	25	168.61	15	168.08	29
Ac C=O	168.72	26	168.94	29	168.41	29
Ac C=O	169.36	28	169.92	30	169.31	35
Ac C=O	170.70	28	170.67	31	169.94	35

Compound Number 185

S-b-SA (acetate)
¹H (acetone)

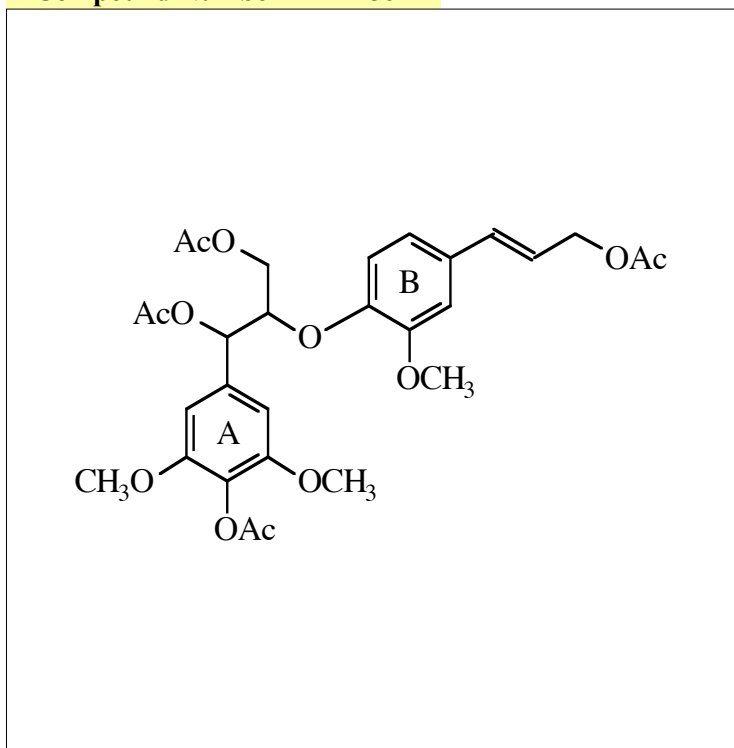
Atom	H Shifts	Mult	J
Ac Me	3.81	s	
Ac Me	3.85	s	
γ2	4.19	dd	11.8, 4.1
γ1	4.43	dd	11.8, 6.1
B γ	4.68	dd	7.4, 1.2
α	6.07	d	4.2
β	4.74	dt	6.1, 4.2
A6 or B6	3.78	s	
A2 or B2	6.80	s	
B β	6.33	dt	15.8, 6.3
B α	6.63	d	16.0

Notes:

S. Ralph
 SRVII 15A
 67mg
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.46	43	20.26	49	20.04	47
Ac Me	20.76	43	20.63	47	20.29	52
Ac Me	20.99	43	20.80	44	20.62	75
Ac Me	21.07	47	20.93	47	20.62	75
OMe	56.02	96	56.39	100	55.73	100
OMe	56.02	96	56.39	100	55.73	100
OMe	56.17	100	56.49	96	55.86	91
OMe	56.17	100	56.49	96	55.84	91
γ	62.76	34	63.28	40	62.07	26
B γ	64.92	43	65.25	48	64.16	40
α	74.25	35	75.29	41	73.84	91
β	80.93	37	81.56	42	79.98	91
A2	103.69	65	104.52	77	103.20	55
A6	103.69	65	104.52	77	103.20	55
B2	103.95	57	104.60	78	103.53	58
B6	103.95	57	104.60	78	103.53	58
B β	122.95	35	124.09	44	123.32	35
A4	128.49	11	129.32	11	127.47	19
B1	132.41	31	133.30	26	131.88	29
Bα	134.07	38	134.36	48	132.96	37
A1	135.37	18	136.46	17	134.40	28
B4	135.53	30	136.62	28	135.19	31
A3	151.93	51	153.02	43	151.44	64
A5	151.93	51	153.02	43	151.44	64
B3	153.22	53	154.14	49	152.58	62
B5	153.22	53	154.14	49	152.58	62
Ac C=O	168.57	18	168.51	22	167.91	26
Ac C=O	169.57	24	169.95	25	169.24	31
Ac C=O	170.82	27	170.68	26	169.86	35
Ac C=O	170.82	27	170.74	20	170.00	26

Compound Number 186
¹³C

S-b-CA (acetate)
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
OMe	3.81	s	
γ1	4.38	dd	11.9, 5.9
γ2	4.26	dd	11.9, 4.1
B γ	4.68	dd	6.4, 1.2
β	4.89	m	
α	6.05	d	5.1
B β	6.30	dt	15.8, 6.4
B α	6.63	d	15.9
A2,6	6.87	s	
B2	7.15	d	1.6

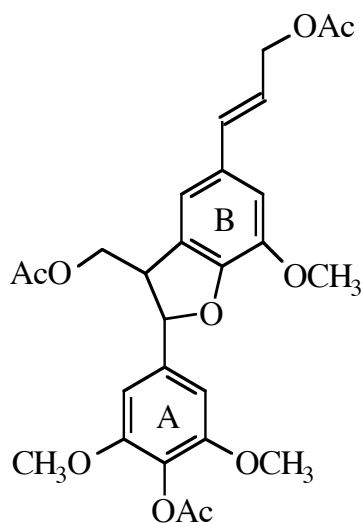
Notes:

S. Ralph
SR VII 16D
15mg

Landucci, Luque and Ralph
J. Wood Chem. Tech.
15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.54	34	20.25	45	20.04	45
Ac Me	20.86	37	20.64	43	20.38	52
Ac Me	21.12	46	20.80	41	20.63	75
Ac Me	21.12	46	20.89	47	20.63	75
OMe	55.91	57	56.29	54	55.61	56
OMe	56.29	100	56.54	100	55.90	100
OMe	56.29	100	56.54	100	55.90	100
γ	62.73	37	63.09	43	61.88	29
B γ	56.15	43	65.36	52	64.31	45
α	74.05	46	74.78	46	73.20	35
β	80.21	37	80.17	43	78.01	32
A2	104.52	83	105.14	81	103.94	65
A6	104.52	83	105.14	81	103.94	65
B2	110.41	43	111.40	45	110.26	33
B5	119.04	43	119.16	44	117.14	37
B6	119.89	46	120.49	40	119.43	39
B β	122.36	49	123.52	48	122.30	40
A4	128.85	14	129.61	11	127.66	23
B1	131.93	31	132.56	27	130.71	31
B α	133.90	43	134.13	48	132.84	40
A1	134.82	31	136.11	26	134.78	32
B4	147.37	29	148.33	22	146.56	31
B3	151.06	29	151.92	21	150.11	33
A3	152.13	60	153.06	38	151.38	65
A5	152.13	60	153.06	38	151.38	65
Ac C=O	168.59	23	168.46	21	167.90	31
Ac C=O	169.55	31	169.89	22	169.18	32
Ac C=O	170.84	26	170.75	29	169.96	36
Ac C=O	170.90	23	170.75	29	170.03	29

Compound Number 187



S-c-CA (acetate)

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.48	dd	11.1, 5.5
γ2	4.37	dd	11.1, 7.3
B γ	4.67	d	6.4
α	5.59	d	7.1
B β	6.25	dt	15.9, 6.4
B α	6.65	d	15.9
A2	6.84	s	
B2 or B6	7.05	s	
B2 or B6	7.07	s	

Notes:

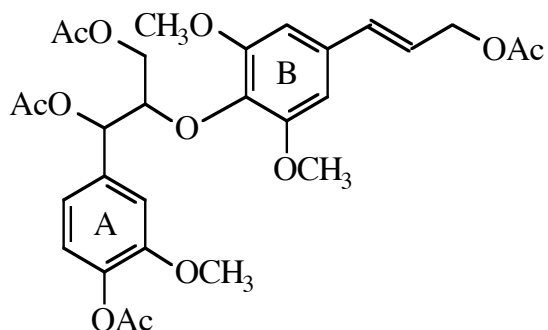
S. Ralph
 SR VII 21C
 8mg
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	45	20.25	30	20.13	46
Ac Me	20.92	43	20.74	30	20.57	52
Ac Me	21.11	42	20.82	30	20.73	54
β	50.62	47	51.37	32	49.37	34
OMe	56.18	58	56.54	100	55.84	55
OMe	56.31	100	56.54	100	56.00	100
OMe	56.31	100	56.54	100	56.00	100
B γ	65.26	53	65.50	35	64.51	48
γ	65.43	42	65.96	34	64.47	34
α	88.44	42	88.76	31	87.46	37
A2	102.65	81	103.51	62	102.86	73
A6	102.65	81	103.51	62	102.86	73
B2	110.87	43	112.38	31	111.11	33
B6	115.42	45	116.34	31	115.24	34
B β	121.44	47	122.36	31	121.46	39
B5	127.51	34	129.03	15	127.98	36
A4	128.68	13	129.52	6	127.74	18
B1	130.85	34	131.70	16	130.22	36
B α	134.33	47	134.67	31	133.46	37
A1	135.97	36	140.50	18	138.92	34
B3	144.53	30	145.55	15	143.90	34
B4	148.26	21	149.28	10	147.49	25
A3	152.43	53	153.40	27	151.77	69
A5	152.43	53	153.40	27	151.77	69
Ac C=O	168.69	25	168.57	12	168.02	28
Ac C=O	170.79	30	170.75	8	170.13	28
Ac C=O	170.93	15	170.94	8	170.28	37

Compound Number 188

¹³C



G-b-SA acetate

¹H (acetone)

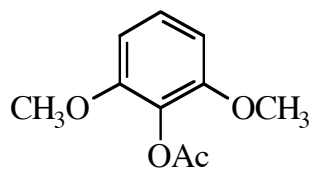
Atom	H Shifts	Mult	J
OMe	3.84	s	
γ1	4.42	dd	11.8, 6.0
γ2	4.18	dd	11.8, 4.1
B γ	4.69	dd	6.2, 1.1
α	6.08	d	4.3
B2,6	6.80	s	
B β	6.33	dt	15.9, 6.2
B α	6.64	d	16.0

Notes:

S. Ralph
 SR VII - 17A
 16mg
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.72	55	20.49	55	20.35	100
Ac Me	20.81	48	20.61	51	20.35	100
Ac Me	21.06	49	20.81	47	20.70	79
Ac Me	21.02	57	20.94	54	20.70	79
OMe	55.99	58	56.31	64	55.73	62
OMe	56.07	100	56.44	100	55.82	96
OMe	56.07	100	56.44	100	55.82	96
γ	62.74	32	63.24	43	62.05	27
B γ	65.00	39	65.26	49	64.24	37
α	74.09	35	75.07	38	73.67	29
β	81.03	36	81.57	39	80.04	29
B2	103.76	67	104.71	84	103.62	60
B6	103.76	67	104.71	84	103.62	60
A2	111.56	32	111.46	47	110.92	28
A6	119.24	33	119.94	39	118.72	28
A5	122.51	36	123.34	46	122.58	43
B β	122.97	41	124.14	45	123.43	34
B1	132.46	28	133.39	25	132.02	28
B α	134.16	36	134.40	41	133.02	35
A1	135.38	14	136.46	16	134.36	24
B4	136.11	26	137.14	28	135.66	27
A4	139.56	19	140.60	14	138.88	24
A3	150.91	22	152.10	22	150.59	29
B3	153.29	45	154.23	39	152.69	52
B5	153.29	45	154.23	39	152.69	52
Ac C=O	168.92	19	168.94	18	168.45	27
Ac C=O	169.55	26	169.92	24	169.33	33
Ac C=O	170.88	38	170.66	22	169.95	36
Ac C=O	170.88	38	170.66	22	170.10	27

Compound Number 189



2,6-dimethoxyphenol acetate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.45	36	20.27	35	20.12	47
OMe	56.12	100	56.40	100	55.89	96
OMe	56.12	100	56.40	100	55.89	96
2	104.91	90	105.77	95	105.00	100
6	104.91	90	105.77	95	105.00	100
1	126.23	47	126.92	53	126.23	53
4	128.85	5	129.94	5	128.11	9
3	152.34	24	153.43	22	151.90	42
5	152.34	24	153.43	22	151.90	42
Ac C=O	168.71	11	168.56	10	168.04	19

¹H (acetone)

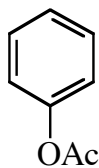
Atom	H Shifts	Mult	J
Ac Me	2.22	s	
OMe	3.37	s	
2,6	6.69	d	8.5
1	7.13	t	8.5

Notes:

Jamie Milhaupt
JR-JMA 35.1
40mg

Compound Number 190

¹³C



phenol acetate

¹H (acetone)

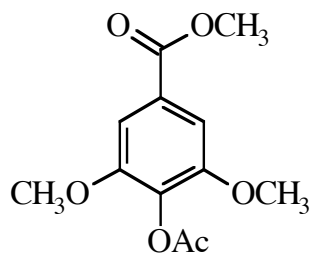
Atom	H Shifts	Mult	J
Ac Me	2.23	s	
3,5	7.12	m	
1	7.22	m	
2,6	7.40	m	

Notes:

Jamie Milhaupt
JR-JMA 55
54mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.12	33	20.94	36	20.75	47
3	121.58	89	122.57	97	121.70	100
5	121.58	89	122.57	97	121.70	100
1	125.82	50	126.36	57	125.63	59
2	129.42	100	130.09	100	129.35	100
6	129.42	100	130.09	100	129.35	100
4	150.74	10	151.96	10	150.44	16
Ac C=O	169.48	10	169.61	10	169.05	14

Compound Number 191



methyl (4-acetoxy-3,5-dimethoxy) benzoate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
α OMe	3.88	s	
OMe	3.87	s	
2,6	7.33	s	

Notes:

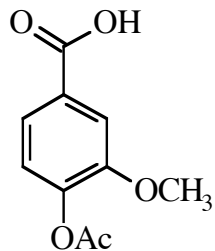
Jamie Milhaupt
JR-JMA 41.1
40mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	42	20.22	43	20.06	48
α OMe	52.34	45	52.57	45	52.36	49
OMe	56.32	100	56.68	96	56.17	100
OMe	56.32	100	56.68	96	56.17	100
2	106.34	95	106.87	100	105.79	90
6	106.34	95	106.87	100	105.79	90
1	128.10	21	129.04	17	127.70	29
4	132.63	9	133.69	8	131.96	10
3	152.10	39	153.27	26	151.81	58
5	152.10	39	153.27	26	151.81	58
α	166.37	16	166.61	11	165.75	25
Ac C=O	168.14	17	168.17	13	167.67	26

Compound Number 192

¹³C



4-acetoxy-3-methoxy benzoic acid

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.90	s	
2	7.70	s	
6	7.67	dd	7.6, 1.8
5	7.19	dd	7.7, 1.0

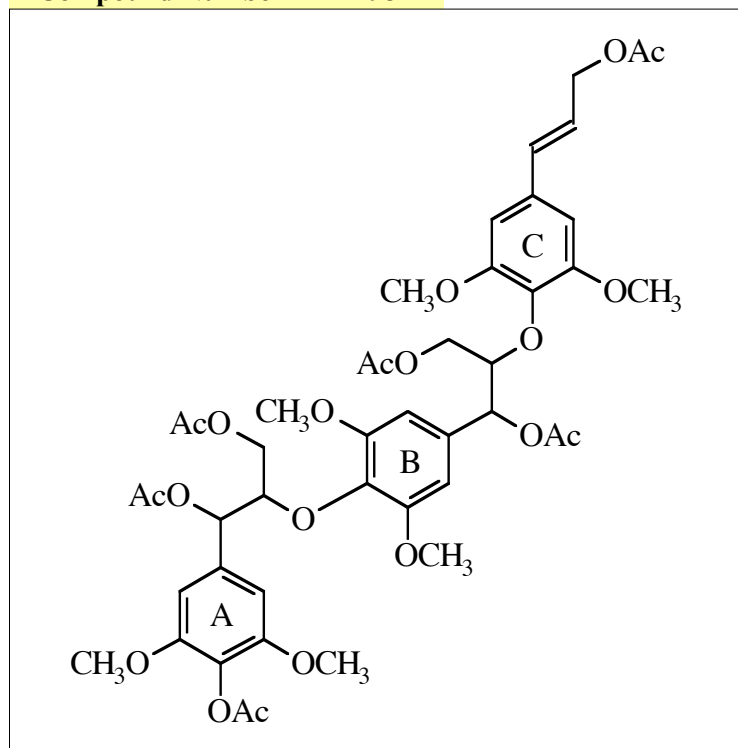
Notes:

Jamie Milhaupt
 JR-JMA 39.1
 41mg
 2D short range XH corr confirms assignment
 of 5 and 6.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.65	91	20.46	82	20.37	88
OMe	56.12	100	56.40	99	55.90	100
2	113.38	93	114.25	90	113.18	84
6	122.98	96	123.31	100	122.16	90
5	123.46	91	123.80	100	123.05	85
1	128.00	44	129.96	30	129.58	52
4	144.43	40	144.79	22	142.98	46
3	151.20	53	152.26	27	150.82	56
α	168.52	51	167.04	37	166.66	59
Ac C=O	171.37	56	168.65	37	168.21	54

Compound Number 193

¹³C



S-b-S-b-SA (acetate)

¹H (acetone)

Atom	H Shifts	Mult	J
A,B γ2	4.14	m	
A,B γ1	4.40	m	
C γ	4.70	d	11.2
A,B α	6.06,6.03	d	4.0
C β	6.33	dt	15.6

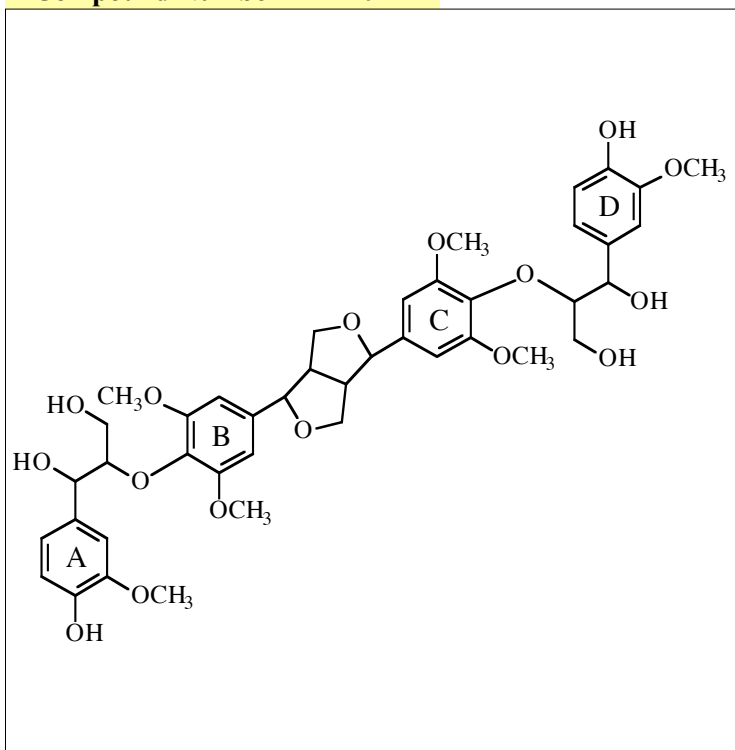
Notes:

L.Landucci
 LLL XIV 148BA
 10 mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	70	20.26	41	20.04	50
Ac Me	20.53	70	20.26	41	20.04	50
Ac Me	20.85	56	20.67	27	20.21	33
Ac Me	20.85	56	20.80	21	20.30	35
Ac Me	21.15	73	20.95	46	20.61	70
Ac Me	21.15	73	20.95	46	20.61	70
OMe	56.12	100	56.46	100	55.72	100
OMe	56.12	100	56.46	100	55.72	100
OMe	56.26	100	56.46	100	55.72	100
OMe	56.26	100	56.46	100	55.72	100
OMe	56.26	100	56.46	100	55.85	92
OMe	56.26	100	56.46	100	55.85	92
γ	62.88	33	63.44	22	62.22	26
Bγ	62.88	33	63.44	22	62.22	26
Cγ	65.00	22	65.26	17	64.16	19
α	74.35	23	75.43	32	73.97	20
B α	74.50	23	75.43	32	73.97	20
β	80.89	33	81.42	14	79.89	17
B β	80.89	33	81.56	14	79.89	17
A2	103.81	41	104.67	49	103.35	46
A6	103.81	41	104.67	49	103.35	46
B2	104.10	44	104.67	49	103.35	46
B6	104.10	44	104.67	49	103.35	46
C2	104.33	35	104.96	20	103.53	30
C6	104.33	35	104.96	20	103.53	30
C β	123.04	17	124.09	12	123.29	13
A4	128.54	11	129.36	7	127.48	15
C1	132.45	11	133.25	9	131.80	11
B1	133.24	16	134.06	9	132.46	8
C α	134.12	18	134.38	12	132.95	15
C4	135.40	10	136.54	9	134.25	9
A1	135.63	12	136.60	9	134.45	7
B4	135.81	13	136.64	9	135.16	13
A3	151.96	42	153.01	26	151.40	43
A5	151.96	42	153.01	26	151.40	43
B3	153.08	29	153.88	21	152.29	34
B5	153.08	29	153.88	21	152.29	34
C3	153.29	33	154.16	19	152.54	26
C5	153.29	33	154.16	19	152.54	26
A4 Ac C=O	168.68	15	168.50	18	167.89	24
Ac C=O	169.52	18	169.95	28	169.23	33
Ac C=O	169.66	19	169.95	28	169.23	33
Ac C=O	170.79	17	170.67	23	169.83	39
Ac C=O	170.94	27	170.67	23	169.83	39
Ac C=O	170.94	27	170.67	23	169.98	12

Compound Number 194

¹³C



G-b-S-r-S-b-G

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B,C β	54.48	30	55.37	40	53.56	31
OMe	56.00	80	56.26	70	55.41	69
OMe	56.27	100	56.62	100	55.89	100
OMe	56.27	100	56.62	100	55.89	100
A,D γ	60.56	43	60.97	34	59.73	25
B,C γ	72.01	27	72.64	38	71.21	25
A,D α	72.55	32	73.38	36	72.00	25
B,C α	85.86	25	86.53	40	84.97	25
A,D β	87.08	30	87.84	45	86.05	19
B,C 2	102.82	68	104.12	74	103.22	50
B,C 6	102.82	68	104.12	74	103.22	50
A,D 2	108.45	36	110.93	40	110.85	25
A,D 5	114.19	41	115.19	49	114.54	25
A,D 6	118.75	43	120.05	38	119.24	25
A,D 1	131.31	25	133.77	19	133.18	25
B,C 1	134.41	16	135.74	17	134.69	25
B,C 4	137.63	23	139.00	21	136.68	25
A,D 4	144.89	30	146.45	26	145.20	38
A,D 3	146.64	32	147.96	26	146.85	38
B,C 3	153.49	50	154.20	47	152.50	56
B,C 5	153.49	50	154.20	47	152.50	56

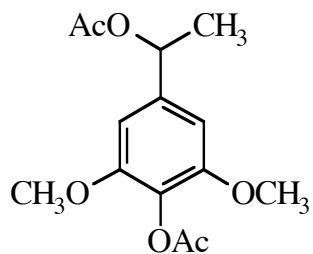
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.83	s	
OMe	3.87	s	
A,D γ2	3.71	dd	12.0, 3.4
A,D α	4.98	d	3.2
B,C α	4.75	d	2.3
B,C 2,6	6.77	s	
A,D 2	7.04	d	1.6

Notes:

S. Luque
 12E
 8 mg
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)
 As this compound has a plane of symmetry
 The shifts for the other half are identical.

Compound Number 195



1-(4-acetoxy-3,5-dimethoxyphenyl)-1-acetoxy ethane

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.22	s	
β	1.49	d	6.6
OMe	3.80	s	
α	5.80	q	6.6
2,6	6.74	s	

Notes:

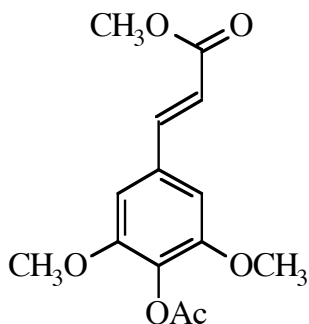
J. Milhaupt
A 51
41mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.47	43	20.24	41	20.03	53
Ac Me	21.36	36	21.12	38	20.90	51
β	22.24	47	22.62	52	22.02	50
OMe	56.17	100	56.44	97	56.89	100
OMe	56.17	100	56.44	97	56.89	100
α	72.28	51	72.64	52	71.58	51
2	102.94	87	103.51	100	102.54	82
6	102.94	87	103.51	100	102.54	82
4	128.24	8	129.11	6	127.25	14
1	140.03	27	141.50	23	140.23	36
3	152.12	39	153.16	29	151.57	56
5	152.12	39	153.16	29	151.57	56
Ac C=O	168.69	18	168.52	14	168.00	28
α Ac C=O	170.15	15	170.16	14	169.54	26

Compound Number 196

¹³C



Acetylated Sinapic acid methyl ester

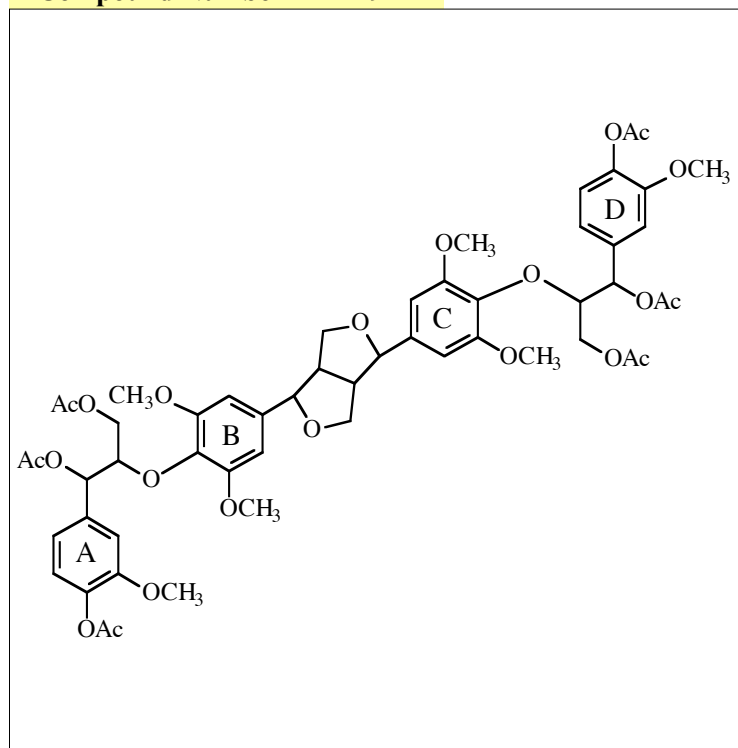
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.25	s	
γ OMe	3.75	s	
OMe	3.87	s	
2,6	7.08	s	
β	6.58	d	16.0
α	7.62	d	16.1

Notes:

J. Milhaupt
A 45
47mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	45	20.23	39	20.00	49
γ OMe	51.68	45	51.70	48	51.34	47
OMe	56.12	100	56.61	95	56.08	100
OMe	56.12	100	56.61	95	56.08	100
2	104.65	100	105.83	100	105.24	88
6	104.65	100	105.83	100	105.24	88
β	118.05	52	118.97	46	118.18	47
4	130.40	10	131.45	7	129.60	17
1	132.64	29	133.56	26	132.30	38
α	144.51	51	145.15	52	144.26	45
3	152.38	49	153.53	38	151.90	63
5	152.38	49	153.53	38	151.90	63
γ	167.11	24	167.44	18	166.57	30
Ac C=O	168.39	22	168.38	16	167.83	29

Compound Number 197

G-b-S-r-S-b-G (acetate)
¹H (acetone)

Atom	H Shifts	Mult	J
B,C β	3.10	m	
OMe	3.80	s	
OMe	3.82	s	
B γ1	3.91	m	
A γ2	4.16	m	
B γ2	4.25	m	
A γ2	4.40	dd	
Aβ	4.68	m	
B,C α	4.72	m	
A,D α	6.06	m	
B,C 2,6	6.69	s	
A 6	6.96	dd	
A 5	7.02	d	
A 2	7.15	s	

Notes:

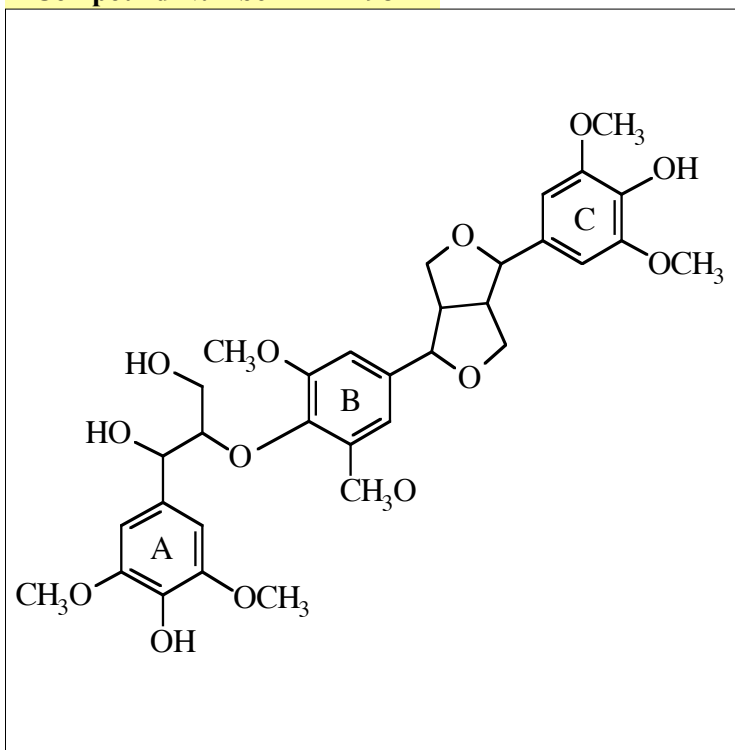
S. Luque SLL 13F, 11 mg
¹H data from 360 MHz spectrum
 The β-O-4 units are erythro, some splitting of peaks can be seen due to the number of R and S isomers present, especially the resinol beta in CDCl₃. In acetone a beta isomer at 55.47, in CDCl₃ at 53.93 and fine splitting of many peaks was observed at 360 MHz. Also a peak around 69 is unassigned.
 Landucci, Luque and Ralph J. Wood Chem. Tech. 15(4), 493-513 (1995) As this compound has a plane of symmetry, the shifts for the other half are identical.

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.74	83	20.48	80	20.27	86
Ac Me	20.83	69	20.61	62	20.27	86
Ac Me	21.14	59	20.94	64	20.61	43
B,C β	54.45	22	55.38	31	53.65	22
A,D OMe	56.00	72	56.26	69	55.63	66
B,C OMe	56.18	100	56.39	100	55.73	100
B,C OMe	56.18	100	56.39	100	55.73	100
A,D γ	62.78	28	63.27	33	62.02	18
B,C γ	72.06	13	72.60	33	71.24	21
A,D α	74.01	26	75.04	31	73.64	17
A,D β	80.87	25	81.30	24	79.83	20
B,C α	85.94	23	86.52	31	84.93	19
B,C 2	102.86	48	103.71	58	102.69	31
B,C 6	102.86	48	103.71	58	102.69	31
A,D 2	111.58	27	112.20	33	110.85	16
A,D 6	119.27	28	120.03	24	118.72	16
A,D 5	122.48	29	123.25	36	122.43	18
B,C 4	134.60	12	135.47	11	133.51	14
A,D 1	136.19	16	137.15	18	135.61	15
B,C 1	137.35	16	138.96	20	137.50	14
A,D 4	139.56	22	140.54	22	138.79	17
A,D 3	150.90	20	152.01	22	150.46	21
B,C 3	153.42	43	154.05	44	152.46	34
B,C 5	153.42	43	154.05	44	152.46	34
4 Ac C=O	168.92	28	168.92	33	168.35	32
αAc C=O	169.56	23	169.90	27	169.24	31
γAc C=O	170.91	28	170.65	33	169.87	29

Compound Number 198

¹³C



S-b-S-r-S

¹H (acetone)

Atom	H Shifts	Mult	J
B,C β	3.12	m	
OMe	3.80	s	
OMe	3.82	s	
OMe	3.88	s	
B α	4.68	d	4.0
C α	4.74	d	4.0
α	4.99	m	
B 2,6	6.69	s	
C 2,6	6.71	s	
A 2,6	6.78	s	

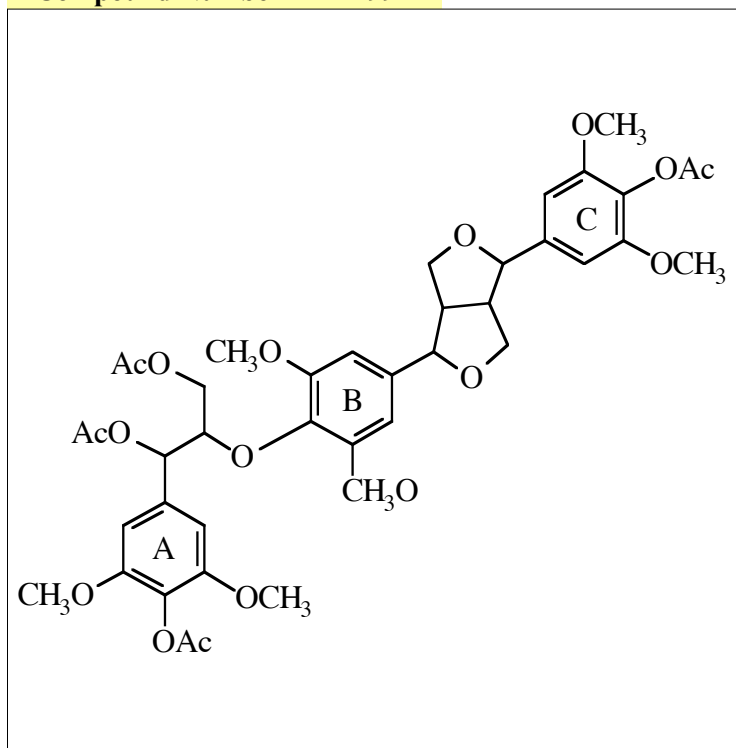
Notes:

S. Luque
 SLL 1 12E
 10 mg
 A4 was coincident with other shifts, the assignments were inferred from other modes and peak heights.
 Landucci, Luque and Ralph
 J. Wood Chem. Tech.
 15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	54.43	27	55.27	19	53.59	20
C β	54.57	21	55.42	19	53.73	20
OMe	56.34	68	56.63	100	55.88	76
OMe	56.34	68	56.63	100	55.88	76
OMe	56.45	100	56.63	100	56.01	100
OMe	56.45	100	56.63	100	56.01	100
OMe	56.49	88	56.63	100	56.01	100
OMe	56.49	88	56.63	100	56.01	100
γ	60.65	27	61.03	17	59.90	14
C γ	71.80	18	72.40	21	71.10	18
B γ	72.17	16	72.61	20	71.26	21
α	72.77	14	73.63	17	72.38	20
B α	86.01	23	86.61	20	85.10	20
C α	86.01	23	86.73	21	85.30	22
β	87.24	18	87.87	17	86.20	21
B2	102.69	45	104.10	36	103.28	33
B6	102.69	45	104.10	36	103.28	33
C2	102.84	64	104.51	43	103.65	46
C6	102.84	64	104.51	43	103.65	46
A2	102.94	50	104.91	40	104.29	37
A6	102.94	50	104.91	40	104.29	37
A1	130.46	11	132.73	11	131.36	21
C1	132.00	16	133.13	13	132.42	18
B1	134.05	18	135.86	13	134.42	21
A4	134.51	21	135.86	13	134.86	26
C4	134.51	21	136.23	10	134.86	26
B4	137.91	18	139.07	13	136.79	13
A3	147.15	43	148.38	26	147.40	39
A5	147.15	43	148.38	26	147.40	39
C3	147.29	36	148.68	21	147.88	45
C5	147.29	36	148.68	21	147.88	45
B3	153.55	36	154.16	20	152.55	33
B5	153.55	36	154.16	20	152.55	33

Compound Number 199

¹³C



S-b-S-r-S (acetate)

¹H (acetone)

Atom	H Shifts	Mult	J
B,C β	3.11	m	
B α	4.73	d	
C α	4.76	d	
α	6.05	m	
2,6	6.70	s	
2,6	6.76	s	

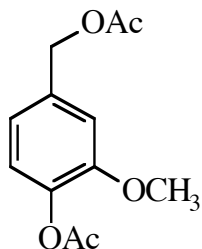
Notes:

S. Luque
SLL 13F
15mg
Landucci, Luque and Ralph
J. Wood Chem. Tech.
15(4), 493-513 (1995)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	52	20.26	49	20.06	45
Ac Me	20.53	52	20.26	49	20.06	45
Ac Me	20.86	31	20.63	26	20.29	32
Ac Me	21.16	30	20.94	26	20.63	34
B β	54.39	17	55.33	20	53.61	23
C β	54.52	23	55.44	23	53.85	23
OMe	56.17	65	56.38	64	55.72	68
OMe	56.17	65	56.38	64	55.72	68
OMe	56.23	88	56.46	100	55.87	100
OMe	56.23	88	56.46	100	55.87	100
OMe	56.29	100	56.46	100	55.87	100
OMe	56.29	100	56.46	100	55.87	100
γ	62.81	18	63.41	19	62.16	13
C γ	72.07	21	72.66	44	71.31	34
B γ	72.19	21	72.66	44	71.31	34
α	74.25	16	75.33	15	73.92	13
β	80.78	15	81.29	11	79.76	12
B α	85.82	21	86.45	25	84.85	19
C α	85.98	20	86.56	20	85.00	18
C2	102.30	48	103.23	47	102.36	44
C6	102.30	48	103.23	47	102.36	44
B2	102.84	32	103.71	35	102.70	26
B6	102.84	32	103.71	35	102.70	26
A2	104.07	41	104.68	34	103.30	26
A6	104.07	41	104.68	34	103.30	26
C4	128.05	7	128.85	7	126.98	9
A4	128.51	11	129.34	7	127.45	12
B4	134.67	13	135.61	9	133.69	12
A1	135.66	11	136.65	10	135.21	12
B1	137.27	13	138.83	12	137.38	14
C1	139.74	16	141.45	15	140.08	18
A3	151.92	33	152.95	20	151.38	32
A5	151.92	33	152.95	20	151.38	32
C3	152.34	31	153.22	24	151.58	39
C5	152.34	31	153.22	24	151.58	39
B3	153.35	25	153.98	22	152.41	26
B5	153.35	25	153.98	22	152.41	26
Ac C=O	168.63	18	168.48	15	167.91	22
Ac C=O	168.85	16	168.58	15	168.02	19
Ac C=O	169.53	16	169.91	14	169.26	19
Ac C=O	170.94	16	170.76	15	169.89	19

Compound Number 200

¹³C



Vanillyl alcohol diacetate
4-hydroxy-3-methoxybenzyl alcohol diacetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.57	76	20.45	75	20.25	97
Ac Me	20.93	59	20.78	55	20.59	78
OMe	55.84	100	56.20	92	55.68	100
α	65.86	91	66.10	99	65.10	90
2	112.50	91	113.32	83	112.58	92
6	120.67	89	121.04	96	120.16	92
5	122.77	95	123.57	100	122.67	89
1	134.80	45	136.23	37	134.99	64
4	139.62	26	140.64	20	138.97	43
3	151.07	33	152.19	24	150.69	52
4 Ac C=O	168.84	29	168.93	24	168.42	49
α Ac C=O	170.66	23	170.79	19	170.15	36

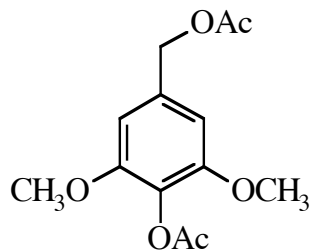
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.23	s	
OMe	3.80	s	
α	5.06	s	
6	6.96	dd	8.1,1.8
5	7.03	d	8.0
2	7.11	d	1.7

Notes:

S. Ralph
35mg

Compound Number 201



Syringyl alcohol diacetate

3,5-dimethoxy-4-hydroxy benzyl alcohol diacetate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.47	59	20.23	49	20.05	62
Ac Me	21.05	31	20.79	27	20.63	42
OMe	56.21	100	56.46	100	55.91	100
OMe	56.21	100	56.46	100	55.91	100
α	66.37	48	66.46	44	65.45	42
2	105.13	89	105.67	93	104.84	80
6	105.13	89	105.67	93	401.84	80
4	128.58	7	129.43	6	127.57	12
1	134.42	21	135.77	19	134.49	32
3	152.21	39	153.19	27	151.59	53
5	152.21	39	153.19	27	151.59	53
4 Ac C=O	168.67	16	168.50	12	167.97	28
α Ac C=O	170.77	12	170.80	9	170.14	17

¹H (acetone)

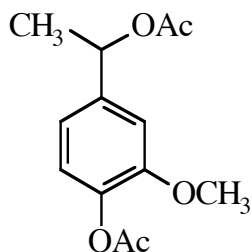
Atom	H Shifts	Mult	J
Ac Me	2.06	s	
Ac Me	2.22	s	
OMe	3.80	s	
α	5.05	s	
2,6	6.76	s	

Notes:

J. Milhaupt
A 53
35 mg

Sample has impurity

Compound Number 202

¹³C

1-(4-acetoxy-3-methoxyphenyl)-1-acetoxyethane

¹H (acetone)

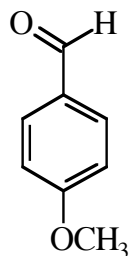
Atom	H Shifts	Mult	J
β	1.49	d	6.6
Ac Me	2.03	s	
Ac Me	2.22	s	
OMe	3.82	s	
α	5.83	q	6.6
6	6.95	dd	8.1,1.8
5	7.02	d	8.1
2	7.11	d	1.8

Notes:

J. Milhaupt
A 49.1
35mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.69	79	20.47	79	20.28	96
Ac Me	21.37	65	21.12	64	20.90	87
β	22.21	91	22.57	86	22.00	87
OMe	55.93	100	56.21	88	55.70	100
α	71.96	89	72.31	91	71.26	96
2	110.60	88	111.30	78	110.46	82
6	118.44	95	118.73	98	117.74	87
5	122.75	89	123.51	100	122.60	96
1	139.33	26	140.32	17	138.62	42
4	140.52	44	141.88	36	140.60	58
3	151.05	31	152.18	24	150.66	42
4 Ac C=O	169.01	31	166.95	22	168.44	49
α Ac C=O	170.21	30	170.17	19	169.55	42

Compound Number 203



4-methoxy benzaldehyde

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.51	51	56.03	58	55.51	38
3	114.26	100	115.16	100	114.35	87
5	114.26	100	115.16	100	114.35	87
1	129.90	14	131.11	11	129.57	18
2	131.88	97	132.43	90	131.65	100
6	131.88	97	132.43	90	131.65	100
4	164.55	14	165.44	11	164.10	18
α	190.68	45	191.09	42	191.01	51

¹H (acetone)

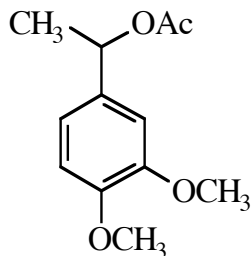
Atom	H Shifts	Mult	J
OMe	3.89	s	
3,5	7.08	d	8.8
2,6	7.85	d	8.8
α	9.86	s	

Notes:

Aldrich
60mg

Compound Number 204

¹³C



1-(3,4-dimethoxyphenyl)-1-acetoxyethane

¹H (acetone)

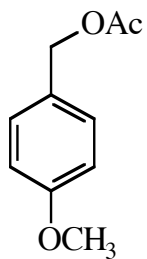
Atom	H Shifts	Mult	J
β	1.47	d	6.6
Ac Me	2.00	s	
OMe	3.78	s	
OMe	3.81	s	
α	5.78	q	6.6
5,6	6.90	m	
2	6.97	s	

Notes:

J. Milhaupt
A 141
38mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.39	39	21.18	38	20.93	62
β	21.99	55	22.41	57	21.82	72
OMe	55.91	100	56.13	100	55.43	100
OMe	55.91	100	56.13	100	55.43	100
α	72.20	51	72.51	54	71.42	73
2	109.69	46	111.16	43	109.93	67
5	111.06	49	112.63	46	111.57	70
6	118.64	53	119.25	54	118.12	70
1	134.19	24	135.54	17	134.02	45
4	148.76	16	150.01	12	148.32	35
3	148.96	18	150.29	12	148.58	36
Ac C=O	170.29	15	170.21	13	169.51	31

Compound Number 205



4-methoxybenzyl alcohol acetate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.01	32	20.85	33	20.61	36
OMe	55.23	51	55.53	61	54.98	50
α	66.07	53	66.25	57	65.18	45
3	113.94	100	114.60	100	113.70	100
5	113.94	100	114.60	100	113.70	100
1	128.10	17	129.43	14	128.03	24
2	130.08	99	130.78	100	129.85	98
6	130.08	99	130.78	100	129.85	98
4	159.65	14	160.57	12	159.07	13
Ac C=O	170.85	11	170.85	10	170.13	13

¹H (acetone)

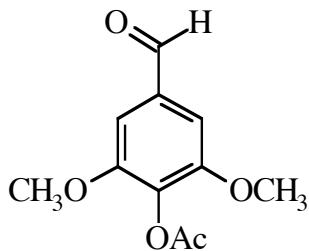
Atom	H Shifts	Mult	J
Ac Me	2.00	s	
OMe	3.78	s	
α	5.01	s	
3,5	6.91	d	8.7
2,6	7.31	d	8.7

Notes:

J. Milhaupt
A 139
56mg

Compound Number 206

¹³C



Syringaldehyde acetate
3,5-dimethoxy-4-acetoxy-benzaldehyde

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.41	39	20.21	37	20.01	50
OMe	56.35	100	56.72	100	56.20	100
OMe	56.35	100	56.72	100	56.20	100
2	106.09	92	106.72	84	106.00	92
6	106.09	92	106.72	84	106.00	92
4	133.82	7	134.60	5	132.83	12
1	134.36	22	135.62	10	134.20	34
3	152.88	32	153.91	22	152.35	51
5	152.88	32	153.91	22	152.35	51
Ac C=O	168.01	14	168.15	11	167.58	23
α	191.00	45	191.82	31	191.89	48

¹H (acetone)

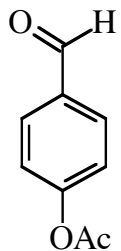
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.90	s	
2,6	7.28	s	
α	9.93	s	

Notes:

J. Milhaupt
A 147
42mg

Compound Number 207

¹³C



4-Acetoxy benzaldehyde

¹H (acetone)

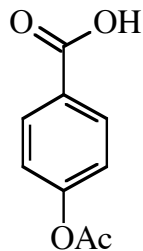
Atom	H Shifts	Mult	J
Ac Me	2.30	s	
3,5	7.35	d	8.6
2,6	7.97	d	8.6
α	10.01	s	

Notes:

J. milhaupt
137.5
42mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.06	39	20.98	39	20.78	42
3	122.32	100	123.43	100	122.63	98
5	122.32	100	123.43	100	122.63	98
2	131.12	92	131.68	100	130.85	100
6	131.12	92	131.68	100	130.95	100
1	133.93	16	135.13	13	133.75	19
4	155.30	12	156.42	11	154.99	16
Ac C=O	168.62	12	169.27	9	168.64	16
α	190.88	38	191.83	34	191.84	42

Compound Number 208



4-Acetoxy benzoic acid

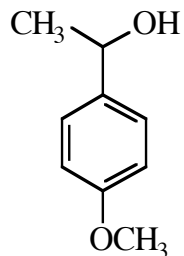
 ^1H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.29	s	
3,5	7.26	d	8.8
2,6	8.08	d	8.8

Notes:J. Milhaupt
27mg ^{13}C

Atom	CDCl_3		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.25	48	20.98	48	20.80	48
3	121.84	100	122.76	95	121.96	100
5	121.84	100	122.76	95	121.96	100
1	126.96	20	128.81	15	128.31	21
2	131.95	96	131.91	100	130.78	99
6	131.95	96	131.91	100	130.78	99
4	155.09	26	155.55	18	153.86	25
α	168.89	22	167.00	17	166.55	20
Ac C=O	171.38	13	169.28	15	168.75	25

Compound Number 209



4-Methoxy benzyl alcohol

¹H (acetone)

Atom	H Shifts	Mult	J
β	1.37	d	6.5
OMe	3.76	s	
α	4.79	m	
3,5	6.86	d	8.7
2,6	7.29	d	8.6

Notes:

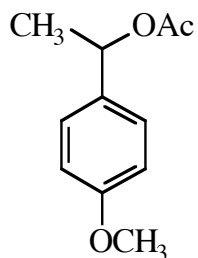
J. Milhaupt
JMA 145
42mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	25.04	52	26.20	54	25.89	15
OMe	55.27	48	55.43	62	54.92	15
α	69.84	44	69.50	42	67.60	15
3	113.82	91	114.20	100	113.25	100
5	113.82	91	114.20	100	113.25	100
2	126.67	100	127.27	92	126.34	100
6	126.67	100	127.27	92	126.34	100
1	138.12	17	140.18	11	139.34	7
4	158.90	14	159.49	13	157.90	6

Compound Number 210

¹³C



1-(4-acetoxyphenyl)-1-acetoxy ethane

¹H (acetone)

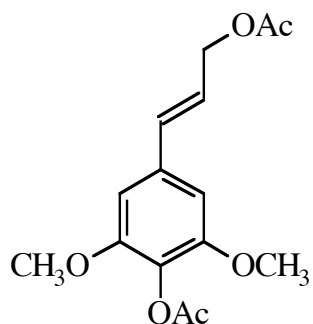
Atom	H Shifts	Mult	J
β	1.46	d	6.6
Ac Me	1.98	s	
OMe	3.78	s	
α	5.79	q	6.6
3,5	6.90	d	8.8
2,6	7.30	d	8.8

Notes:

J. Milhaupt
JMA 149
23mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.44	35	21.16	34	20.92	44
β	22.01	56	22.35	57	21.76	51
OMe	55.32	48	55.51	44	54.98	46
α	72.06	47	72.28	46	71.18	48
3	113.90	100	114.52	100	113.63	100
5	113.90	100	114.52	100	113.63	100
2	127.64	100	128.26	92	127.28	100
6	127.64	100	128.26	92	127.28	100
1	133.82	19	134.94	15	133.52	25
4	159.34	13	160.22	11	158.69	20
Ac C=O	170.38	12	170.20	10	169.49	19

Compound Number 211



Sinapyl alcohol diacetate

¹³C

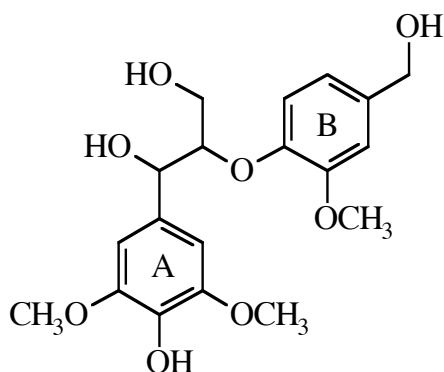
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.51	46	20.26	44	20.05	49
Ac Me	21.05	33	20.79	33	20.62	45
OMe	56.21	100	56.47	100	55.90	100
OMe	56.21	100	56.47	100	55.90	100
γ	64.90	50	65.13	51	64.06	45
2	103.38	88	104.18	93	103.22	78
6	103.38	88	104.18	93	103.22	78
β	123.71	49	124.99	44	124.32	41
4	128.75	8	129.68	5	127.69	14
α	134.01	49	134.04	44	132.55	42
1	134.71	26	135.67	17	134.33	30
3	152.28	42	153.36	32	151.73	58
5	152.28	42	153.36	32	151.73	58
4 Ac C=O	168.71	21	168.51	16	167.395	25
γ Ac C=O	170.85	14	170.72	9	170.01	20

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.04	s	
Ac Me	2.22	s	
OMe	3.82	s	
γ	4.69	dd	6.2, 1.2
2,6	6.84	s	
β	6.38	dt	15.8, 6.2
α	6.66	d	15.9

Notes:

J.Milhaupt
JMA 111
20mg

Syringylglycerol- β -vanillyl alcohol ether

1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-[4-(1-hydroxymethyl)-2-methoxyphenoxy]propane-1,3-diol

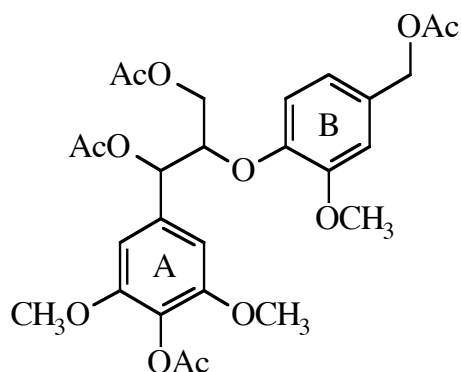
¹H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.80	s	
B OMe	3.86	s	
γ 1	3.50	m	
γ 2	3.69	m	
β	4.18	m	
B α	4.56	d	5.6
α	4.87	m	
A 2,6	6.78	s	
6	6.84	dd	8.2,2.0
2	7.03	d	1.9
5	7.12	d	8.2

Notes:

T. Duch
I-57
25mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	55.90	54	56.28	59	55.44	70
A OMe	56.34	100	56.60	100	55.74	100
A OMe	56.34	100	56.60	100	55.74	100
γ	61.05	44	61.95	41	60.00	51
B α	64.87	54	64.54	46	62.74	68
α	74.16	47	74.06	51	70.88	57
β	89.20	45	88.56	49	84.44	54
A2	103.82	73	105.41	94	104.13	76
A6	103.82	73	105.41	94	104.13	76
B2	110.98	48	111.95	51	110.97	57
B5	119.98	49	119.60	52	115.43	54
B6	120.50	45	120.02	48	118.58	57
A1	130.66	32	132.82	32	131.93	54
B1	134.61	29	136.17	32	134.31	46
A4	137.06	29	137.97	28	135.45	49
B4	146.93	38	148.42	49	146.93	46
A3	147.10	51	148.50	30	147.34	70
A5	147.10	51	148.50	30	147.34	70
B3	151.16	27	151.54	27	149.39	49



Syringylglycerol- β -vanillyl alcohol ether tetra-acetate
1-(4-acetoxy-3,5-dimethoxyphenyl)-1,3-diacetoxy-2-[4-(1-acetoxymethyl)-2-methoxyphenoxy]

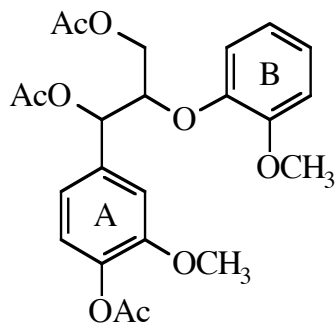
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	2.03	s	
Ac Me	2.09	s	
Ac Me	2.21	s	
A OMe	3.80	s	
B OMe	3.83	s	
γ 1	4.05	s	12.3,5.9
γ 2	4.27	s	11.9,4.0
β	4.81	s	
B β	5.02	s	
α	6.08	d	6.5
A 2,6	6.86	s	
B6	6.91	dd	8.3,1.8
B5	7.03	d	8.4
B2	7.05	d	1.6

Notes:

T.Duch
I-55
40 mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	45	20.24	51	20.03	66
Ac Me	20.64	57	20.63	75	20.38	62
Ac Me	20.97	68	20.83	45	20.65	100
Ac Me	20.97	68	20.95	50	20.65	100
B OMe	55.80	34	56.31	60	55.60	66
A OMe	56.14	100	56.55	100	55.98	100
A OMe	56.14	100	56.55	100	55.98	100
γ	62.91	27	63.59	46	63.37	48
B α	66.08	66	66.35	57	65.28	57
α	74.57	50	75.64	50	74.48	53
β	80.14	48	80.72	55	79.02	53
A2	104.02	89	105.13	99	103.94	90
A6	104.02	89	105.13	99	103.94	90
B2	112.70	52	113.94	59	112.86	60
B5	118.12	48	118.67	55	116.91	60
B6	121.15	52	121.77	56	120.69	62
B1	128.79	20	129.70	22	130.30	52
A4	130.88	36	132.09	30	134.92	57
A1	134.63	39	136.18	37	134.92	57
B4	147.90	34	148.97	29	147.38	55
B3	150.60	36	151.57	34	149.79	59
A3	152.14	61	153.21	57	151.55	78
A5	152.14	61	153.21	57	151.55	78
A4 Ac C=O	168.42	30	168.46	30	167.88	50
Ac C=O	169.60	32	170.02	34	169.32	57
Ac C=O	170.48	34	170.72	24	167.94	59
Ac C=O	170.79	25	170.88	24	170.15	40

*erythro*Guaiacylglycerol- β -guaiacyl ether acetate

1-(4-acetoxy-3-methoxyphenyl)-1,3-diacetoxy-2-(2-methoxyphenoxy)propane

¹H (acetone)

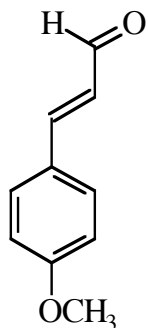
Atom	H Shifts	Mult	J
Ac Me	1.94	s	
Ac Me	2.08	s	
Ac Me	2.23	s	
OMe	3.81	s	
OMe	3.83	s	
γ 1	4.22	dd	11.9,4.2
γ 2	4.39	dd	11.9,5.8
β	4.83	m	
α	6.09	d	5.0

Notes:

S. Ralph
Mixture is 65/35 erythro/threo
35mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.57	100	20.46	84	20.22	100
Ac Me	20.66	66	20.59	69	20.29	100
Ac Me	20.93	71	20.86	57	20.53	73
OMe	55.78	91	56.26	100	55.54	81
OMe	55.90	85	56.32	100	55.66	81
γ	62.55	57	63.03	55	61.84	44
α	73.79	60	74.63	55	73.10	49
β	80.15	71	80.37	59	78.36	47
A2	112.02	54	112.83	55	111.61	58
B2	112.70	61	113.90	62	112.89	51
B5	119.51	79	119.88	59	117.93	51
A6	119.71	56	120.46	59	119.28	59
B6	120.98	86	121.68	69	120.61	71
A5	122.52	60	123.36	61	122.43	58
B1	123.58	59	124.08	60	122.83	49
A1	135.41	32	136.71	41	135.30	44
A4	139.80	22	140.85	21	139.05	32
B4	147.18	21	148.33	18	146.61	29
B3	150.97	24	152.11	32	150.30	31
A3	151.11	24	152.11	32	150.52	34
Ac C=O	168.69	26	168.89	26	168.31	36
Ac C=O	169.44	26	169.89	25	169.16	37
Ac C=O	170.68	23	170.74	20	169.94	27

Compound Number 215



p-Methoxy cinnamaldehyde

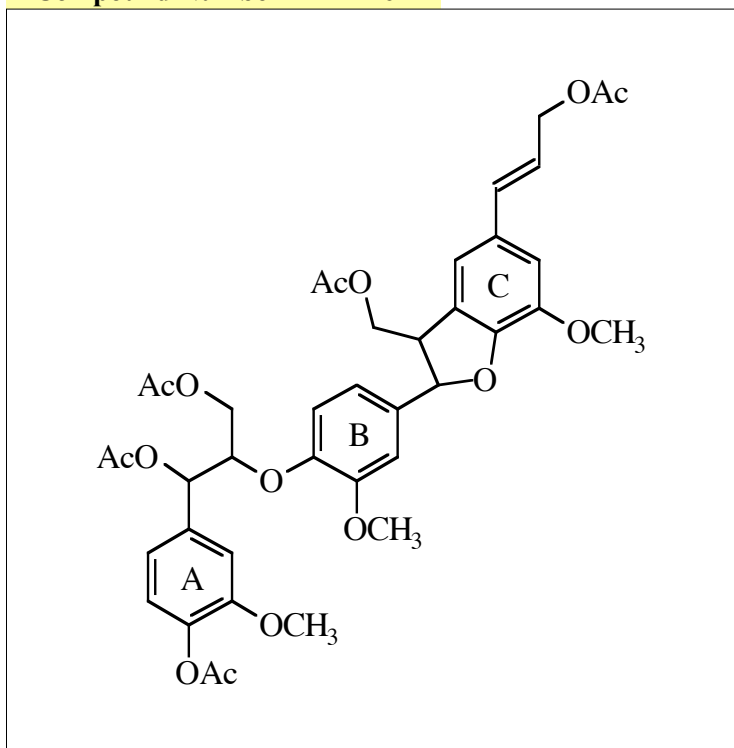
¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.34	46	55.81	52	55.35	43
3	114.48	100	115.35	100	114.51	100
5	114.48	100	115.35	100	114.51	100
β	126.33	46	127.37	47	126.31	51
1	126.67	22	127.91	16	126.69	23
2	130.28	92	131.26	95	130.65	98
6	130.28	92	131.26	95	130.65	98
α	152.72	44	153.22	41	153.10	40
4	162.13	15	163.08	11	161.75	20
γ	193.66	46	193.81	44	194.00	43

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
β	6.65	dd	15.9,7.7
3,5	7.02	d	8.9
α	7.60	d	15.9
2,6	7.68	d	8.9
γ	9.66	d	7.7

Notes:Pew Collection
50 mg



G-b-G-c-CA (acetate)

¹H (acetone)

Atom	H Shifts	Mult	J
C γAc Me	1.93	s	
A, B γ Ac Me	2.04	s	
A α Ac Me	2.06	s	
A4 Ac Me	2.21	s	
B β	3.75	m	
A, B OMe	3.81	s	
C OMe	3.89	s	
A γ1	4.22	dd	4.1, 12.0
A γ2	4.36	dd	5.9, 12.0
B γ1	4.32	dd	7.6, 11.1
B γ2	4.43	dd	5.4, 11.1
C γ	4.65	dd	1.3, 6.5
β	4.86	m	
B α	5.55	d	6.8
α	6.05	d	5.2
C β	6.23	dt	6.5, 15.8
C α	6.64	d	15.8
B6	6.91	dd	2.0, 8.3
B5	7.00	d	8.3
B2	7.07	d	2.0
A2	7.23	m	

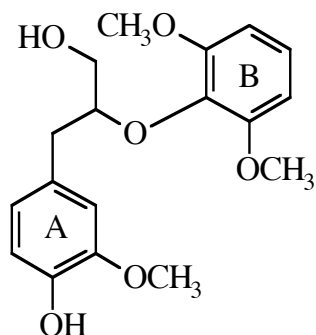
Notes:

S.Ralph
VII-70A
Assignments in acetone are based on
360MHZ HMBC and HMQC expts.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.63	111	20.45	104	20.32	97
A αAc Me	20.74	107	20.60	88	20.40	84
B γAc Me	20.79	99	20.68	92	20.51	68
C γAc Me	20.96	141	20.80	86	20.62	73
A γAc Me	21.00	141	20.86	86	20.70	73
B β	50.37	59	51.24	65	49.34	25
OMe	55.88	100	56.28	130	55.71	125
OMe	55.91	121	56.28	130	55.71	125
OMe	56.00	69	56.28	130	55.71	125
γ	62.45	46	63.04	65	61.85	33
C γ	65.18	76	65.49	100	64.49	50
B γ	65.29	43	65.95	73	64.76	31
α	73.66	40	74.48	71	73.01	32
β	80.25	57	80.30	105	78.30	31
B α	88.23	41	88.54	59	87.17	29
B2	110.28	86	111.50	76	110.74	16
C2	110.60	67	112.17	95	110.93	28
A2	111.88	81	112.71	69	111.62	29
C6	115.31	75	116.33	85	115.26	27
B6	118.69	45	119.14	56	117.49	21
B5	119.18	76	119.41	77	118.30	15
A6	119.60	67	120.45	92	119.33	37
C β	121.24	80	122.23	100	121.34	40
A5	122.59	79	123.33	99	122.50	35
C5	127.49	58	129.01	72	127.89	25
C1	130.60	72	131.53	90	130.04	32
C α	134.30	94	134.71	111	133.49	35
A1	135.30	42	136.60	68	135.05	20
B1	135.80	53	137.06	50	135.26	28
A4	139.75	65	140.78	70	139.06	39
C3	144.41	66	145.39	78	143.84	38
B4	147.19	42	148.14	59	146.54	23
C4	148.20	51	149.31	53	147.53	29
B3	150.96	71	151.95	72	150.16	28
A3	151.19	71	152.08	71	150.54	49
A4 C=O	168.80	48	168.92	67	168.43	47
A αC=O	169.49	56	169.89	68	169.26	46
C γC=O	170.74	75	170.77	107	170.04	61
B γC=O	170.76	92	170.95	94	170.15	41
A γC=O	170.88	59	170.95	94	170.28	47

Compound Number 217

¹³C



3-(4-hydroxy-3-methoxyphenyl)-2-[2,6-dimethoxyphenoxy]
propan-1-ol

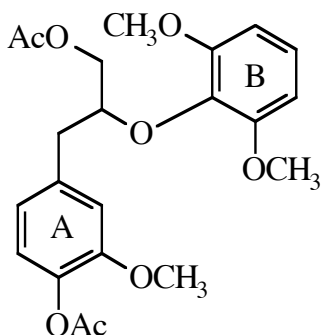
¹H (acetone)

Atom	H Shifts	Mult	J
α	3.03	dd	13.6,5.4
γ	3.50	m	
A OMe	3.82	s	
B OMe	3.83	s	
β	4.17	m	
B 2,6	6.69	d	
A 5,6	6.74	m	
A2	6.90	s	
B1	7.01	dd	8.8
Ar OH	7.39	s	

Notes:

T. Duch
TDI-143, 39mg
Assignments in acetone are based on
HMBC and HMQC expts.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	37.30	43	37.97	23	36.86	22
OMe	55.90	61	56.19	27	55.52	34
OMe	56.09	91	56.45	40	55.86	61
OMe	56.09	91	56.45	40	55.86	61
γ	62.21	37	62.78	20	61.69	22
β	84.48	45	85.29	24	83.46	31
B2	105.42	83	106.49	38	105.65	36
B6	105.42	83	106.49	38	105.65	36
A2	112.31	44	113.89	22	113.58	29
A5	114.28	45	115.52	22	115.11	31
A6	122.09	43	122.81	24	121.68	30
B1	123.95	46	124.51	24	123.41	31
A1	130.13	30	130.76	17	129.32	26
A3	135.66	21	137.09	13	135.65	22
A4	144.12	28	145.71	15	144.64	25
B4	146.44	27	148.05	15	147.15	25
B3	153.60	41	154.61	18	153.29	38
B5	153.60	41	154.61	18	153.29	38



Acetic acid 3-(4-acetoxy-3-methoxyphenyl)-2-[2,6-dimethoxyphenoxy] propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
α	3.06	t	11.5,6.5
B OMe	3.76	s	
OMe	3.79	s	
γ	4.11	d	4.8
β	4.51	m	
B 2,6	6.64	d	8.3
A6	6.86	dd	8.0,1.8
A5	6.95	d	8.2
B1	6.98	dd	8.2,8.0
A2	7.07	d	1.8

Notes:

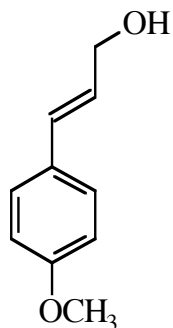
T. Duch
TDI-143 Ac'd, 32mg
Assignments in acetone are based on
HMBC and HMQC expts.

A1, B4, and A4 are too close to positively
identify.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.70	42	20.49	44	20.37	38
Ac Me	20.85	31	20.65	35	20.46	38
α	38.26	31	38.82	33	37.51	23
OMe	55.97	76	56.12	40	55.60	35
OMe	55.97	76	56.30	77	55.74	53
OMe	55.97	76	56.30	77	55.74	53
γ	65.35	31	65.72	33	64.78	22
β	80.49	35	80.86	33	79.44	25
B2	105.20	68	106.29	59	105.39	42
B6	105.20	68	106.29	59	105.39	42
A2	113.95	33	114.77	32	113.76	25
A6	121.64	39	122.34	33	121.30	23
A5	122.30	36	123.12	38	122.27	27
B1	123.92	34	124.53	36	123.74	26
B4	135.89	18	137.12	17	137.28	18
A1	137.13	28	137.89	22	136.71	23
A4	138.26	21	139.37	17	137.69	19
A3	150.69	23	151.85	20	150.35	21
B3	153.66	35	154.65	26	153.16	32
B5	153.66	35	154.65	26	153.16	32
Ac C=O	169.17	22	169.08	21	168.60	21
γ Ac C=O	170.92	22	169.08	18	170.16	21

Compound Number 219

¹³C



trans

p-Methoxy coumaryl alcohol
4-methoxy cinnamyl alcohol

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.76	s	
γ	4.20	bs	
β	6.24	dt	15.9, 5.4
α	6.53	d	15.9
3,5	6.86	d	8.7
2,6	7.33	d	8.7

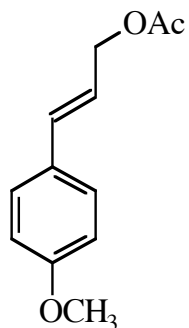
Notes:

S.Ralph 55mg
SRVIII-45

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.30	45	55.48	37	55.00	26
γ	63.76	42	63.36	33	61.62	33
3	113.99	78	114.73	67	113.96	62
5	113.99	78	114.73	67	113.96	62
2	127.69	82	128.24	67	127.27	66
6	127.69	82	128.24	67	127.27	66
β	126.43	44	128.61	33	128.20	43
α	130.82	32	129.76	34	128.27	32
1	129.57	14	130.78	9	129.51	15
4	159.32	12	160.05	8	158.57	13

Compound Number 220

¹³C



trans

p-Methoxy coumaryl alcohol acetate
4-methoxy cinnamyl alcohol acetate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
OMe	3.78	s	
γ	4.65	dd	6.4, 1.2
β	6.19	dt	15.7, 6.4
3,5	6.89	d	8.8
2,6	7.38	d	8.8

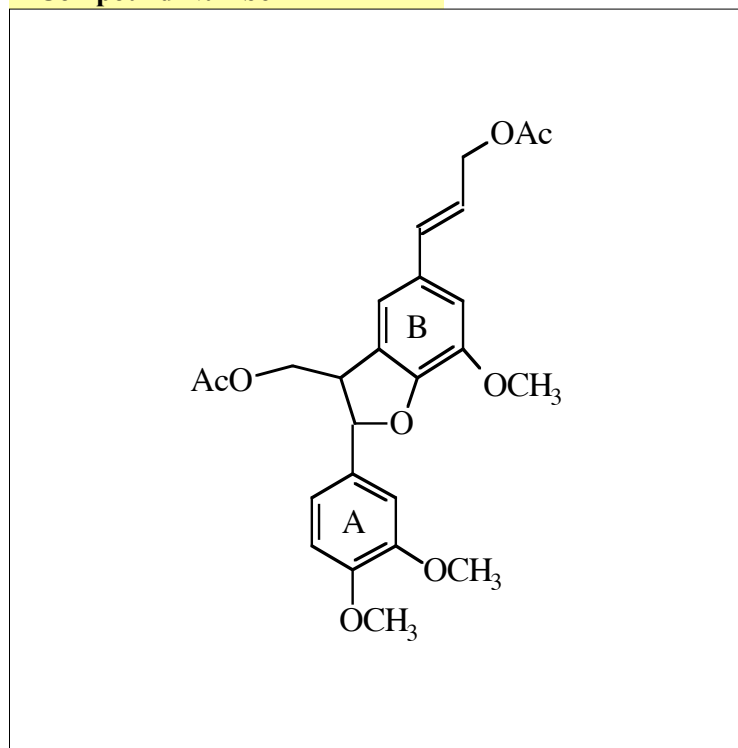
Notes:

S.Ralph
 30mg
 NL220.23 gHSQC
 NL220.24 gHMBC
 Acetone shifts confirmed

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.07	27	20.82	19	20.64	21
OMe	55.35	48	55.59	31	55.05	26
γ	65.39	46	65.52	32	64.48	26
3	114.13	86	114.91	55	114.02	50
5	114.13	86	114.91	55	114.02	50
β	121.00	40	122.21	33	121.17	25
2	127.94	85	128.69	65	127.74	53
6	127.94	85	128.69	65	127.74	53
1	130.17	11	130.80	7	129.86	7
α	134.10	41	134.32	28	133.00	24
4	159.73	13	160.71	5	159.13	10
Ac C=O	170.90	10	170.77	6	170.07	8

Compound Number 221

¹³C



V-c-CA

4-methoxy phenyl coumaran diacetate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.02	s	
OMe	3.79	s	
OMe	3.80	s	
OMe	3.88	s	
γ1	4.38	dd	11.1, 7.4
γ2	4.43	dd	11.1, 5.6
Bγ	4.66	dd	7.4, 0.9
Aα	5.54	d	7.0
Bβ	6.23	dt	15.8, 6.4
Bα	6.64	d	15.9

Notes:

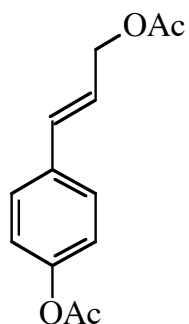
S.Ralph 51mg
SRVII-104

NL221.4 HMBC in acetone
NL221.5 HMQC in acetone

gamma's and A3 and A4 are very close
and may be switched

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	29	20.70	26	20.50	29
Ac Me	20.99	25	20.83	20	20.67	27
β	50.32	29	51.16	38	49.36	21
OMe	55.97	62	56.20	50	55.53	47
OMe	55.97	62	56.20	50	55.53	47
OMe	56.08	34	56.48	28	55.75	29
Bγ	65.19	31	65.52	29	64.51	27
γ	65.35	29	65.96	29	64.77	19
α	88.61	28	88.84	27	87.44	22
A2	109.39	30	110.95	26	109.96	23
B2	110.81	27	112.29	25	111.05	19
A5	111.21	30	112.77	26	111.76	24
B6	115.35	28	116.35	28	115.29	21
A6	118.78	31	119.35	28	118.47	25
Bβ	121.22	30	122.21	28	121.34	23
B5	127.76	13	129.18	13	128.06	20
B1	130.56	14	131.46	15	130.03	20
A1	132.94	18	134.53	14	132.88	20
Bα	134.35	29	134.75	28	133.55	22
B3	144.45	17	145.40	13	143.90	17
B4	148.35	11	149.40	8	147.67	12
A3	149.30	26	150.48	11	148.87	30
A4	149.30	26	150.55	10	148.87	30
Ac C=O	170.73	16	170.79	7	170.12	14
Ac C=O	170.73	10	170.94	12	170.26	20

Compound Number 222

¹³C*trans*

4-hydroxy cinnamyl alcohol diacetate

Coumaryl alcohol acetate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.98	31	20.78	27	20.63	30
4 Ac Me	21.12	47	20.96	38	20.86	40
γ	64.95	39	65.17	36	64.18	28
3	121.79	78	122.85	62	121.97	58
5	121.79	78	122.85	62	121.97	58
β	123.58	36	124.89	31	123.97	28
2	127.62	75	128.29	65	127.43	57
6	127.62	75	128.29	65	127.43	57
α	133.19	36	133.28	30	132.05	28
1	134.08	13	134.99	13	133.64	15
4	150.52	12	151.70	9	150.13	13
4 Ac C=O	169.32	14	169.55	10	169.03	13
γ Ac C=O	170.78	10	170.74	8	170.07	9

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.03	s	
4 Ac Me	2.24	s	
γ	4.69	dd	6.2, 1.3
β	6.32	dt	16.0, 6.2
α	6.69	d	16.0
3,5	7.08	d	8.6
2,6	7.47	d	8.6

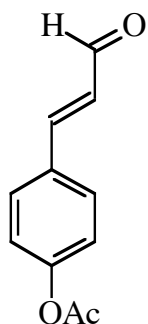
Notes:

S.Ralph 37mg

NL222.23 gHMQC

NL222.24 gHMBC

Compound Number 223



trans

4-acetoxy cinnamaldehyde
Coumaryl aldehyde acetate

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.11	70	20.98	25	20.65	45
3	122.43	125	123.40	64	122.33	100
5	122.43	125	123.40	64	122.33	100
β	128.73	86	129.60	27	128.41	47
2	129.70	125	130.60	62	129.81	98
6	129.70	125	130.60	62	129.81	98
1	131.75	27	132.91	10	131.59	20
α	151.44	72	152.21	25	151.73	44
4	152.90	25	154.01	9	152.41	18
Ac C=O	168.97	22	169.40	6	168.70	17
γ	193.44	65	193.95	26	193.97	49

¹H (acetone)

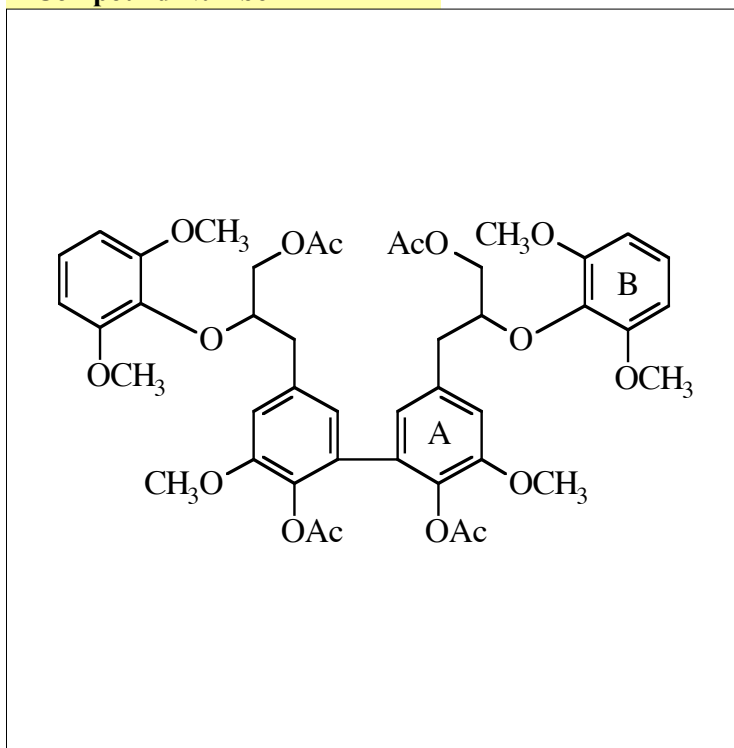
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
β	6.73	dd	16.0, 7.6
3,5	7.22	d	8.6
α	7.66	d	16.0
2,6	7.76	d	8.5
γ	9.70	d	7.6

Notes:

S.Ralph 27mg

NL223.4 gHMQC in acetone

NL223.5 gHMBC in acetone

S-b-G-5,5-G-b-S ($\alpha = \text{CH}_2$)¹H (acetone)

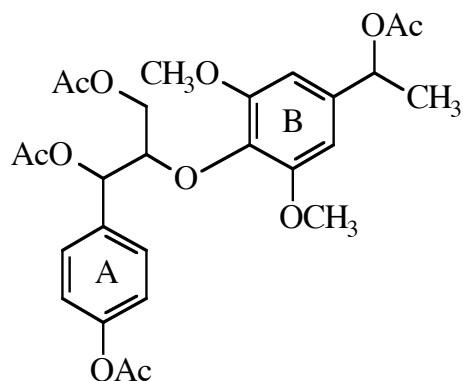
Atom	H Shifts	Mult	J
Ac Me	1.93	s	
Ac Me	1.99	s	
α	3.07	m	
OMe	3.74	s	
OMe	3.82	s	
γ	4.14	d	4.8
β	4.51	bt	4.9
B2,6	6.62	d	8.4
A6	6.76	s	
A2	7.09	d	1.4

Notes:

S.Ralph
 SRVII 109D 44mg
 2D HMBC in CDCL₃A4 and A1 identical chemical shift and B4 very close
 NL224.15 gHMBC
 NL224.4 gHMQC
 As compound has a plane of symmetry thru A5 only half the shifts are reported

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.34	30	20.32	18	19.88	34
Ac Me	20.80	37	20.68	20	20.35	59
α	38.29	24	38.90	15	37.58	22
OMe	56.00	91	56.33	71	55.71	120
OMe	56.00	91	56.33	71	55.71	120
OMe	56.00	91	56.33	71	55.84	40
γ	65.26	25	65.69	17	64.70	28
β	80.43	28	80.91	18	79.49	31
B2	105.31	68	106.27	40	105.42	81
B6	105.31	68	106.27	40	105.42	81
A2	113.43	24	114.11	14	113.29	20
A6	128.48	23	124.07	11	122.66	20
B1	123.92	32	124.57	14	123.70	36
A5	131.10	18	131.92	8	130.30	23
B4	136.00	15	137.04	17	135.36	31
A1	136.19	29	137.04	17	135.42	31
A4	136.19	29	137.04	17	135.84	29
A3	151.02	20	152.12	12	150.67	26
B3	153.17	42	154.64	22	153.17	69
B5	153.17	42	154.64	22	153.17	69
4 Ac C=O	168.68	8	168.80	6	167.98	19
γ Ac C=O	170.82	19	170.80	10	170.02	35

Compound Number 225



erythro

H-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
Bβ	1.47	d	6.6
Ac Me	1.84	s	
Ac Me	2.03	s	
Ac Me	2.12	s	
A4 Ac Me	2.25	s	
OMe	3.79	s	
γ1	4.15	dd	11.9, 4.2
γ2	4.38	dd	11.9, 5.9
β	4.69	m	
Bα	5.78	q	6.6
α	6.07	d	4.6
B2,6	6.68	s	
A3,5	7.11	d	8.5
A2,6	7.45	d	8.5

Notes:

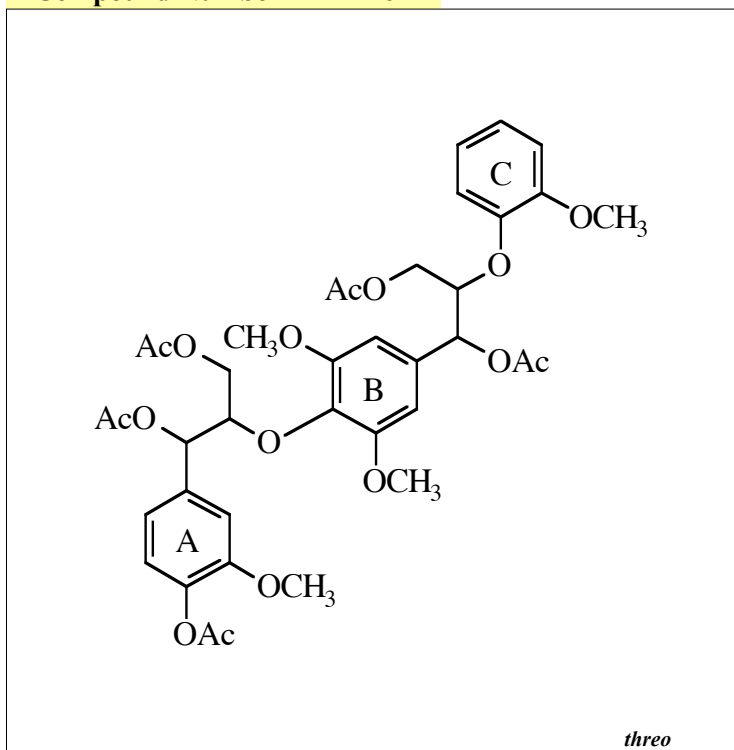
S.Ralph
 SRVII-139E3 18mg
 gHMQC and gHMBC in acetone

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.78	39	20.55	18	20.22	27
Ac Me	20.12	40	20.95	31	20.60	28
Ac Me	21.19	47	20.95	31	20.74	32
Ac Me	21.44	36	21.16	18	20.95	28
Bβ	22.26	34	22.60	21	21.99	25
OMe	56.08	78	56.38	44	55.75	54
OMe	56.08	78	56.38	44	55.75	54
γ	62.66	26	63.19	18	61.94	15
Bα	72.38	36	72.68	17	71.59	22
α	73.94	29	74.90	15	73.49	15
β	80.88	20	81.26	13	79.79	16
B2	103.29	67	103.98	38	102.85	39
B6	103.29	67	103.98	38	102.85	39
A3	121.36	57	122.33	37	121.56	45
A5	121.36	57	122.33	37	121.56	45
A2	128.06	42	128.89	30	128.72	37
A6	128.06	42	128.89	30	128.72	37
A1	134.69	14	135.64	7	134.26	10
B4	134.96	19	135.84	17	135.05	15
B1	137.91	21	139.17	11	137.40	15
A4	150.37	19	151.53	8	149.96	14
B3	153.22	40	154.08	17	152.52	29
B5	153.22	40	154.08	17	152.52	29
A4 Ac C=O	169.36	17	169.61	7	169.08	19
Aα Ac C=O	169.62	16	169.93	9	169.08	19
Bα Ac C=O	170.29	17	170.21	6	169.55	18
Aγ Ac C=O	170.29	17	170.66	10	169.90	19

Compound Number 226

¹³C



G-bt-S-bt-G

threo

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.84		
γ Ac Me	1.98		
α Ac Me	2.00		
α Ac Me	2.10		
A4 Ac Me	2.22		
OMe	3.80		
γ	4.03	m	
γ1,γ2	4.22	m	
γ	4.41	dd	11.8, 6.05
Aβ	4.71	m	
Bβ	4.79	m	
A,Bα	6.07	bd	6.31
B2,6	6.79	d	2.8

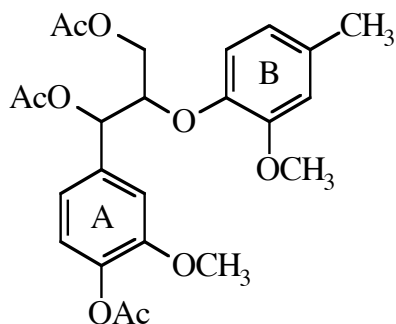
Notes:

S.Ralph
 SRVII-140C2
 30mg
 gHSQC and gHMBC in acetone
 NL226.4
 NL226.5

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.69	44	20.48	99	20.28	55
γ Ac Me	20.75	50	20.58	96	20.28	55
α Ac Me	20.79	43	20.67	96	22.41	41
α Ac Me	21.09	70	20.92	103	22.41	50
4 Ac Me	21.09	70	20.96	116	20.65	50
OMe	55.80	44	56.19	115	55.48	45
OMe	55.90	44	56.24	119	55.62	43
OMe	56.04	71	56.43	127	55.78	66
OMe	56.04	71	56.43	127	55.78	66
Aγ	62.74	27	63.36	63	62.19	22
Bγ	63.16	28	63.72	71	62.56	21
Aα	73.99	29	75.07	69	73.74	25
Bα	74.87	28	75.71	54	74.60	19
Bβ	80.36	18	80.76	69	79.15	24
Aβ	80.78	21	81.38	70	79.94	23
B2	104.30	51	105.27	125	104.13	43
B6	104.30	51	105.27	125	104.13	43
A2	111.60	16	112.26	47	110.95	21
C2	112.49	33	113.68	75	112.61	34
C5	118.50	37	118.95	60	117.23	23
A6	119.24	19	120.01	60	118.78	23
C6	120.98	31	121.66	81	120.60	34
A5	122.37	25	123.26	78	122.46	43
C1	123.24	30	123.61	89	122.46	43
B1	132.59	12	133.70	37	132.42	17
B4	135.35	10	136.40	19	134.48	16
A1	136.03	16	137.04	41	135.59	18
A4	139.49	16	140.53	33	138.85	21
C4	148.00	16	149.14	34	147.58	21
C3	150.77	25	151.74	37	150.03	22
A3	150.77	25	152.01	35	150.53	21
B3	153.14	27	153.96	68	152.43	37
B5	153.14	27	153.96	68	152.43	37
A4 Ac C=O	168.84	17	168.95	37	168.40	20
α Ac C=O	169.49	18	169.92	49	169.29	26
α Ac C=O	169.76	17	169.99	49	169.29	36
γ Ac C=O	170.51	20	170.61	60	169.92	39
γ Ac C=O	170.82	19	170.61	60	169.92	39

Compound Number 227

¹³C



erythro

G-b-G

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	66	20.47	61	20.31	30
Ac Me	20.74	48	20.62	51	20.40	30
Ac Me	20.99	48	20.89	45	20.62	42
Bβ	21.09	58	21.07	45	20.68	20
OMe	55.70	74	56.14	62	55.47	23
OMe	55.89	57	56.27	55	55.69	20
γ	62.48	43	62.95	45	61.80	12
α	73.70	45	74.58	44	73.10	17
β	80.57	59	80.63	45	78.71	19
A2	111.84	46	112.63	67	111.50	21
B2	113.49	46	114.61	50	113.60	15
B5	119.54	63	120.07	44	118.21	15
A6	119.69	49	120.30	51	119.17	17
B6	121.21	53	121.85	54	120.77	23
A5	122.55	46	123.36	45	122.50	14
B1	133.53	27	133.79	20	132.26	17
A1	135.62	28	136.82	27	135.45	17
A4	139.69	20	140.73	14	138.98	12
B4	144.76	22	145.94	15	144.24	13
B3	150.86	24	151.83	15	150.12	16
A3	150.95	25	152.11	17	150.53	15
A4 Ac C=O	168.79	23	168.92	18	168.41	14
α Ac C=O	169.50	24	169.91	17	169.26	14
γAc C=O	170.78	22	170.76	15	170.03	12

¹H (acetone)

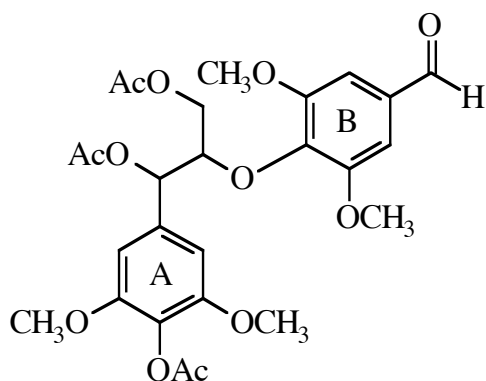
Atom	H Shifts	Mult	J
Ac Me	1.94	s	
Ac Me	2.08	s	
Bβ	2.22	s	
Ac Me	2.25	s	
OMe	3.79	s	
OMe	3.83	s	
γ1	4.20	dd	11.9, 4.2
γ2	4.37	dd	11.9, 5.8
β	4.74	m	
α	6.06	d	5.0
B6	6.65	bd	8.1
B2	6.82	bs	
B5	6.85	d	8.2
A5,6	7.04	m	
A2	7.23	s	
γ1 isomer	3.99		
γ2 isomer	4.25		
α isomer	6.10		

Notes:

S.Ralph
 SRVII-141-1 31mg
 threo isomer shifts

	C	A
γ	63.04	63.58
α	74.54	75.38
β	80.59	80.98

NL227.4 gHSQC in acetone
 NL227.5 gHMBC in acetone



S-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.87	s	
α Ac Me	2.14	s	
A4 Ac Me	2.22	s	
OMe	3.82	s	
OMe	3.95	s	
γ 1	4.22	dd	11.9, 3.8
γ 2	4.47	dd	11.9, 6.2
β	4.95	dt	6.6, 4.2
α	6.09	d	4.2
A 2,6	6.81	s	
B 2,6	7.25	s	
Bα	9.90	s	

Notes:

L.Landucci

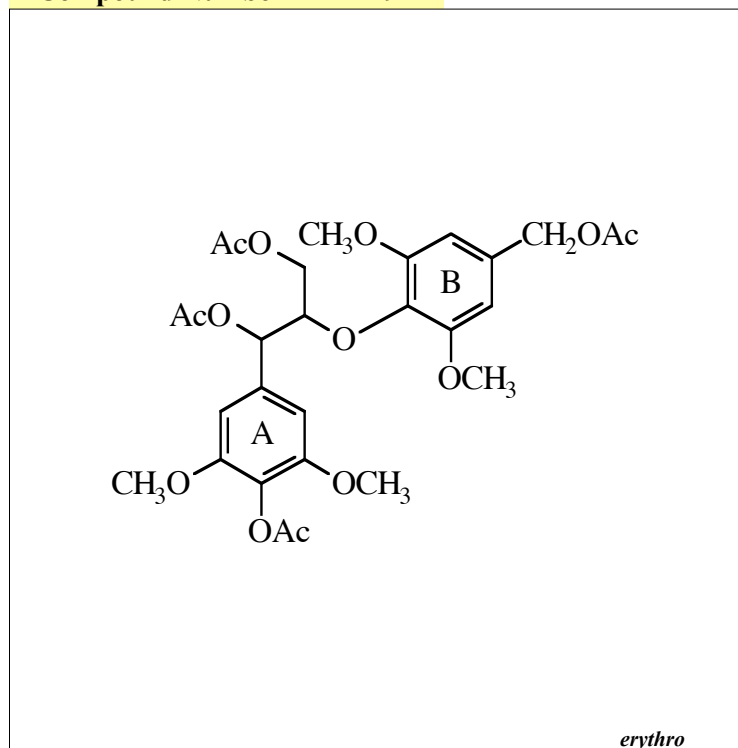
LLL XXII-134C

35mg

NL228.4 gHSQC in acetone

NL228.5 gHMBC in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.44	21	20.24	147	20.09	45
α AcMe	20.70	15	20.58	108	20.31	34
γ Ac Me	21.04	13	20.89	98	20.63	37
A OMe	56.18	49	56.50	270	55.93	79
A OMe	56.18	49	56.50	270	55.93	79
B OMe	56.18	49	56.58	279	55.99	87
B OMe	56.18	49	56.58	279	55.99	87
γ	62.90	11	63.40	96	62.26	18
α	74.17	12	75.17	93	73.81	22
β	80.87	12	81.67	98	80.21	20
A2	104.07	22	104.61	181	103.39	37
A6	104.07	22	104.61	181	103.39	37
B2	106.50	24	107.18	183	106.37	42
B6	106.50	24	107.18	183	106.37	42
A4	128.61	3	129.41	21	127.60	10
B1	132.08	8	133.26	54	131.82	18
A1	135.04	9	136.27	53	134.94	20
B4	140.89	4	141.81	28	140.06	16
A3	151.95	15	153.06	86	151.54	43
A5	151.95	15	153.06	86	151.54	43
B3	153.46	14	154.43	86	152.95	46
B5	153.46	14	154.43	86	152.95	46
A4 Ac C=O	168.60	7	168.52	48	168.03	21
α Ac C=O	169.46	9	169.94	50	169.35	25
γ Ac C=O	170.76	6	170.66	46	169.96	23
Bα	191.01	12	191.69	98	191.82	22



S-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.86	s	
Bα Ac Me	2.05	s	
a Ac Me	2.14	s	
A4 Ac Me	2.22	s	
OMe	3.81	s	
OMe	3.82	s	
γ1	4.18	dd	11.9, 4.2
γ2	4.43	dd	11.9, 6.0
β	4.74	dt	6.2, 4.2
Bα	5.02	s	
α	6.08	d	4.3
B 2,6	6.71	s	
A 2,6	6.78	s	

Notes:

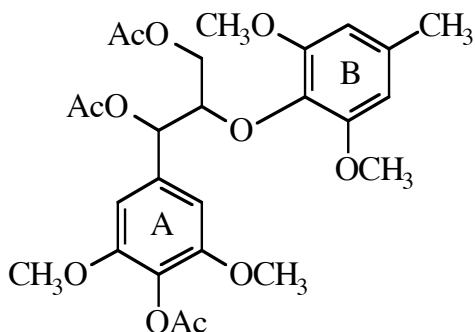
S.Ralph
SRIX-17D
18mg

NL229.4 gHSQC in acetone
NL229.5 gHMBC in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.48	137	20.35	42	20.06	54
γ Ac Me	20.77	88	20.71	29	20.29	40
Bα Ac Me	21.06	92	20.93	20	20.64	52
α Ac Me	21.10	106	21.04	30	20.66	51
OMe	56.05	178	56.50	58	55.74	70
OMe	56.05	178	56.50	58	55.74	70
OMe	56.17	239	56.58	79	55.88	88
OMe	56.17	239	56.58	79	55.88	88
γ	62.73	71	63.42	23	62.09	18
Bα	66.45	67	66.71	22	65.58	27
α	74.19	75	75.41	23	73.88	24
β	80.79	65	81.55	25	79.96	22
A2	103.92	127	104.61	43	103.18	38
A6	103.92	127	104.61	43	103.18	38
B2	105.47	132	106.29	42	105.20	40
B6	105.47	132	106.29	42	105.20	40
A4	128.44	21	129.41	4	127.45	12
B1	132.02	49	133.40	11	131.90	19
B4	135.09	29	136.29	8	134.12	17
A1	135.59	48	136.76	13	135.26	18
A3	151.90	89	153.12	25	151.47	52
A5	151.90	89	153.12	25	151.47	52
B3	153.19	77	154.13	20	152.47	38
B5	153.19	77	154.13	20	152.47	38
A4 Ac C=O	168.64	44	168.64	13	168.10	26
α Ac C=O	169.54	43	170.09	13	169.35	28
γ Ac C=O	170.84	27	170.81	12	169.97	27
Bα Ac C=O	170.92	34	170.97	6	170.20	16

Compound Number 230

¹³C



erythro

S-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.87	s	
α Ac Me	2.14	s	
A4 Ac Me	2.22	s	
Bα	2.27	s	
OMe	3.78	s	
OMe	3.81	s	
γ1	4.18	dd	11.9, 4.4
γ2	4.40	dd	11.9, 6.2
β	4.66	dt	5.8, 4.4
α	6.06	d	4.4
B 2,6	6.49	s	
A 2,6	6.76	s	

Notes:

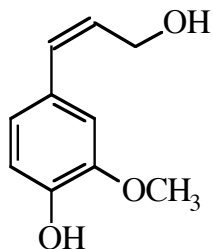
S.Ralph
 SRIX-17E 40mg
 threo isomer shifts from SRIX-104D

	C	A
γ	63.53	64.13
α	75.60	76.58
β	80.87	81.65

NL230.4 gHSQC in acetone
 NL230.5 gHMBC in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.43	29	20.24	41	20.04	79
γ Ac Me	20.76	23	20.62	28	20.30	63
α Ac Me	21.06	21	20.93	27	20.61	61
Bα	21.82	21	21.76	28	21.32	56
OMe	55.90	45	56.25	63	55.57	117
OMe	55.91	45	56.25	63	55.57	117
OMe	56.12	49	56.46	82	55.84	126
OMe	56.12	49	56.46	82	55.84	126
γ	62.69	18	63.22	29	62.00	32
α	74.20	17	75.33	29	73.88	37
β	80.80	19	81.45	31	79.94	38
A2	103.81	36	104.43	54	103.08	70
A6	103.81	36	104.43	54	103.08	70
B2	105.95	34	106.85	60	105.77	82
B6	105.95	34	106.85	60	105.77	82
A4	128.33	5	129.25	6	127.39	20
B4	132.79	6	134.15	9	132.12	29
B1	134.13	13	134.52	16	133.35	37
A1	135.77	13	136.80	17	135.39	38
A3	151.86	21	153.01	27	151.45	73
A5	151.86	21	153.01	27	151.45	73
B3	152.87	22	153.84	29	152.27	71
B5	152.87	22	153.84	29	152.27	71
A4 Ac C=O	168.62	10	168.54	14	167.99	35
α Ac C=O	169.54	11	169.98	15	169.33	42
γ Ac C=O	170.94	9	170.72	13	169.95	41

Compound Number 231



cis

cis-coniferyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.97	23	56.13	91	55.47	96
γ	59.75	21	59.73	77	58.16	86
2	111.53	20	113.19	82	112.84	81
5	114.33	21	115.55	82	115.15	79
6	122.25	22	122.78	86	121.56	83
1	129.04	6	129.73	26	128.06	46
α	129.51	20	130.19	82	128.62	82
β	131.10	20	131.44	82	130.95	75
4	145.17	7	146.69	29	145.74	50
3	146.38	5	147.93	22	147.13	39

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.83	s	
γ	4.41	d	5.8
β	5.73	dt	11.9, 6.2
α	6.39	d	11.7
6	6.72	dd	8.2, 2.0
5	6.82	d	8.2
2	6.87	d	2.0
CDCl ₃	CDCl ₃		
OMe	3.89	s	
γ	4.44	dd	6.4, 1.4
β	5.79	dt	11.5, 6.6
α	6.49	d	11.9
6	6.74	dd	8.2, 1.8
5	6.78	d	1.8
2	6.89	d	8.2

Notes:

J.Ralph 10mg

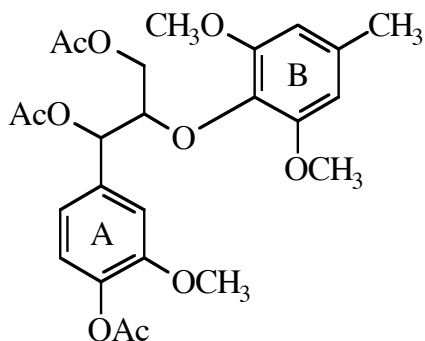
NL231.4 gHSQC in acetone

NL231.5 gHMBC in acetone

NL231.24 gHSQC in DMSO

Compound Number 232

¹³C



erythro

G-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.85	s	
Ac Me	2.12	s	
Ac Me	2.22	s	
B α	2.27	s	
B OMe	3.76	s	
A OMe	3.82	s	
γ 1	4.16	dd	11.8, 4.4
γ 2	4.43	dd	11.7, 5.8
β	4.67	dt	5.8, 4.2
α	6.10	d	4.2
B 2,6	6.51	s	
A6	6.99	dd	8.3, 1.8
A5	7.06	d	8.2
A2	7.18	d	1.8

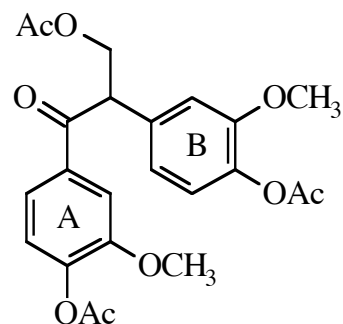
Notes:

S.Ralph
 SRIX-43G
 55 mg
 HSQC and HMBC in d6-DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	211	20.46	138	20.34	166
Ac Me	20.78	188	20.59	116	20.34	166
Ac Me	21.09	174	20.92	119	20.67	97
B α	21.87	170	21.77	111	21.40	85
OMe	55.94	494	56.25	329	55.66	200
OMe	55.94	494	56.25	329	55.66	200
OMe	55.94	494	56.25	329	55.70	135
γ	62.64	157	63.10	122	61.98	59
α	74.02	160	75.04	125	73.72	66
β	80.92	173	81.40	126	80.03	68
B2	106.02	314	106.87	224	105.90	140
B6	106.02	314	106.87	224	105.90	140
A2	111.46	150	112.07	101	110.83	64
A6	119.10	157	119.81	115	118.66	65
A5	122.43	179	123.29	122	122.61	71
B4	132.81	59	134.03	33	132.13	47
B1	134.16	112	134.56	65	133.51	62
A1	136.35	118	137.26	75	135.87	63
A4	139.44	72	140.56	40	138.86	50
A3	150.84	88	152.02	53	150.63	60
B3	152.96	183	153.86	104	152.42	128
B5	152.96	183	153.86	104	152.42	128
A4 Ac C=O	168.91	75	168.94	50	168.51	56
α Ac C=O	169.56	85	169.93	56	169.39	57
γ Ac C=O	170.92	79	170.67	50	170.03	64

Compound Number 233

¹³C



G-b1-G

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.93	s	
Ac Me	2.20	s	
Ac Me	2.24	s	
OMe	3.81	s	
OMe	3.96	s	
γ1	4.33	dd	10.5, 5.8
γ2	4.76	dd	10.5, 8.5
β	5.19	dd	8.5, 5.7
B6	6.98	dd	8.0, 2.0
B5	7.03	d	8.0
A5	7.16	d	8.2
B2	7.22	d	1.8
A6	7.73	d	6.2, 1.8
A2	7.77	d	1.8

Notes:

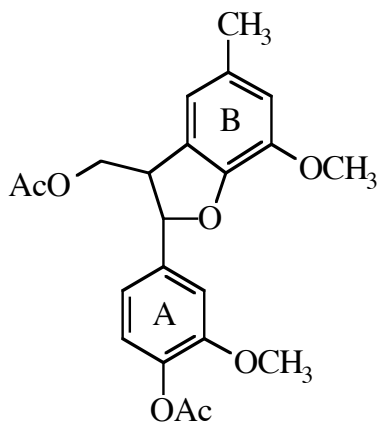
S.Lempke
I-31

HSQC and HMBC in d6-acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	47	20.43	46	20.32	24
Ac Me	20.67	47	20.43	46	20.32	24
Ac Me	20.92	21	20.66	20	20.55	9
β	52.08	21	52.37	21	50.52	8
OMe	56.03	49	56.29	27	55.80	11
OMe	56.03	49	56.40	28	55.95	13
γ	65.58	19	65.94	21	64.74	6
A2	111.99	21	113.14	23	112.35	8
B2	112.32	22	113.66	23	112.95	8
A6	120.95	124	121.30	24	120.26	8
B6	122.22	23	122.88	23	122.14	8
A5	122.94	25	123.95	24	123.28	16
B5	123.54	22	124.21	24	123.28	16
B1	133.94	15	135.54	14	134.26	7
A1	135.02	13	135.77	11	134.42	8
B4	139.64	10	140.53	8	138.79	6
A4	144.13	11	145.10	8	143.59	6
B3	151.54	12	152.52	11	151.11	13
A3	151.72	11	152.70	10	151.11	13
A4 Ac C=O	168.46	11	168.58	9	138.10	7
B4 Ac C=O	168.83	10	168.87	10	168.41	7
γ Ac C=O	170.89	11	170.75	10	170.10	6
α	195.95	13	196.63	11	195.91	7

Compound Number 234

¹³C



G-c-G

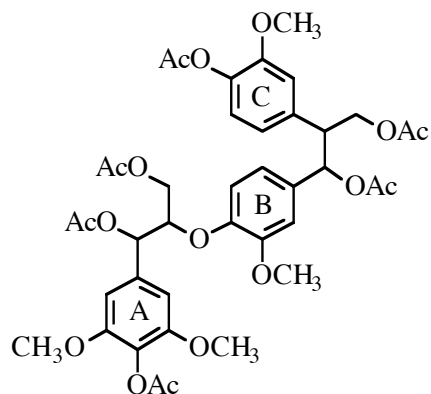
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.22	s	
B α	2.26	s	
β	3.74	m	
A OMe	3.80	s	
B OMe	3.83	s	
γ 1	4.29	dd	11.1, 8.0
γ 2	4.42	dd	10.9, 5.6
α	5.55	d	6.6
B6	6.70	s	
B2	6.73	s	
A6	6.99	dd	8.2, 1.8
A5	7.05	d	8.2
A2	7.18	d	1.8

Notes:

S.Ralph
 SRIX-46E
 31mg
 HSQC and HMBC in d₆-acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	21.51	39	20.47	41	20.33	117
Ac Me	21.67	34	20.70	35	20.54	121
B α	22.13	31	21.18	32	20.80	111
β	51.63	37	51.65	42	49.82	89
OMe	56.77	45	56.23	41	55.66	118
OMe	56.77	46	56.41	40	55.73	129
γ	66.49	38	66.19	44	65.03	75
α	88.49	38	87.85	43	86.41	80
A2	110.89	34	111.02	40	110.39	85
B2	114.11	29	114.79	32	113.50	57
B6	117.76	38	117.92	40	116.90	84
A6	119.09	38	118.61	44	117.81	97
A5	123.68	39	123.72	43	122.87	89
B5	127.71	20	128.29	17	127.22	72
B1	132.29	21	131.92	20	130.68	78
A4	140.42	11	140.61	10	138.98	52
A1	140.73	22	141.40	22	139.88	77
B3	144.89	16	145.00	13	143.48	71
B4	146.62	9	146.96	10	145.26	44
A3	152.09	16	152.36	13	150.83	66
A4 Ac C=O	169.81	13	168.97	13	168.47	51
γ Ac C=O	171.66	15	170.96	14	170.29	66



S-b-G-b1-G

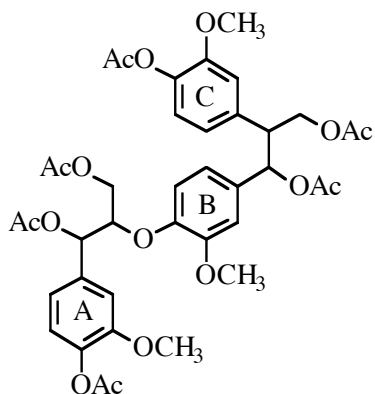
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.89	s	
Ac Me	1.90	s	
Ac Me	2.04	s	
Ac Me	2.17	s	
Ac Me	2.18	s	
Bβ	3.46	m	
OMe	3.69	s	
OMe	3.72	s	
OMe	3.75	s	
OMe	3.76	s	
Bγ1	4.22	m	
Aγ1	4.31	m	
Bγ2	4.36	m	
Aγ2	4.38	m	
Aβ	4.82	m	
Aα	5.99	d	5.8
Bα	6.08	d	7.2
A2,6	6.80	s	
C2	6.97	s	

Notes:

S. Ralph
 SRIX-44D6
 70mg
 HSQC and HMBC in d6-acetone
 Bβ,Aβ,A2,A6,B5,B1,A1,and B4 appear as two very close signals
 The shift reported is the average.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γAc Me	20.19	26	20.25	39	19.99	106
γAc Me	20.39	24	20.49	37	20.24	118
α Ac Me	20.52	24	20.63	37	20.30	108
α Ac Me	20.56	25	20.68	37	20.38	99
4 Ac Me	20.73	27	20.87	51	20.50	133
4 Ac Me	20.76	27	20.87	51	20.50	133
Bβ	49.86	9	50.93	17	49.21	40
OMe	55.59	24	56.22	68	55.54	97
OMe	55.67	25	56.22	68	55.59	125
OMe	55.97	49	56.51	71	55.87	179
OMe	55.97	49	56.51	71	55.87	179
Aγ	62.37	10	63.07	20	61.95	41
Bγ	64.04	14	65.02	19	64.07	36
Aα	73.74	15	74.77	22	73.39	46
Bα	74.82	13	75.66	22	74.62	42
Aβ	79.64	8	79.97	19	78.10	25
A2	104.20	19	105.11	37	104.04	93
A6	104.20	19	105.11	37	104.04	93
B2	111.11	11	112.37	18	111.22	33
C2	112.95	16	114.30	22	113.27	57
B5	118.27	10	118.61	11	116.86	19
B6	119.26	12	120.13	19	119.06	40
C6	120.99	16	122.06	20	120.84	56
C5	122.25	20	123.12	25	122.10	59
A4	128.50	6	129.52	8	127.83	40
B1	133.19	10	134.59	9	133.00	25
A1	134.81	9	136.05	12	134.76	33
C1	136.11	10	137.79	13	136.85	47
C4	138.85	10	139.98	13	138.27	48
B4	146.81	5	147.93	7	146.40	37
B3	150.44	9	151.43	9	149.76	33
C3	150.59	12	151.80	17	150.26	65
A3	151.84	24	153.01	31	151.47	120
A5	151.84	24	153.01	31	151.47	120
A4 Ac C=O	168.23	8	168.49	16	167.81	59
C4 Ac C=O	168.61	10	168.98	15	168.27	53
α Ac C=O	169.27	12	169.93	29	169.07	57
α Ac C=O	169.50	8	169.93	29	169.12	68
γ Ac C=O	170.42	11	170.74	19	169.89	111
γ Ac C=O	170.50	12	170.77	21	169.89	111



G-b-G-b1-G

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.95	s	
α Ac Me	2.07	s	
4 Ac Me	2.15	s	
Bβ	3.50	m	
OMe	3.74	s	
OMe	3.78	s	
OMe	3.83	s	
By 1	4.21	m	
Aγ 1	4.27	m	
By 2	4.33	m	
Aγ 2	4.37	m	
Aβ	4.85	m	
Aα	6.06	d	5.0
Bα	6.13	d	7.0
B2	6.81	s	
B,C 6	6.82	m	
B,C 5	6.96	m	
C2	7.02	d	
A 5,6	7.05	m	
A2	7.25, 7.26		2 signals

Notes:

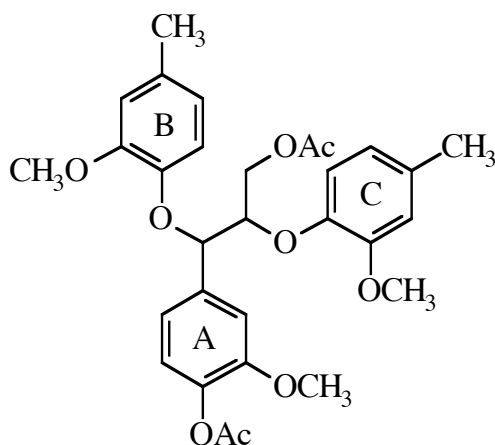
SRIX-47C2

21 mg

Bβ,Aβ,A2,B5,B1,B4 appear as two very close signals, the shift reported is the average.

HSQC and HMBC in d6-acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.69	44	20.49	90	20.35	99
γ Ac Me	20.69	44	20.49	90	20.35	99
α Ac Me	20.78	24	20.62	53	20.35	99
α Ac Me	20.85	25	20.69	55	20.50	53
4 Ac Me	21.03	33	20.87	84	20.61	88
4 Ac Me	21.03	33	20.87	84	20.61	88
Bβ	50.07	6	50.96	24	49.13	22
OMe	55.83	21	56.25	96	55.63	45
OMe	55.94	33	56.25	96	55.68	67
OMe	55.97	35	56.30	77	55.72	62
Aγ	62.52	12	63.04	29	61.94	20
Bγ	64.29	14	65.05	32	64.17	20
Aα	73.72	15	74.55	30	73.14	22
Bα	75.07	12	75.70	26	74.68	21
Aβ	80.01	7	80.16	34	78.15	17
B2	111.36	14	112.43	31	111.27	19
A2	111.98	8	112.78	22	111.68	20
C2	113.12	15	114.34	37	113.32	28
B5	118.74	11	118.93	17	116.97	11
B6	119.48	15	120.14	35	119.12	24
A6	119.73	11	120.46	34	119.40	26
C6	121.22	15	122.10	28	120.89	26
C5	122.50	19	123.13	41	122.19	28
A5	122.62	18	123.36	37	122.51	27
B1	133.41	7	134.76	13	133.13	15
A1	135.34	4	136.60	16	135.26	20
C1	136.29	5	137.84	16	137.02	25
C4	139.06	9	140.02	17	138.21	27
A4	139.82	9	140.80	15	139.10	25
B4	147.00	5	147.92	9	146.35	18
B3	150.75	11	151.55	15	149.81	21
C3	150.80	14	151.83	22	150.26	31
A3	151.02	10	152.11	17	150.57	24
4 Ac C=O	168.84	10	168.92	21	168.46	39
4 Ac C=O	168.90	12	168.98	24	168.46	39
α Ac C=O	169.55	10	169.93	29	169.23	33
α Ac C=O	169.78	10	169.93	29	169.28	32
γ Ac C=O	170.74	11	170.75	31	170.06	55
γ Ac C=O	170.80	11	170.75	31	170.06	55



G-a-G-b-G

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	1.90	s	
Ac Me	2.20	s	
B or C α	2.20	s	
B or C α	2.24	s	
OMe	3.75	s	
OMe	3.79	s	
OMe	3.83	s	
γ1	4.43	dd	11.7, 3.8
γ2	4.54	dd	11.7, 5.8
β	4.74	m	
α	5.55	d	5.4
C6	6.53	dd	8.2, 1.6
B6	6.61	dd	8.0, 1.4
C5	6.76	d	
B,C 2	6.78	s	
B5	6.83	d	8.0
A5	6.98	d	8.0
A6	7.05	dd	8.0, 1.8
A2	7.33	d	1.8

Notes:

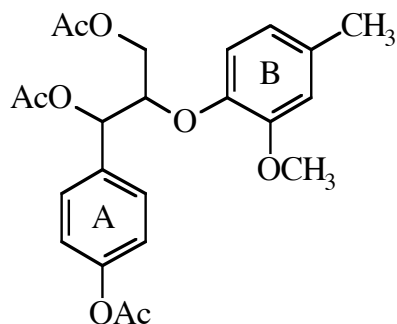
SRIX-46DB

33mg

HSQC and HMBC in d₆-acetone

Shifts for B and C α', 2's and 6's were too close to assign with complete confidence

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.69	24	20.46	29	20.34	129
Ac Me	20.82	24	20.65	27	20.44	134
Cα	21.05	23	20.96	28	20.56	136
Bα	21.12	23	21.05	28	20.61	136
OMe	55.71	25	56.11	33	55.48	131
OMe	55.96	49	56.19	36	55.63	193
OMe	55.96	49	56.28	32	55.63	193
γ	63.56	21	65.62	30	62.46	86
α	80.41	21	81.09	24	79.08	93
β	82.44	21	82.14	32	80.19	98
A2	111.53	21	112.70	21	111.79	86
B2	113.37	28	114.51	34	113.58	190
C2	113.41	27	114.54	29	113.58	190
C5	116.77	21	117.73	24	116.22	109
B5	119.45	24	119.80	31	117.84	118
A6	119.72	23	120.54	29	119.51	88
B6	121.01	24	121.64	30	120.67	117
C6	121.21	25	121.80	30	120.77	125
A5	122.36	22	123.13	30	122.30	87
C1	131.97	15	132.54	14	131.23	93
B1	133.11	15	133.32	15	131.83	89
A1	138.62	16	138.11	17	136.70	93
A4	139.42	10	140.48	9	138.81	79
C4	145.22	12	146.01	10	144.25	89
B4	145.32	12	146.37	11	144.77	88
C3	149.95	12	151.12	11	149.52	85
B3	150.79	12	151.69	11	150.00	86
A3	151.02	13	152.03	14	150.45	89
A4 Ac C=O	168.85	11	168.89	10	168.39	65
γ Ac C=O	170.91	12	170.81	12	170.13	70



H-b-G

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.92	s	
α Ac Me	2.07	s	
A4 Ac Me	2.24	s	
Bα	2.25	s	
OMe	3.77	s	
γ1	4.17	dd	11.9, 4.4
γ2	4.37	dd	11.9, 5.6
β	4.69	m	
α	6.06	d	5.0
B6	6.64	m	
B 2,5	6.85	m	
A 3,5	7.12	m	
A 2,6	7.50	m	

Notes:

SRIX-51D-C

13mg

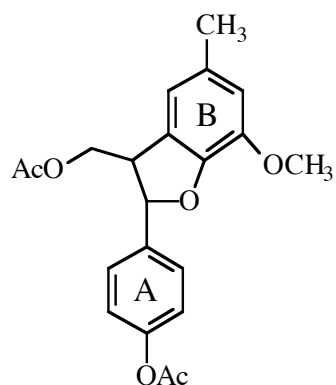
HMBC,HSQC,selective INEPT in acetone

minor isomer shifts

C	A	D	¹ H in acetone
γ 63.10	63.56	62.38	γ1 3.96, dd J = 11.8,5.6
α 74.53	75.24	74.03	γ2 4.24, dd J = 11.8,4.2
β 80.73	81.06	79.39	α 6.12,d J = 6.8

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.82	21	20.59	46	20.34	66
α Ac Me	21.06	21	20.88	45	20.58	94
A4 Ac Me	21.18	47	20.95	88	20.58	94
Bα	21.18	47	21.07	48	20.73	78
OMe	55.79	28	56.13	57	55.46	58
γ	62.48	18	62.84	45	61.67	32
α	73.67	19	74.43	46	72.93	37
β	80.80	21	80.84	46	78.98	37
B2	113.60	20	114.65	47	113.64	42
B5	120.09	19	120.44	46	118.60	42
B6	121.27	25	121.85	60	120.77	51
A3	121.53	41	122.41	96	121.56	83
A5	121.53	41	122.41	96	121.56	83
A2	128.41	39	129.25	86	128.13	77
A6	128.41	39	129.25	86	128.13	77
B1	133.72	10	133.96	20	132.43	32
A1	134.44	12	135.53	23	134.05	34
B4	144.75	8	145.86	14	144.14	30
A4	150.59	9	151.71	20	150.11	28
B3	151.03	8	151.95	17	150.23	35
A4 Ac C=O	169.29	10	169.57	20	169.05	32
α Ac C=O	169.60	10	169.90	17	169.21	31
γ Ac C=O	170.87	9	170.73	16	169.97	30

Compound Number 239



H-c-G

¹³C

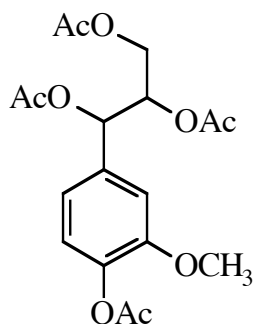
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.89	25	20.68	53	20.48	26
A4 Ac Me	21.21	36	20.95	77	20.73	56
Bα	21.35	33	21.18	49	20.73	56
β	50.94	21	51.78	54	49.85	19
OMe	56.11	30	56.38	43	55.56	19
γ	65.83	22	66.29	57	65.02	20
α	87.46	21	87.57	53	85.95	20
B2	113.35	23	114.79	52	113.40	18
B6	117.04	23	118.02	51	116.88	21
A3	121.81	53	122.82	112	121.90	46
A5	121.81	53	122.82	112	121.90	46
A2	127.10	45	127.64	107	126.83	47
A6	127.10	45	127.64	107	126.83	47
B5	128.30	9	128.12	26	127.67	8
B1	131.59	12	131.95	21	130.59	14
A1	138.76	10	140.15	22	138.55	16
B3	144.09	7	145.03	14	143.38	11
B4	145.86	5	146.96	11	145.14	7
A4	150.54	9	151.66	16	150.07	11
A4 Ac C=O	169.44	10	169.62	19	169.08	17
γ Ac C=O	170.88	9	170.94	18	170.21	12

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.00	s	
A4 Ac Me	2.24	s	
Bα	2.26	s	
β	3.73	m	
OMe	3.83	s	
γ1	4.27	dd	10.9, 8.0
γ2	4.41	dd	10.9, 5.6
α	5.58	d	6.4
B2	6.70	bs	
B6	6.73	bs	
A3,5	7.11	d	8.5
A2,6	7.44	d	8.5

Notes:

SRIX-53E 2mg
HSQC and HMBC in acetone



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.67	167	20.44	216	20.36	57
Ac Me	20.67	167	20.52	182	20.41	54
Ac Me	20.80	126	20.66	173	20.46	47
Ac Me	20.96	111	20.79	172	20.66	41
OMe	56.02	134	56.34	192	55.84	41
γ	62.11	93	62.81	156	61.93	24
β	72.22	95	72.92	167	71.68	27
α	73.43	96	74.15	151	72.90	25
2	111.30	106	112.29	169	111.25	27
6	119.75	102	120.15	161	119.00	26
5	123.10	104	123.72	155	122.81	29
1	134.70	62	136.28	74	135.20	22
4	140.20	36	140.98	45	139.19	21
3	151.37	41	152.30	54	150.72	22
4 Ac C=O	168.77	40	168.95	61	168.40	22
α Ac C=O	169.65	39	170.08	70	169.44	39
β Ac C=O	170.04	44	170.30	63	169.44	39
γAc C=O	170.43	40	170.73	66	169.97	22

¹H (acetone)

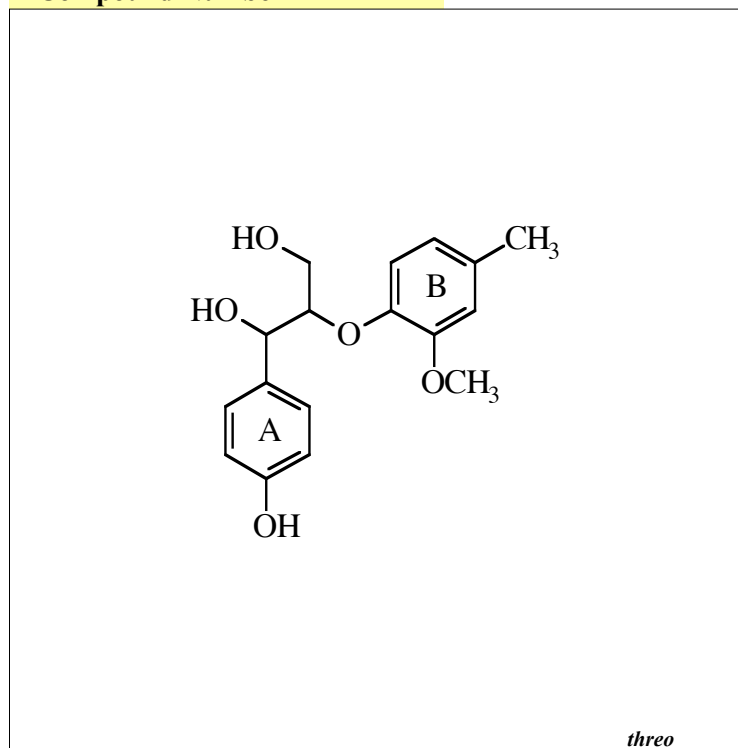
Atom	H Shifts	Mult	J
Ac Me	1.98	s	
Ac Me	1.99	s	
Ac Me	2.08	s	
Ac Me	2.22	s	
OMe	3.83	s	
γ1	3.90	dd	11.9, 6.2
γ2	4.24	dd	11.9, 4.0
β	5.42	m	
α	5.97	d	6.6
6	7.00	dd	8.2, 1.6
5	7.06	d	8.2
2	7.17	d	1.6

Notes:

SRIX-69E
 7mg
 gHSQC d6-acetone
 gHMBC d6-acetone
 minor isomer shifts in acetone
 γ 62.31
 β 72.92
 α 73.53

Compound Number 241

¹³C



H-b-G

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	21.16	16	21.08	21	20.51	31
OMe	55.81	19	56.24	28	55.55	37
γ	60.79	11	61.73	22	60.00	17
α	73.72	13	73.84	21	70.94	19
β	89.12	14	89.41	22	85.34	20
B2	113.07	17	114.18	19	113.46	25
A3	115.53	31	115.62	46	114.35	44
A5	115.53	31	115.62	46	114.35	44
B5	120.78	19	120.73	23	116.69	24
B6	121.96	16	122.21	25	120.75	31
A2	128.42	28	129.10	45	127.75	47
A6	128.42	28	129.10	45	127.75	47
A1	131.29	6	133.16	10	130.38	20
B1	133.99	11	133.35	11	132.21	17
B4	145.21	7	147.33	7	146.17	17
B3	150.97	8	151.67	5	149.60	17
A4	156.37	9	157.63	11	156.19	20

¹H (acetone)

Atom	H Shifts	Mult	J
B α	2.27	s	
γ2	3.43	m	
γ1	3.64	m	
OMe	3.85	s	
β	4.03	m	
α	4.83	dd	6.9, 3.2
B6	6.66	m	
A3,5	6.79	d	8.7
B2	6.85	d	2.0
B5	7.07	d	8.0
A2,6	7.28	d	8.7
A4 OH	8.26	s	

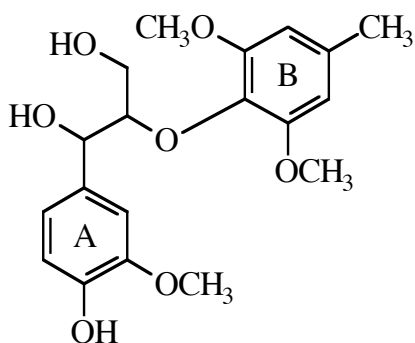
Notes:

SRIX-84

35mg

erythro isomer shifts

	C	A	D
γ	60.79	61.64	59.89
α	72.72	73.55	71.41
β	87.06	87.53	84.57

*threo*

G-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
B α	2.29	s	
γ1	3.28	dd	12.5, 3.2
γ2	3.64	dd	12.6, 3.6
OMe	3.80	s	
β	3.88	m	
OMe	3.85	s	
α	5.00	d	7.6
B2,6	6.55	s	
A5	6.79	d	8.34
A6	6.92	dd	8.3, 1.8
A2	7.07	d	1.8

Notes:

SRIX-86B,C

40 mg

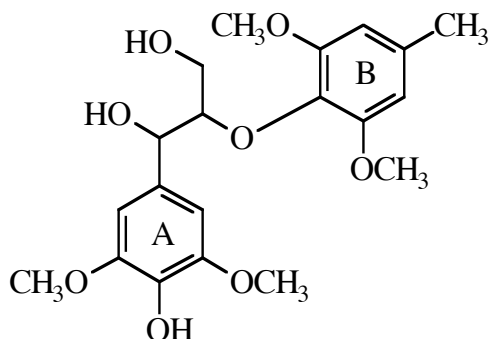
erythro isomer shifts

	C	A	D
γ	60.63	60.86	59.57
α	72.49	73.26	71.93
β	87.13	87.90	86.11

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	21.99	36	21.77	39	21.31	74
OMe	56.01	58	56.16	46	55.48	93
OMe	56.14	111	56.46	86	55.82	168
OMe	56.14	111	56.46	86	55.82	168
γ	60.51	30	61.19	35	60.11	29
α	74.20	32	74.08	38	71.53	37
β	89.20	33	89.83	37	87.29	41
B2	106.10	95	107.09	76	106.28	100
B6	106.10	95	107.09	76	106.28	100
A2	109.92	33	111.45	36	111.01	44
A5	114.36	37	115.22	43	114.62	43
A6	120.47	34	120.73	38	119.22	47
A1	132.06	18	133.60	22	132.79	44
B4	133.04	10	134.65	14	132.90	34
B1	134.67	23	134.82	22	133.80	27
A4	145.46	17	146.75	24	145.29	33
A3	146.58	16	147.90	19	146.83	32
B3	152.75	29	153.60	34	152.27	59
B5	152.75	29	153.60	34	152.27	59

Compound Number 243

¹³C



threo

S-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
B α	2.29	s	
OMe	3.80	s	
OMe	3.86	s	
α	4.99	d	6.8
A2,6	6.54	s	
B2,6	6.77	s	
A4 OH	7.08	s	

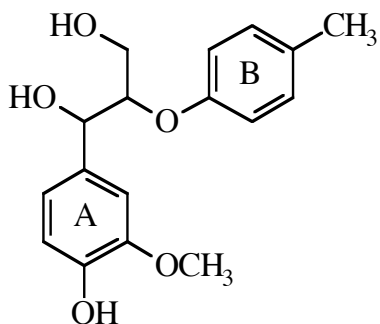
Notes:

SRIX-88SSB
 54mg B1,B4,A4,A1
 gHSQC, gHMBC in acetone
 erythro isomer shifts
 C A
 γ 60.50 61.23
 α 72.50 73.43
 β 87.03 86.32

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	21.85	42	21.78	78	21.31	91
OMe	56.02	94	56.48	173	55.88	252
OMe	56.02	94	56.48	173	55.88	252
OMe	56.25	94	56.56	175	55.90	266
OMe	56.25	94	56.56	175	55.90	266
γ	60.37	33	61.31	47	60.18	49
α	74.33	39	74.29	52	71.59	62
β	89.04	40	89.56	62	87.18	61
A2	104.04	77	105.39	150	104.30	124
A6	104.04	77	105.39	150	104.30	124
B2	105.99	87	107.05	169	106.34	155
B6	105.99	87	107.05	169	106.34	155
A1	131.04	27	132.54	37	132.13	59
B1	132.90	18	134.55	28	132.88	57
B4	134.43	26	134.78	47	133.92	46
A4	134.58	28	136.00	35	134.32	43
A3	146.99	54	148.23	68	147.37	112
A5	146.99	54	148.23	68	147.37	112
B3	152.63	46	153.52	74	152.34	113
B5	152.63	46	153.52	74	152.34	113

Compound Number 244

¹³C



threo

G-b-H

¹H (acetone)

Atom	H Shifts	Mult	J
B α	2.22	s	
OMe	3.79	s	
γ 1	3.54	m	
γ 2	3.78	m	
β	4.39	m	
α	4.94	m	
A5	6.77	d	8.2
A2	7.08	bs	
A4 OH	7.44	s	

Notes:

SRIX-88GHB

36mg A1 and B1 may be interchanged

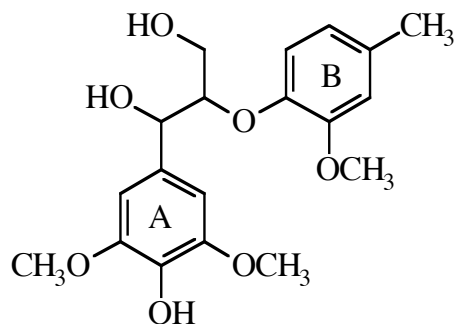
gHSQC, gHMBC in acetone and CDCl₃

erythro isomer shifts

	C	A	D
γ	61.44	62.03	60.17
α	73.94	74.03	71.55
b	81.22	83.98	83.37

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	20.53	27	20.46	42	20.05	125
OMe	55.98	34	56.20	49	55.49	119
γ	61.11	18	61.67	36	60.04	63
α	73.81	20	73.36	36	70.92	75
β	83.38	21	84.30	36	83.25	74
A2	109.56	21	111.36	48	110.95	79
A5	114.43	24	115.17	43	114.73	83
B3	116.57	47	117.08	79	115.88	199
B5	116.57	47	117.08	79	115.88	199
A6	120.00	21	120.36	40	119.01	80
B2	130.18	49	130.47	89	129.55	210
B6	130.18	49	130.47	89	129.55	210
B1	131.43	13	130.55	30	128.97	83
A1	131.76	14	134.24	20	133.25	66
A4	145.59	14	146.66	19	145.41	67
A3	146.75	13	147.93	17	146.99	68
B4	155.98	11	157.98	15	156.93	67

Compound Number 245



threo

S-b-G

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bα	21.73	21	21.06	41	20.57	38
B OMe	55.85	24	56.26	49	55.50	46
A OMe	56.34	48	56.60	97	55.80	77
A OMe	56.34	48	56.60	97	55.80	77
γ	60.99	15	61.89	40	60.05	27
α	74.18	19	74.05	42	70.90	28
β	89.51	21	88.73	45	84.58	27
A2	103.86	39	105.41	95	104.15	56
A6	103.86	39	105.41	95	104.15	56
B2	113.06	23	114.20	45	113.34	33
B5	120.90	22	120.10	45	115.95	31
B6	121.96	22	122.19	48	120.76	34
A1	130.82	12	132.84	23	130.21	25
B1	134.17	14	133.10	22	132.00	27
A4	134.58	10	136.15	18	134.33	25
B4	145.25	10	147.36	18	145.98	25
A3	147.12	23	148.40	38	147.39	52
A5	147.12	23	148.40	38	147.39	52
B3	150.93	11	151.50	18	149.46	25

¹H (acetone)

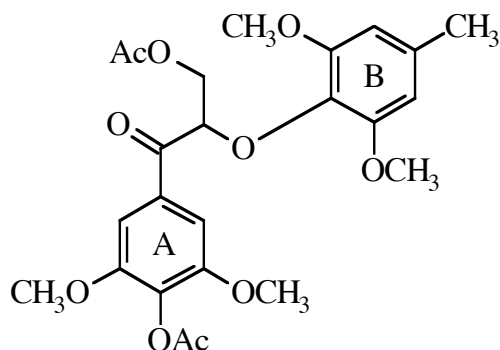
Atom	H Shifts	Mult	J
Bα	2.25	s	
γ1	3.48	m	
A OMe	3.78	s	
B OMe	3.84	s	
γ2	4.10	m	
β	4.48	d	3.8
α	4.85	dd	3.6, 6.4
B6	6.65	m	
A2,6	6.76	s	
B2	6.83	d	1.8
B5	7.04	d	8.2

Notes:

SRIX-95BR
erythro shifts

	C	A	D
α	72.87	73.98	71.90
β	87.70	87.09	83.97
γ	60.76	61.75	59.94

HSQC and HMBC in CDCl₃



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.43	25	20.22	129	20.08	149
γ Ac Me	20.75	21	20.60	113	20.42	139
Bα	21.82	20	21.73	109	21.32	130
B OMe	55.86	49	56.19	268	55.65	293
B OMe	55.86	49	56.19	268	55.65	293
A OMe	56.29	48	56.60	249	56.12	272
A OMe	56.29	48	56.60	249	56.12	272
γ	64.15	22	64.34	117	63.26	88
β	81.65	24	81.24	119	79.70	97
B2	105.93	48	106.75	280	105.93	196
B6	105.93	48	106.75	280	105.93	196
A2	106.25	46	106.80	283	105.58	191
A6	106.25	46	106.80	283	105.58	191
A4	133.03	6	133.82	33	132.20	40
B4	133.50	15	134.25	35	132.74	68
A1	133.57	14	134.72	63	133.61	100
B1	134.31	14	134.88	67	133.33	102
A3	152.09	25	153.11	110	151.75	193
A5	152.09	25	153.11	110	151.75	193
B3	152.49	24	153.51	107	152.05	180
B5	152.49	24	153.51	107	152.05	180
A4 Ac C=O	168.14	11	168.20	55	167.79	81
γ Ac C=O	170.75	11	170.73	52	170.03	99
α	194.84	13	195.23	57	194.40	87

¹H (acetone)

Atom	H Shifts	Mult	J
A4 Ac Me	1.90	s	
Bα	2.08	s	
γ Ac Me	2.26	s	
B OMe	3.70	s	
A OMe	3.85	s	
γ	4.49	m	
β	5.50	t	5.4
B2,6	6.47	s	
A2,6	7.49	s	

Notes:

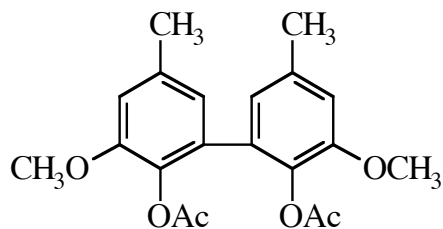
SRTSII-131-Ac 12mg

A2,6 and B2,6 ; A1 and B1 switch in DMSO

HSQC and HMBC in Acetone, CDCl₃ and DMSO

Compound Number 247

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.54	24	20.36	84	20.10	63
α	21.51	24	21.32	82	20.87	64
OMe	56.08	36	56.28	114	55.83	67
2	112.75	23	113.52	98	112.90	55
6	123.17	27	123.44	95	122.22	48
5	131.30	9	132.13	29	130.49	34
4	135.39	4	136.48	58	134.74	21
1	136.02	14	136.48	58	135.52	46
3	150.95	12	152.17	31	150.64	38
Ac C=O	168.96	9	168.67	21	168.00	26

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
α	2.33	s	
OMe	3.81	s	
6	6.60	bdd	2.0, 0.8
2	6.92	bd	1.6

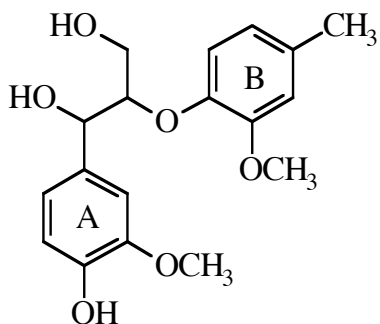
Notes:

LLL-XXIII-76DA 37mg

As this dimer contains a plane of symmetry the CSs are reported for one unit.

Compound Number 248

¹³C



threo

G-b-G

¹H (acetone)

Atom	H Shifts	Mult	J
Bα	2.27	s	
γ1	3.51	m	
γ2	3.68	m	
OMe	3.81	s	
OMe	3.85	s	
β	4.07	m	
α	4.88	d	6.0
B6	6.66	bd	7.3
B5	6.87	bd	8.0
A4 OH	7.37	s	

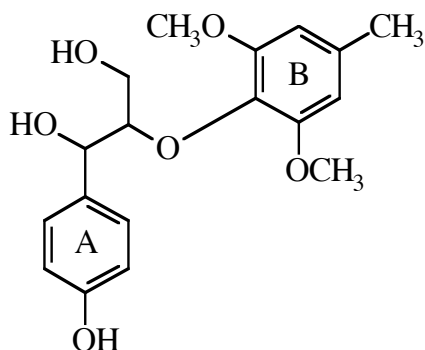
Notes:

SRIX-98 27mg
 B5 and A6 may be switched
 HSQC and HMBC in CDCl₃
 C A D erythro shifts
 γ 60.69 61.69 59.97
 α 72.71 73.78 71.72
 β 87.33 87.08 84.21

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bα	21.21	31	21.06	36	20.63	80
OMe	55.85	39	56.19	44	55.45	79
OMe	55.93	41	56.26	54	55.58	93
γ	60.96	17	61.82	26	60.10	47
α	73.96	24	73.95	28	70.96	52
β	89.52	23	88.90	33	84.95	44
A2	109.59	28	111.40	34	111.05	54
B2	113.05	32	114.17	36	113.43	52
A5	114.39	28	115.23	37	114.69	56
B5	120.22	30	120.23	37	116.28	48
A6	120.87	28	120.57	38	119.04	56
B6	121.94	33	122.19	41	120.84	71
A1	131.64	15	133.16	19	130.36	49
B1	134.08	18	133.82	16	133.01	52
B4	145.31	14	146.80	16	145.44	57
A4	145.58	15	147.82	14	146.13	44
A3	146.75	15	148.02	16	147.00	53
B3	150.86	13	151.47	12	149.57	45

Compound Number 249

¹³C



threo

H-b-S

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bα	22.01	25	21.78	21	21.34	35
OMe	56.19	58	56.48	50	55.86	77
OMe	56.19	58	56.48	50	55.86	77
γ	60.50	18	61.06	21	60.08	23
α	74.10	23	73.95	22	71.53	27
β	89.14	23	89.98	23	87.36	28
B2	106.16	48	107.12	42	106.33	57
B6	106.16	48	107.12	42	106.33	57
A3	115.56	48	115.58	48	114.37	59
A5	115.56	48	115.58	48	114.37	59
A2	128.75	45	129.22	46	127.88	61
A6	128.75	45	129.22	46	127.88	61
A1	131.26	17	133.06	10	132.21	23
B4	133.02	11	134.67	7	132.86	24
B1	134.77	15	134.84	10	133.93	17
B3	152.69	27	153.67	15	152.32	42
B5	152.69	27	153.67	15	152.32	42
A4	156.28	18	157.68	12	156.23	26

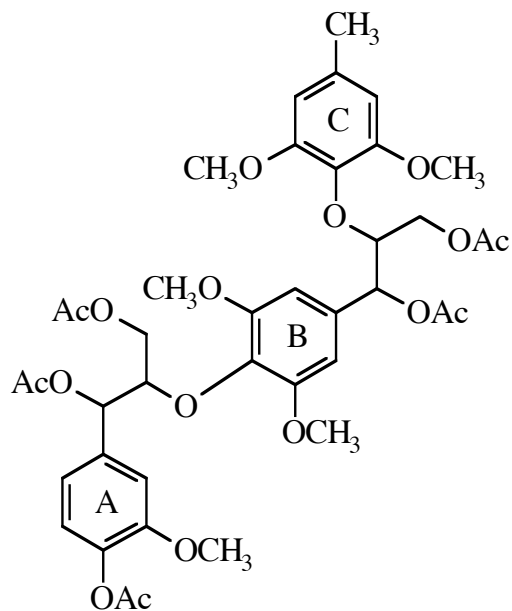
¹H (acetone)

Atom	H Shifts	Mult	J
Bα	2.28	s	
γ1	3.21	dd	12.3, 3.2
γ2	3.60	dd	12.3, 3.2
β	3.82	m	
OMe	3.85	s	
α	4.98	d	7.8
B2,6	6.55	s	
A3,5	6.78	d	8.5
A2,6	7.27	d	8.5
<u>CDCl₃</u>	<u>CDCl₃</u>		
Bα	2.36		
γ1	3.32		
γ2	3.57		
β	3.87		
OMe	3.90		
α	5.03		
B2,6	6.47		
A3,5	6.72		
A2,6	7.26		

Notes:

SRIX-101B 21mg
 HSQC acetone
 HSQC & HMBC CDCl₃
 erythro shifts

	C	A
γ	60.6	60.8
α	72.4	73.1
β	87.0	87.8

Compound Number 250
¹³C

G-b-S-b-S
¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.84	d	1.6
α Ac Me	1.93	d	1.4
γ Ac Me	2.00	d	3.0
α Ac Me	2.11	d	1.0
A4 Ac Me	2.21	s	
Cα	2.28	s	
OMe	3.77	s	
OMe	3.79	s	
OMe	3.81	s	
Bγ 1	3.83	m	
Aγ 1	4.16	dd	11.7, 4.2
Bγ 2	4.22	ddd	11.7, 3.8, 1.8
Aγ 2	4.40	dd	11.7, 6.0
Bβ	4.52	m	
Aβ	4.70	m	
Aα	6.06	d	overlapping
Bα	6.06	d	overlapping
C2,6	6.49	s	
B2,6	6.74	d	
A5,6	7.00	m	1.6
A2	7.16	d	1.4

Notes:

SRIX-105 30mg

 Order of Ac Me changes in CDCl₃

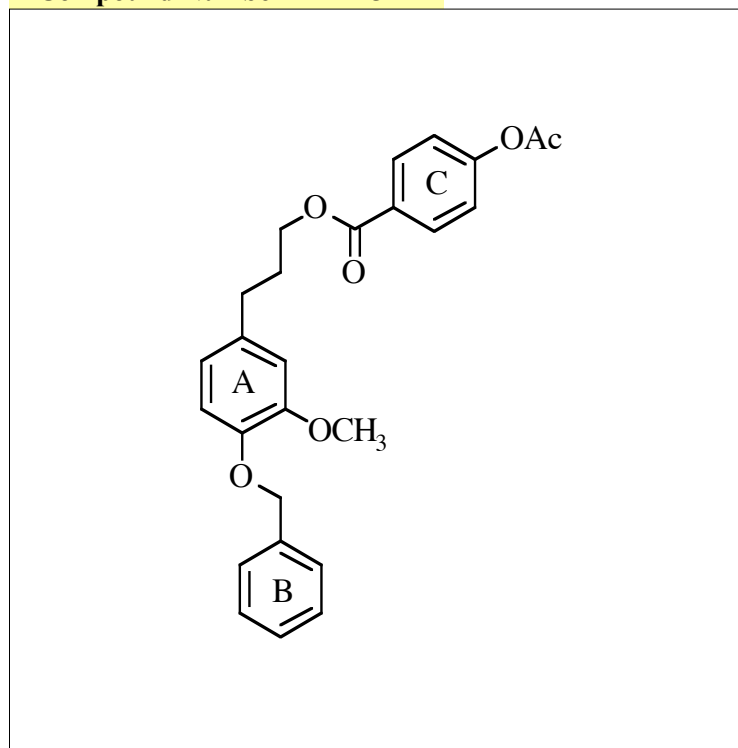
 HSQC and HMBC in CDCl₃ and d₆-acetone

Bα, Aβ, Bβ, A2 and A6 show two signals c.a. 0.1ppm apart due to isomer effects and the CS reported is an average value

The first β-O-4 linkage appears to be erythro and the second linkage appears to be threo.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.85	47	20.48	55	20.27	35
γ Ac Me	20.67	46	20.59	48	20.35	47
γ Ac Me	20.73	41	20.74	41	20.48	36
α Ac Me	21.08	75	20.93	53	20.67	41
α Ac Me	21.08	75	21.02	48	20.73	40
Cα	21.85	39	21.74	47	21.37	35
B OMe	55.99	109	56.32	91	55.71	115
B OMe	55.99	109	56.32	91	55.71	115
C OMe	55.99	109	56.45	123	55.71	115
C OMe	55.99	109	56.45	123	55.71	115
A OMe	56.07	84	56.86	104	55.85	72
Aγ	62.76	21	63.39	39	62.25	19
Bγ	63.74	25	64.30	36	63.20	15
Aα	74.06	23	75.15	44	73.83	22
Bα	75.99	29	76.75	28	75.77	13
Aβ	80.89	57	81.45	34	80.00	17
Bβ	80.89	57	81.76	28	80.50	15
B2	104.44	53	105.27	79	104.01	36
B6	104.44	53	105.27	79	104.01	36
C2	106.05	70	106.99	89	105.89	53
C6	106.05	70	106.99	89	105.89	53
A2	111.60	17	112.30	33	111.04	21
A6	119.23	24	120.02	25	118.85	13
A5	122.42	33	123.30	41	122.57	21
C1	133.37	20	134.17	27	133.02	39
B1	133.74	25	134.36	27	133.02	39
C4	134.40	18	135.56	14	133.79	13
B4	135.22	11	136.33	18	134.35	20
A1	136.15	25	137.10	24	135.67	19
A4	139.50	19	140.57	20	138.92	23
A3	150.85	23	152.05	25	150.59	27
C3	152.65	41	153.67	49	152.13	48
C5	152.65	41	153.67	49	152.13	48
B3	153.06	41	153.91	53	152.43	42
B5	153.06	41	153.91	53	152.43	42
A4 Ac C=O	168.89	20	168.96	23	168.49	26
α Ac C=O	169.55	23	169.90	29	169.29	28
α Ac C=O	169.85	21	169.95	34	169.38	29
γ Ac C=O	170.54	21	170.69	45	169.99	34
γ Ac C=O	170.88	21	170.69	45	169.99	34

Compound Number 251



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			21.00	21		
β			31.15	12		
α			32.42	15		
OMe			56.13	18		
γ			64.98	14		
Bα			71.56	11		
A2			113.72	12		
A5			115.39	11		
A6			121.14	12		
C3			122.79	36		
C5			122.79	36		
B2			128.40	33		
B6			128.40	33		
B4			128.40	33		
C1			128.72	6		
B3			129.11	23		
B5			129.11	23		
C2			131.62	29		
C6			131.62	29		
A1			135.56	6		
B1			138.76	4		
A4			147.68	4		
A3			150.88	4		
C4			155.53	7		
Cα			166.03	4		
Ac C=O			169.26	8		

¹H (acetone)

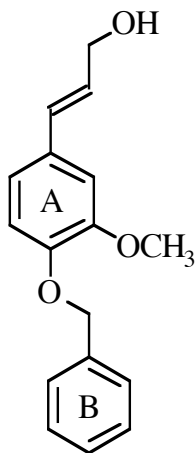
Atom	H Shifts	Mult	J
β	2.08	s	
Ac Me	2.28	d	< 1.0
α	2.74	bt	8.0
OMe	3.79	s	
γ	4.31	bt	6.4
Bα	5.05	s	
A6	6.75	m	
A2,5	6.91	m	
C3,5	7.25	d	8.5
B3,4,5	7.35	m	
B2,6	7.47	bd	7.4
C2,6	8.05	d	8.5

Notes:

L.Landucci XXIII-143 39mg.
HSQC and HMBC in acetone d-6

Compound Number 252

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.16	34		
γ			63.26	17		
Bα			71.47	30		
A2			110.73	29		
A5			115.12	28		
A6			120.11	32		
B2			128.46	61		
B6			128.46	61		
B4			128.54	38		
B3			129.19	77		
B5			129.19	77		
β			129.19	77		
α			130.01	31		
A1			131.94	13		
B1			138.60	13		
A4			148.98	7		
A3			151.02	10		

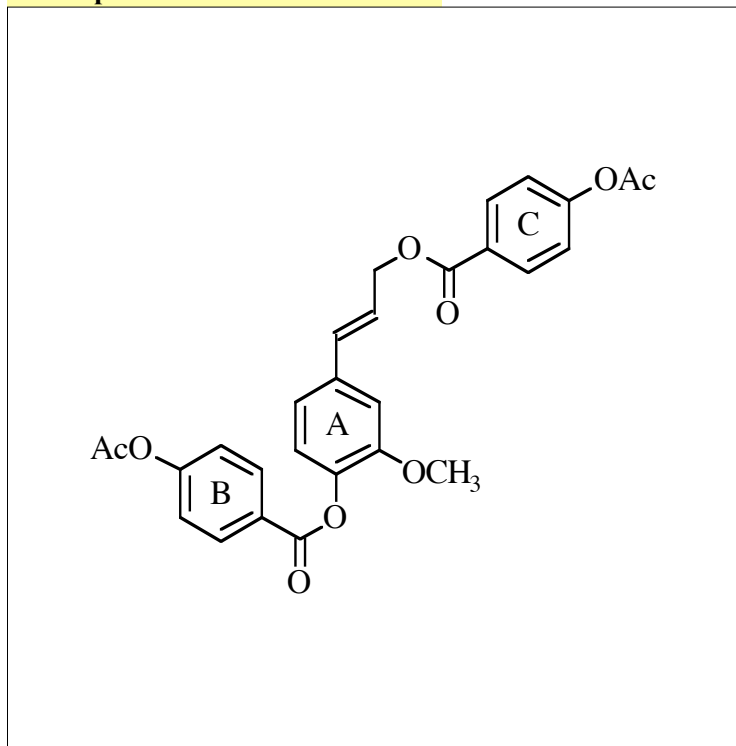
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
γ	4.19	dd	5.4, 1.4
Bα	5.09	s	
β	6.26	dt	16.1, 5.4
α	6.52	dt	9.9, 1.7
A6	6.88	dd	8.3, 2.0
A5	6.96	d	8.3
A2	7.08	d	2.0
B2-6	7.3-7.5	m	

Notes:

L.Landucci XXIII-127G 48 mg
 HSQC and HMBC in acetone d-6
 gamma singal is split and CS value is avg. ± 0.06

Compound Number 253



¹³C

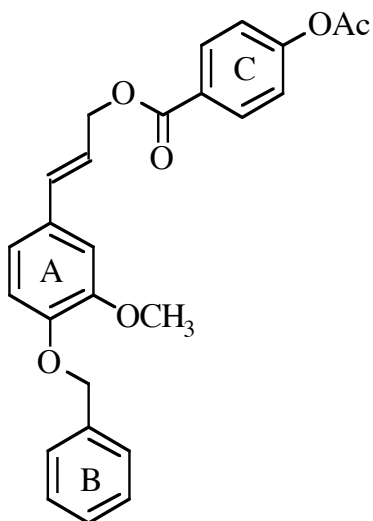
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.98	39		
Ac Me			20.98	39		
OMe			56.30	32		
γ			66.01	22		
A2			111.31	21		
A6			120.16	17		
C3			122.93	45		
C5			122.93	45		
B3			123.16	48		
B5			123.16	48		
A5			123.95	23		
β			124.89	21		
B1			127.72	8		
C1			128.57	7		
C2			131.77	48		
C6			131.77	48		
B2			132.34	46		
B6			132.34	46		
α			134.01	23		
A1			136.55	15		
A4			140.81	14		
A3			152.54	16		
C4			155.72	11		
B4			156.13	15		
Bα			164.23	4		
Cα			165.84	6		
Ac C=O			169.29	19		
Ac C=O			169.29	19		

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.29	s	
Ac Me	2.31	s	
OMe	3.84	s	
γ	5.00	bd	6.0
β	6.55	dt	16.0, 6.0
α	6.85	bd	16.0
A6	7.13	dd	8.3, 1.8
A5	7.20	d	8.3
C3,5	7.28	d	8.7
A2	7.33	bs	
B3,5	7.35	d	8.7
C2,6	8.11	d	8.7
B2,6	8.21	d	8.7

Notes:

L.Landucci XXIII-114B 16 mg
HSQC and HMBC in acetone d-6

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.85	s	
γ	4.95	dd	6.4, 1.3
Bα	5.10	s	
β	6.38	dt	15.9, 6.4
α	6.74	d	15.9
A5,6	6.97	m	
A2	7.16	bs	
C3,5	7.26	d	8.7
B3,4,5	7.31-7.41	m	
B2,6	7.47	bd	7.4
C2,6	8.09	d	8.7

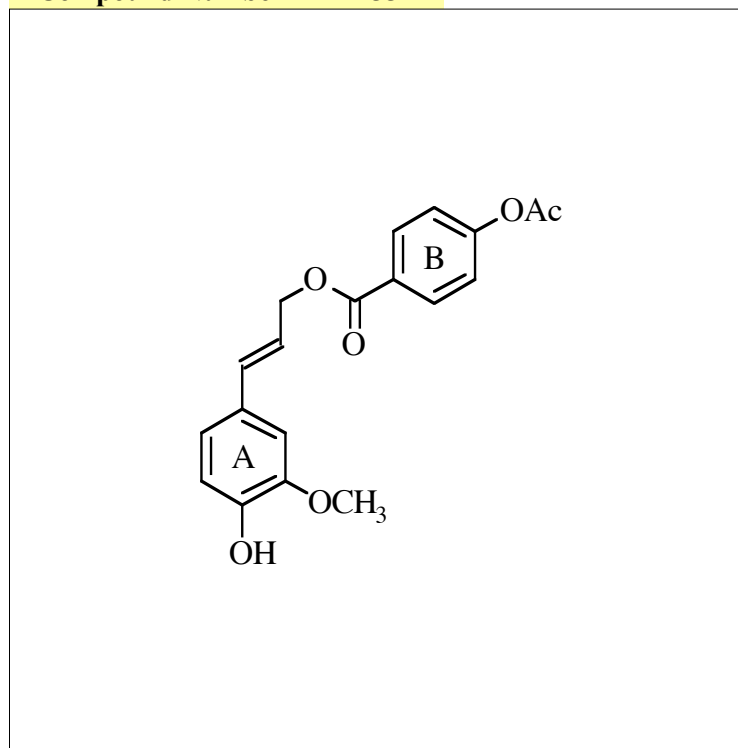
Notes:

L.Landucci XXIII-129B 57mg
HSQC and HMBC in acetone d-6

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			21.00	39		
OMe			56.31	30		
γ			66.34	34		
Bα			71.53	26		
A2			111.16	18		
A5			115.17	18		
A6			120.82	37		
β			122.39	34		
C3			122.83	78		
C5			122.83	78		
B2			128.45	78		
B6			128.45	78		
B4			128.57	38		
C1			128.69	14		
B3			129.20	68		
B5			129.20	68		
A1			131.00	14		
C2			131.74	73		
C6			131.74	73		
α			134.95	36		
B1			138.49	15		
A4			149.70	13		
A3			151.13	12		
C4			155.68	13		
Cα			165.93	13		
Ac C=O			169.25	13		

Compound Number 255

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.98	32		
OMe			56.24	28		
γ			66.47	28		
A2			110.24	23		
A5			115.83	22		
A6			121.33	47		
β			121.33	47		
B3			122.90	62		
B5			122.90	62		
B1			128.70	9		
A1			129.35	10		
B2			131.73	62		
B6			131.73	62		
α			135.40	26		
A4			147.91	11		
A3			148.55	6		
B4			155.68	9		
Bα			165.90	8		
Ac C=O			169.29	11		

¹H (acetone)

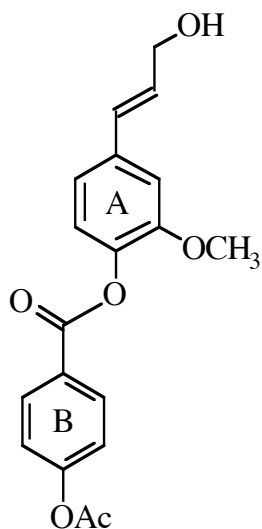
Atom	H Shifts	Mult	J
Ac Me	2.28	s	
OMe	3.86	s	
γ	4.94	dd	6.6, 1.2
β	6.33	dt	16.0, 6.6
α	6.72	d	16.0
A5	6.79	d	8.3
A6	6.93	dd	8.3, 2.1
A2	7.14	d	2.1
B3,5	7.27	d	8.9
B2,6	8.09	d	8.9

Notes:

L.Landucci XXIII-114D2 8mg
HSQC and HMBC in acetone d-6

Compound Number 256

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.99	35		
OMe			56.22	39		
γ			63.10	29		
A2			111.04	37		
A6			119.58	36		
B3			123.15	76		
B5			123.15	76		
A5			123.81	38		
B1			127.80	16		
α			129.30	36		
β			131.61	37		
B2			132.32	73		
B6			132.32	73		
A1			137.50	17		
A4			140.16	11		
A3			152.44	16		
B4			156.10	13		
Bα			164.29	8		
Ac C=O			169.30	13		

¹H (acetone)

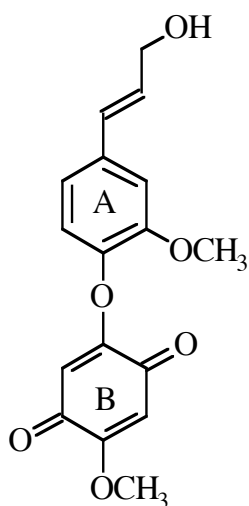
Atom	H Shifts	Mult	J
Ac Me	2.31	s	
OMe	3.84	s	
OH	3.90	t	
γ	4.25	dt	5.2, 1.4
β	6.43	dt	15.9, 5.2
α	6.64	d	15.9
A6	7.05	dd	8.3, 1.9
A5	7.15	d	8.3
A2	7.23	d	1.9
B3,5	7.34	d	8.9
B2,6	8.20	d	8.9

Notes:

L.Landucci XXIII-114D1 4mg
HSQC and HMBC in acetone d-6

Compound Number 257

¹³C



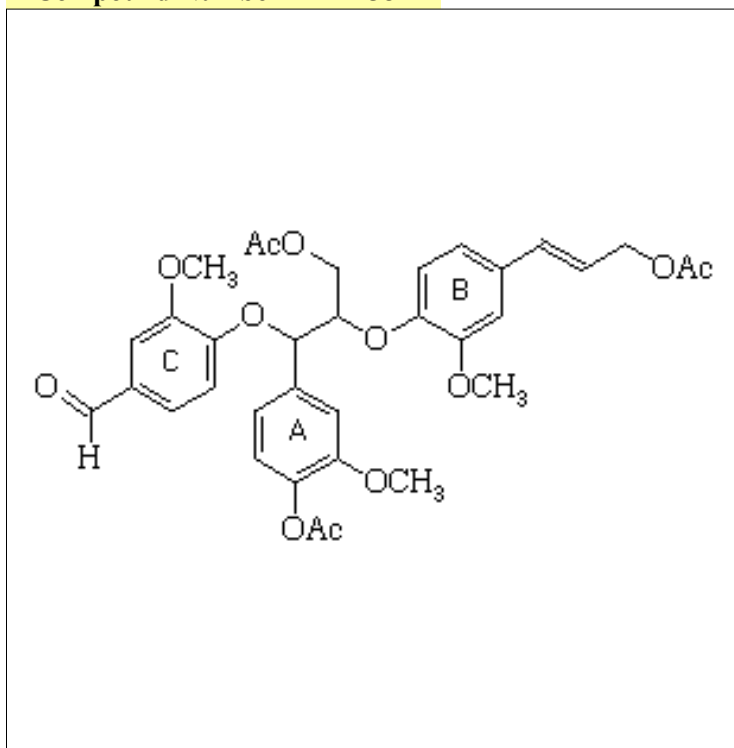
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A OMe			56.27	26		
B OMe			57.07	27		
γ			62.98	26		
B2			106.32	28		
B5			108.77	26		
A2			111.75	24		
A6			120.19	27		
A5			122.94	27		
α			128.91	24		
β			132.31	26		
A1			138.15	13		
A4			140.96	6		
A3			151.65	9		
B6			159.23	6		
B3			160.39	9		
B4			181.63	9		
B1			182.05	7		

¹H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.85	s	
B OMe	3.86	s	
γ	4.24	bs	
B2	5.40	s	
B5	6.02	s	
β	6.44	dt	15.9, 5.0
α	6.63	dt	16.1, 1.7
A5,6	7.09	m	
A2	7.27	bs	

Notes:

L.Landucci XXIII-93CC 17mg
HSQC and HMBC in acetone d-6



Vanillin-a-G-b-CA

¹H (acetone)

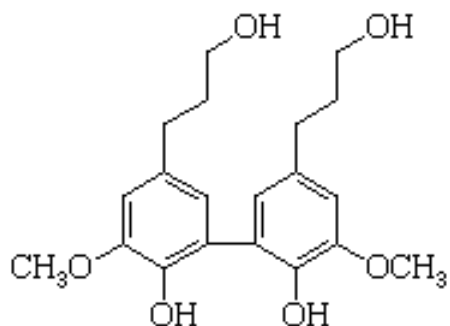
Atom	H Shifts	Mult	J
Ac Me's	1.91, 2.03, 2.07	s's	
OMe	3.81	s	
OMe	3.83	s	
OMe	3.97	s	
γ1	4.45	dd	11.9, 4.0
γ2	4.56	dd	11.9, 5.8
Bγ	4.67	dd	6.4, 1.2
β	4.91	m	
α	5.84	d	5.2
Bβ	6.27	dt	15.9, 6.4
Bα	6.63	d	15.9
B6	6.93	dd	8.2, 1.6
B5	7.01	d	8.3
A5	7.03	d	8.2
A6	7.14	dd	8.2, 1.8
B2	7.15	d	2.0
C5	7.15	d	8.3
A2	7.36	d	2.4
C6	7.39	dd	8.2, 1.8
C2	7.46	d	1.8
Cα	9.81	s	

Notes:

SRIX-116E 3mg
 gHSQC and gHMBC in acetone
 proton CS's for A6,C5 and A2 determined by simulation
 (Acorn MacNuts)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.74	32	20.46	29		
γAc Me	20.82	31	20.62	27		
BγAc Me	21.10	19	20.80	22		
OMe	55.84	28	56.24	36		
OMe	56.09	38	56.29	31		
OMe	56.13	42	56.51	31		
γ	63.12	23	63.32	26		
Bγ	65.17	25	65.38	29		
α	79.98	23	80.55	26		
β	82.11	23	81.82	27		
B2	109.93	24	111.36	51		
C2	110.29	24	111.36	51		
A2	111.14	23	112.68	26		
C5	114.77	21	115.94	27		
B5	119.31	22	119.62	26		
A6	119.46	26	120.33	27		
B6	119.93	24	120.53	28		
Bβ	122.39	22	123.35	27		
A5	122.94	25	123.53	27		
C6	126.32	22	126.04	26		
C1	130.99	14	132.08	14		
B1	132.03	13	132.61	14		
Bα	133.93	21	134.20	25		
A1	136.05	16	136.78	17		
A4	139.89	12	140.85	11		
B4	147.31	12	148.54	12		
C3	150.68	13	151.58	12		
A3	151.13	11	152.02	12		
B3	151.43	12	152.28	12		
C4	152.81	11	153.36	12		
A4 Ac C=O	168.86	11	168.87	11		
γAc C=O	170.82	12	170.77	18		
γAc C=O	170.95	10	170.77	18		
Cα	190.96	25	191.26	30		

Compound Number 259



dihydrodiconiferyl alcohol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	31.94	37	32.53	33	31.34	34
β	34.45	35	35.75	31	34.59	39
OMe	56.20	52	56.42	45	55.85	63
γ	62.38	34	61.85	22	60.24	48
2	110.71	32	111.75	31	110.77	28
6	123.04	40	123.94	32	122.73	32
1	124.52	13	126.47	11	125.89	18
5	133.76	16	134.15	19	132.26	30
3	140.83	17	142.49	13	141.36	24
4	147.33	18	148.64	14	147.61	20

¹H (acetone)

Atom	H Shifts	Mult	J
β	1.81	m	
α	2.64	m	
γ	3.58	t	6.6
OMe	3.85	s	
6	6.72	d	2.1
2	6.82	d	2.0

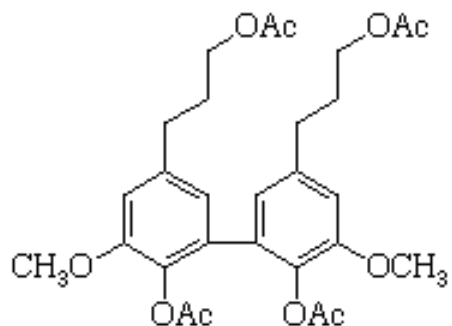
Notes:

L.Landucci
XXIII-52H 25 mg

As this dimer contains a plane of symmetry the CSs are reported for one unit.

Compound Number 260

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.39	32	20.46	44	19.99	11
Ac Me	20.91	27	20.78	37	20.56	12
β	30.30	19	30.99	28	29.58	8
α	32.15	19	32.61	33	31.32	7
OMe	56.02	34	56.34	44	55.79	10
γ	63.72	21	64.04	30	63.10	9
2	111.95	13	112.93	21	112.16	4
6	122.27	15	122.80	19	121.46	4
5	131.36	8	132.20	9	130.51	4
4	135.76	7	136.81	8	135.09	4
1	139.28	10	140.33	12	139.20	4
3	151.13	11	152.37	14	150.82	5
4 Ac C=O	168.76	8	168.76	12	167.98	4
γ Ac C=O	171.08	9	171.00	11	170.25	5

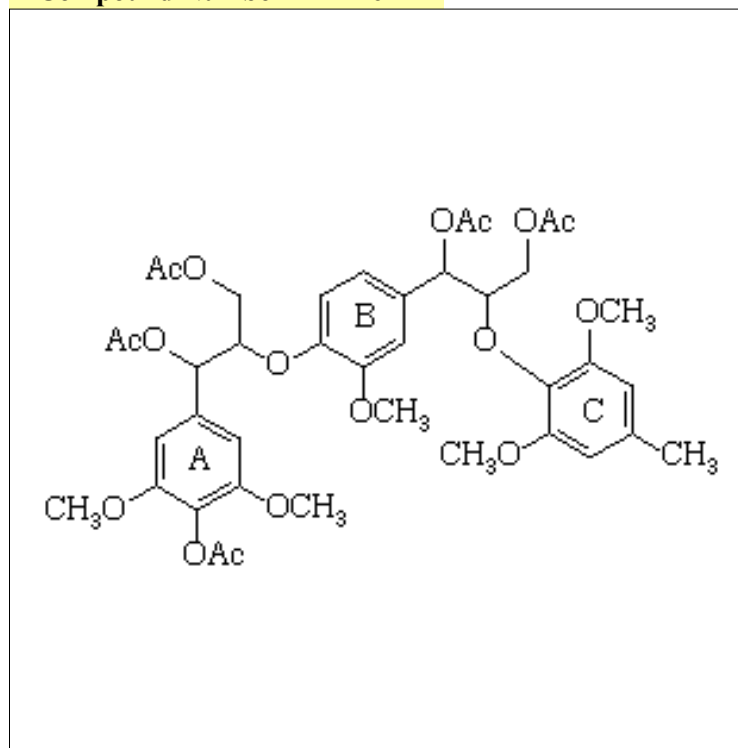
¹H (acetone)

Atom	H Shifts	Mult	J
β	1.97	m	
Ac Me	1.98	s	
Ac Me	2.01	s	
α	2.70	bt	8.0
OMe	3.83	s	
γ	4.07	t	6.4
6	6.66	d	1.8
2	6.99	d	1.8

Notes:

L.Landucci
XXIII-146ACH

As this dimer contains a plane of symmetry the CS's are reported for one unit.



S-b(t)-G-b(e)-S5

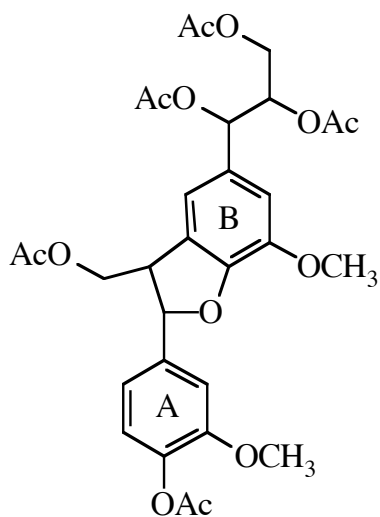
¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.88	s	
γ Ac Me	1.97	s	
α Ac Me	2.01	d	
αAc Me	2.12	d	
A4 Ac Me	2.21	s	
Cα	2.27	s	
OMe's	3.77, 3.80, 3.84	s's	
Aγ 1	4.05	dd	11.9, 5.4
Bγ 1	4.13	dd	11.5, 3.2
Aγ 2	4.26	m	
Bγ 2	4.39	m	
Bβ	4.65	m	
Aβ	4.81	m	
Bα	6.01	d	4.2
Aα	6.08	d	6.6
C 2,6	6.48	s	
A 2,6	6.85	s	
B6	6.90	m	
B5	7.02	d	8.3
B2	7.06	m	

Notes:

S.Ralph
 SRIX-115BAc 30 mg CS's indicate A-threo-B-erythro-C
 gHSQC and gHMBC in acetone, some signals split due to isomers
 B1 +/- (0.05 ppm)
 B2 +/- (0.08 ppm)
 B3 +/- (0.02 ppm)
 B4 +/- (0.02 ppm)
 in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.48	32	20.24	46	20.05	27
γ Ac Me	20.75	26	20.64	81	20.35	38
γ Ac Me	20.84	35	20.64	81	20.35	38
α Ac Me	21.08	26	20.96	68	20.62	37
αAc Me	21.14	29	20.96	68	20.62	37
Cα	21.90	31	21.77	51	21.35	24
OMe	55.97	70	56.28	125	55.61	66
OMe	55.97	70	56.28	125	55.61	66
OMe	55.97	70	56.28	125	55.61	66
OMe	56.28	61	56.28	125	55.98	38
OMe	56.28	61	56.55	84	55.98	38
Bγ	62.82	15	63.35	26	62.12	15
Aγ	63.09	15	63.63	19	62.46	12
Bα	74.33	19	75.22	27	73.76	14
Aα	74.48	18	75.68	27	74.59	10
Aβ	80.20	18	80.65	15	78.96	10
Bβ	80.84	21	81.16	33	79.94	16
A2	104.16	30	104.97	46	103.97	23
A6	104.16	30	104.97	46	103.97	23
C2	106.09	50	106.92	88	105.87	41
C6	106.09	50	106.92	88	105.87	41
B2	111.59	10	112.49	16	110.87	9
B5	118.00	16	118.39	13	116.75	7
B6	119.52	18	120.29	16	118.89	10
A4	128.90	9	129.69	12	127.84	9
B1	132.33	8	132.98	10	131.07	6
C4	132.90	10	134.16	13	132.16	8
C1	134.14	15	134.48	20	133.32	14
A1	134.78	15	136.15	19	134.92	12
B4	147.69	8	148.70	14	147.19	8
B3	150.46	8	151.38	14	149.68	8
A3	152.26	28	153.20	35	151.58	22
A5	152.26	28	153.20	35	151.58	22
C3	152.98	35	153.88	48	152.34	29
C5	152.98	35	153.88	48	152.34	29
A4 Ac C=O	168.52	14	168.45	18	167.91	11
α Ac C=O	169.75	16	169.96	27	169.26	17
αAc C=O	169.79	12	170.01	27	169.33	17
γ Ac C=O	170.62	14	170.70	32	169.94	25
γ Ac C=O	170.91	14	170.70	32	169.94	25

Compound Number 262
¹³C


Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.76	82	20.47	67		
Ac Me	20.76	82	20.56	56		
Ac Me	20.76	82	20.73	60		
Ac Me	20.85	68	20.73	64		
A4 Ac Me	21.07	46	20.89	49		
Aβ	50.64	23	51.45	43		
A OMe	56.02	42	56.29	62		
B OMe	56.26	38	56.59	52		
Bγ	62.36	23	63.00	38		
Aγ	64.98	13	65.79	19		
Bβ	72.47	22	73.27	36		
Bα	73.95	17	74.55	17		
Aα	88.20	22	88.40	27		
A2	110.13	21	111.11	28		
B2	111.74	13	113.19	20		
B6	115.87	13	116.84	20		
A6	118.40	19	118.78	27		
A5	122.97	31	123.80	54		
B5	127.58	14	128.83	13		
B1	129.80	14	131.06	14		
A1	139.29	11	140.82	14		
A4	139.84	10	140.92	15		
B3	144.61	10	145.31	9		
B4	148.54	7	149.38	7		
A3	151.39	15	152.46	21		
A4 Ac C=O	168.96	15	168.96	24		
Bα Ac C=O	169.87	14	170.01	17		
Bβ Ac C=O	170.10	15	170.26	17		
Bγ Ac C=O	170.45	15	170.63	20		
Aγ Ac C=O	170.75	18	170.95	23		

¹H (acetone)

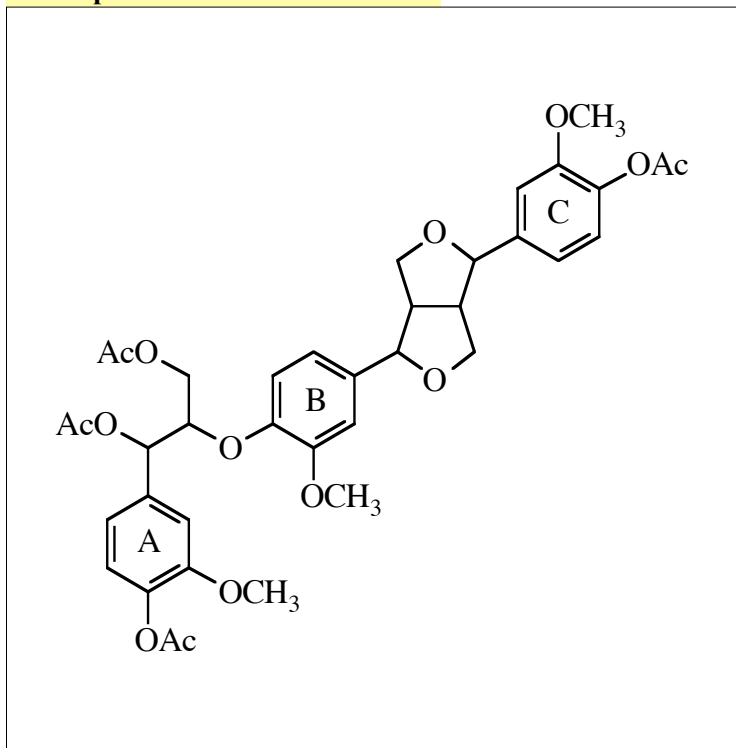
Atom	H Shifts	Mult	J
Ac Me	1.98	m	
Ac Me	2.00	m	
Ac Me	2.03	s	
Ac Me	2.04	s	
A4 Ac Me	2.21	s	
Aβ	3.78	m	
A OMe	3.79	s	
B γ1	3.82	m	
B OMe	3.87	s	
B γ2	4.17	m	
Aγ	4.38	m	
Bβ	5.38	m	
Aα	5.61	d	6.8
Bα	5.92	dd	7.2, 2.8
B2,6,A6	6.99	m	
A5	7.04	d	8.2
A2	7.18	bs	

Notes:

SRVII-91D 8mg HSQC and HMBC in acetone and CDCl₃
A1 and A4 tentative assignments, some signals split due to isomers
CDCl₃: Aγ +/- (0.13), B2 +/- (0.14), B6 +/- (0.10)
Acetone: Aγ +/- (0.15), Bα +/- (0.04), A2 +/- (0.03), B2 +/- (0.22), B6 +/- (0.17),
A6 +/- (0.02), B5 +/- (0.02), A4 +/- (0.03) ppm.

Compound Number 263

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C4 Ac Me			20.48	71		
A4 Ac Me			20.48	71		
Aα Ac Me			20.63	29		
Aγ Ac Me			20.89	17		
Bβ			55.27	23		
Cβ			55.41	23		
OMe			56.21	41		
OMe			56.26	38		
OMe			56.28	19		
Aγ			63.03	14		
Bγ			72.50	40		
Cγ			72.62	40		
Aα			74.54	13		
Aβ			80.31	15		
Bα			86.17	42		
Cα			86.17	42		
C2			111.08	32		
B2			111.58	18		
A2			112.74	16		
C6			118.61	16		
B5			119.03	17		
B6			119.42	10		
A6			120.48	10		
A5			123.33	14		
C5			123.47	14		
A1			136.69	12		
B1			136.69	12		
C4			140.12	13		
A4			141.08	14		
C1			141.88	15		
B4			147.48	7		
B3			151.88	7		
C3			152.27	21		
A3			152.27	21		
A4 Ac C=O			168.92	14		
C4 Ac C=O			169.05	20		
AαAc C=O			169.91	7		
Aγ Ac C=O			170.77	7		

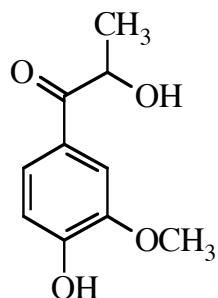
¹H (acetone)

Atom	H Shifts	Mult	J

Notes:

SRVII-143D 13 mg
Erythro isomer shirts reported
 13C CS in Acetone for *threo* isomer
 Aγ 63.58
 Aα 75.33
 Aβ 80.74
 sample contains small amt of 5,5 resinol tetramer.

Compound Number 264

¹³C

alpha,4-dihydroxy-3-methoxypropiophenone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	22.91	48	22.69	58	21.17	37
OMe	56.19	50	56.33	68	55.57	36
β	68.89	46	69.42	50	68.10	30
2	110.64	47	112.20	56	111.74	23
5	114.30	48	115.60	68	114.89	34
6	124.08	49	124.65	75	123.51	35
1	125.91	15	127.08	17	126.15	20
3	147.10	15	148.48	18	147.48	21
4	151.41	19	152.84	24	151.73	25
α	200.75	16	201.10	18	199.72	20

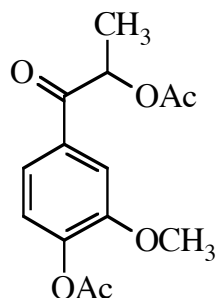
¹H (acetone)

Atom	H Shifts	Mult	J
γ	1.35	d	6.8
OMe	3.91	s	
β-OH	4.10	d	6.4
β	5.13	m	
5	6.94	d	8.2
2	7.57	d	2.0
6	7.60	dd	8.2, 2.0
4-OH	8.61	bs	
<u>CDCl₃</u>			
γ	1.46	d	6.6
OMe	3.96	s	
β	5.13	m	
4-OH	6.61	bs	
5	6.98	d	8.2
6	7.48	dd	8.2, 2.0
2	7.54	d	2.0

Notes:

Pearl collection
25 mg
HSQC and HMBC in acetone

Compound Number 265



alpha,4-diacetoxy-3-methoxypropiphenone

¹³C

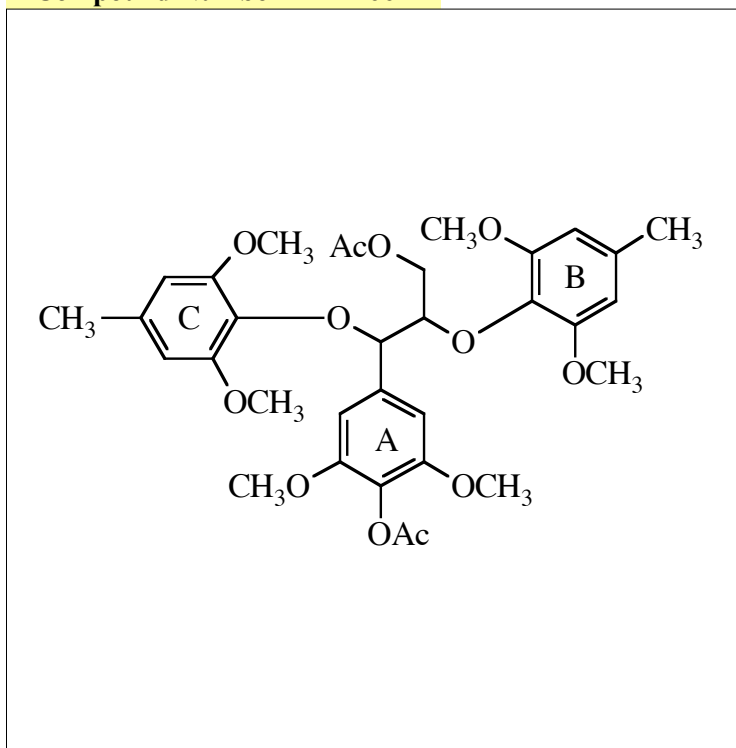
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.16	63	17.41	76	16.90	26
β Ac Me	20.56	55	20.47	61	20.26	49
4 Ac Me	20.66	57	20.54	62	20.26	49
OMe	56.02	67	56.46	82	55.94	27
β	71.23	61	72.21	69	71.26	23
2	112.09	62	112.79	71	111.85	21
6	121.55	66	122.34	73	121.56	22
5	122.97	66	124.10	76	123.32	23
1	133.03	25	134.07	23	132.46	14
4	144.22	19	145.25	17	143.69	12
3	151.66	24	152.72	21	151.23	14
4 Ac C=O	168.31	22	168.62	22	168.02	11
β Ac C=O	170.32	23	170.54	22	169.74	13
α	195.65	23	196.21	24	195.52	13

¹H (acetone)

Atom	H Shifts	Mult	J
γ	1.48	d	7.0
β Ac Me	2.06	s	
4 Ac Me	2.27	s	
OMe	3.90	s	
β	6.00	q	7.0
5	7.23	d	8.0
2	7.64	O/Lap	
6	7.66	O/Lap	
<u>CDCl₃</u>			
γ	1.53	d	7.0
βAc Me	2.14	s	
4 Ac Me	2.33	s	
OMe	3.89	s	
β	3.93	q	7.0
5	7.14	d	8.1
6	7.55	dd	8.1, 2.0
2	7.59	d	2.0

Notes:

Pearl Collection
25 mg
HSQC and HMBC in acetone



S-a-S-b-S

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.83	s	
A4 Ac Me	2.17	s	
C α	2.18	s	
B α	2.22	s	
B OMe	3.69	s	
A/C OMe	3.73	s	
C/A OMe	3.74	s	
γ1	4.53	dd	11.7, 2.8
γ2	4.63	m	
β	4.73	m	
α	5.72	d	6.2
C 2,6	6.37	s	
B 2,6	6.40	s	
A 2,6	6.81	s	

Notes:

SRIX-138A2

3mg

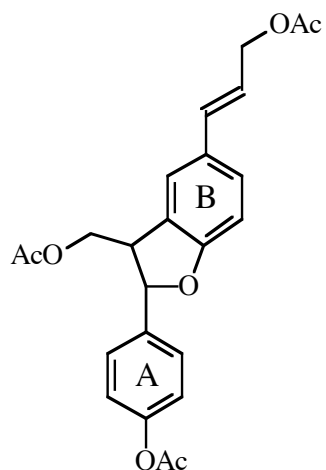
HSQC and HMBC in acetone

A and C OMe shifts may be switched

B and C CH3's may be switchd

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.56	34	20.27	37	20.05	13
γ Ac Me	20.87	36	20.69	29	20.30	13
B α	21.76	35	21.61	31	21.18	12
C α	21.82	42	21.68	30	21.25	13
B OMe	55.87	79	56.27	86	55.46	25
B OMe	55.87	79	56.27	86	55.46	25
A OMe	55.96	93	56.35	94	55.62	32
A OMe	55.96	93	56.35	94	55.62	32
C OMe	56.12	86	56.39	90	55.67	29
C OMe	56.12	86	56.39	90	55.67	29
γ	64.44	30	64.64	33	62.98	8
β	81.52	31	82.68	36	80.92	9
α	81.89	34	83.16	37	81.36	8
A2	105.52	65	105.94	69	104.49	17
A6	105.52	65	105.94	69	104.49	17
B2	105.81	69	107.01	72	105.74	20
B6	105.81	69	107.01	72	105.74	20
C2	106.22	67	107.26	69	106.08	18
C6	106.22	67	107.26	69	106.08	18
A4	128.10	8	129.11	7	127.23	5
C1	133.01	20	133.61	19	132.21	6
B1	133.48	27	133.87	15	132.47	8
C4	133.48	27	134.38	10	132.72	10
B4	133.62	18	135.03	8	132.75	10
A1	138.02	20	138.47	20	136.90	7
A3	150.94	35	152.21	27	150.59	15
A5	150.94	35	152.21	27	150.59	15
C3	152.47	33	153.62	30	151.95	16
C5	152.47	33	153.62	30	151.95	16
B3	152.87	34	153.87	30	152.22	16
B5	152.87	34	153.87	30	152.22	16
A4 Ac C=O	168.75	18	168.52	13	167.91	7
γ Ac C=O	168.75	16	170.78	16	167.91	8

Compound Number 267



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.89	40	20.67	29		
Ac Me	21.11	34	20.81	23		
Ac Me	21.19	58	20.94	41		
β	50.26	40	51.06	30		
Bγ	65.35	42	65.51	33		
Aγ	65.68	40	66.10	31		
α	87.22	40	87.85	32		
B3	109.86	40	110.20	29		
Bβ	121.03	41	122.13	33		
A3	121.98	94	122.88	58		
A5	121.98	94	122.88	58		
B6	122.89	38	123.88	30		
A2	126.89	88	127.70	55		
A6	126.89	88	127.70	55		
B5	126.49	23	127.98	14		
B2	128.55	42	129.19	29		
B1	129.87	21	130.82	14		
Bα	134.16	38	134.43	30		
A1	138.63	19	139.84	12		
A4	150.64	15	151.77	12		
B4	159.85	14	160.77	10		
A4 C=O	169.44	17	169.62	13		
Bγ C=O	170.96	12	170.77	8		
Aγ C=O	170.84	20	170.94	13		
Proton shifts in CDCl ₃						
Ac Me	2.07					
Ac Me	2.10					
Ac Me	2.30					
β	3.70					
γ1	4.29					
γ2	4.46					
Bγ	4.71					
α	5.54					
Bβ	6.14					
Bα	6.61					
B3	6.85					
A 3,5	7.09					
B2	7.27					
B6	7.27					
A 2,6	7.37					

¹H (acetone)

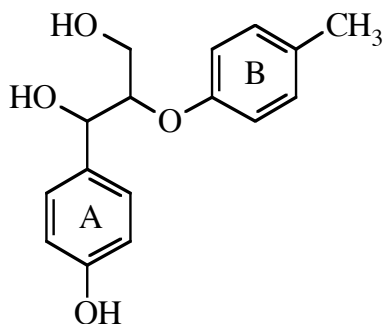
Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.01	s	
Ac Me	2.24	s	
β	3.74	m	
γ1	4.34	dd	11.1, 7.8
γ2	4.46	dd	11.1, 5.4
Bγ	4.66	dd	6.4, 1.4
α	5.64	d	6.4
Bβ	6.23	dt	15.9, 6.4
Bα	6.66	d	15.9
B3	6.85	d	8.3
A 3,5	7.13	d	8.5
B2	7.33	dd	8.3, 2.0
A 2,6	7.45	d	8.5
B6	7.45		

Notes:

LLL XXV-17A-E 11mg

Note: B5 and Bγ C=O move in CDCl₃ to lower ppm relative to acetone shifts

HSQC and HMBC run in Acetone

*erythro*

H-b-H5e

¹H (acetone)

Atom	H Shifts	Mult	J
B α	2.19	s	
γ 1	3.77	dd	11.7, 4.4
γ 2	3.85	dd	11.7, 5.2
β	4.34	m	
α	4.89	d	5.6
A,B 3,5	6.78		
B 2,6	6.99		8.5
A 2,6	7.28		8.5
CDCl ₃			
B α	2.25	s	
γ 1	3.80	dd	11.9, 4.0
γ 2	3.90	dd	11.9, 4.4
β	4.28	m	
α	4.98	d	5.2
A,B 3,5	6.74		
A 2,6	7.02	d	8.3
B 2,6	7.20	d	8.3

Notes:

S. Ralph SRIX-62 24mg

70% erythro

A4 and B4 switch in CDCl₃

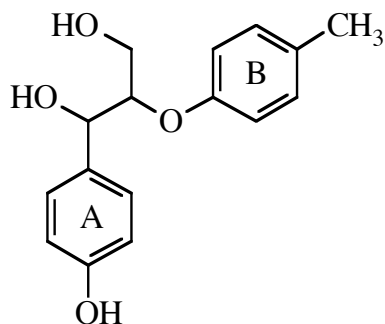
B1 falls between A and B 2,6 in DMSO

HSQC and HMBC in all solvents

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	20.58	58	20.45	28	20.07	43
γ	61.32	34	61.90	22	60.07	26
α	73.89	35	73.81	20	71.36	26
β	82.25	40	84.15	27	83.58	27
A3	115.52	83	115.50	64	114.46	64
A5	115.52	83	115.50	64	114.46	64
B3	116.79	90	117.33	49	116.22	64
B5	116.79	90	117.33	49	116.22	64
A2	127.71	81	128.89	80	128.01	58
A6	127.71	81	128.89	80	128.01	58
B2	130.18	98	130.44	60	129.52	68
B6	130.18	98	130.44	60	129.52	68
B1	131.41	27	130.61	14	129.03	26
A1	132.13	27	133.98	11	132.76	22
A4	155.78	28	157.43	13	156.25	30
B4	155.53	23	157.65	8	156.67	20

Compound Number 269

¹³C



threo

H-b-H5t

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bα	20.53	44	20.46	28	20.05	45
γ	60.95	27	61.54	24	59.99	18
α	73.64	26	73.15	19	70.79	25
β	83.32	28	84.43	25	83.41	27
A3	115.61	68	115.52	63	114.45	62
A5	115.61	68	115.52	63	114.45	62
B3	116.64	79	117.15	47	115.96	71
B5	116.64	79	117.15	47	115.96	71
A2	128.38	66	128.87	75	127.68	63
A6	128.38	66	128.87	75	127.68	63
B2	130.19	87	130.47	61	129.55	74
B6	130.19	87	130.47	61	129.55	74
B1	131.17	20	130.56	16	128.99	28
A1	131.42	25	133.58	13	132.50	19
A4	155.95	20	157.51	15	156.22	24
B4	156.21	26	159.00	10	156.95	20

¹H (acetone)

Atom	H Shifts	Mult	J
Bα	2.21	s	
γ1	3.48	dd	11.5, 5.4
γ2	3.78	dd	11.5, 4.2
β	4.35	m	
α	4.94	d	5.2
A 3,5	6.78		
B 3,5	6.87		
B 2,6	7.02		
A 2,6	7.27		
<u>CDCl₃</u>			
Bα	2.25	s	
γ1	3.46	dd	12.1, 3.8
γ2	3.73	dd	12.1, 4.0
β	4.28	m	
α	4.91	d	6.8
A 3,5	6.72		
B 3,5	6.84		
A 2,6	7.01		
B 2,6	7.18		

Notes:

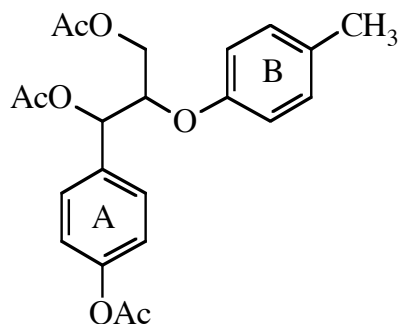
SRIX-62 20mg
75% threo

HSQC and HMBC in DMSO

B1 falls between A and B 2,6 in DMSO
A4 and B4 may be switched in CDCl₃

Compound Number 270

¹³C



erythro

H-b-H5e

¹H (acetone)

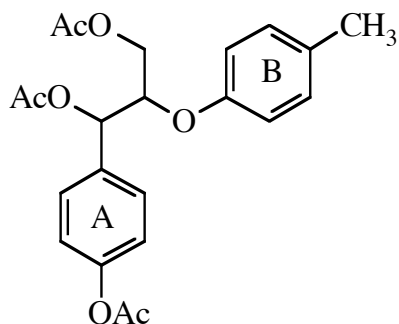
Atom	H Shifts	Mult	J
A _γ Ac Me	1.94	s	
A _α Ac Me	2.06	s	
B _α	2.23	s	
A ₄ Ac Me	2.23	s	
γ ₁	4.23	dd	11.9, 4.2
γ ₂	4.34	dd	11.9, 6.0
β	4.83	m	
α	6.04	d	5.4
B 3,5	6.85	m	
B 2,6	7.08	m	
A 3,5	7.08	m	
A 2,6	7.51	d	8.7

Notes:

SRIX-62 25mg
70% erythro
HSQC and HMBC in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B _α	20.31	64	20.49	46	20.04	42
A _γ Ac Me	20.50	52	20.58	41	20.40	42
A _α Ac Me	20.77	67	20.86	41	20.63	42
A ₄ Ac Me	20.88	74	20.94	52	20.77	48
γ	62.15	49	62.86	36	61.77	21
α	73.33	50	74.12	34	72.74	24
β	78.69	53	79.27	52	77.41	23
B ₃	116.76	103	117.56	68	116.37	61
B ₅	116.76	103	117.56	68	116.37	61
A ₃	121.44	110	122.49	74	121.66	52
A ₅	121.44	110	122.49	74	121.66	52
A ₂	128.30	133	129.31	92	128.31	54
A ₆	128.30	133	129.31	92	128.31	54
B ₂	129.88	148	130.74	107	130.33	71
B ₆	129.88	148	130.74	107	130.33	71
B ₁	131.39	25	131.85	12	130.51	21
A ₁	133.83	30	135.33	18	134.09	24
A ₄	150.54	23	151.79	12	150.23	19
B ₄	155.77	22	157.04	12	155.46	19
A ₄ Ac C=O	168.99	22	169.53	16	169.05	19
α Ac C=O	169.31	22	169.86	11	169.21	19
γ Ac C=O	170.48	20	170.76	11	170.04	18
Proton shifts in CDCl ₃						
A _γ Ac Me	2.02	s				
A _α Ac Me	2.09	s				
B _α	2.28	s				
A ₄ Ac Me	2.28	s				
γ ₁	4.20	dd	11.7, 4.4			
γ ₂	4.37	dd	11.7, 6.2			
β	4.66	m				
α	6.04	d	5.2			
B 3,5	6.77	d	8.5			
B 2,6	7.07	m				
A 3,5	7.07	m				
A 2,6	7.42	d	8.5			

Compound Number 271



threo

H-b-H5t

¹H (acetone)

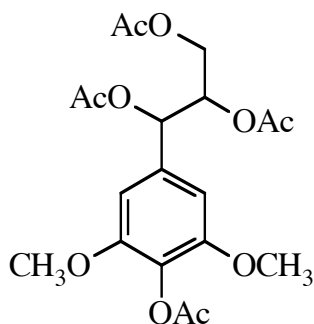
Atom	H Shifts	Mult	J
A γ Ac Me	1.94	s	
A α Ac Me	2.01	s	
B α	2.24	s	
A4 Ac Me	2.24	s	
γ 1	4.01	dd	11.9, 5.8
γ 2	4.23	dd	11.9, 4.2
β	4.83	m	
α	6.10	d	6.4
B 3,5	6.90		
B 2,6	7.10		
A 3,5	7.10		
A 2,6	7.51	d	8.5

Notes:

SRIX-62 25mg
75% threo

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	20.49	65	20.49	59	20.03	
A γ Ac Me	20.64	54	20.55	54	20.39	
A α Ac Me	20.97	65	20.88	57	20.64	
A4 Ac Me	21.08	75	20.94	72	20.77	
γ	62.68	56	63.27	53	62.23	
α	73.94	55	74.88	55	73.77	
β	78.49	64	79.27	76	77.74	
B3	116.48	124	117.24	104	116.09	
B5	116.48	124	117.24	104	116.09	
A3	121.78	118	122.67	109	121.81	
A5	121.78	118	122.67	109	121.81	
A2	128.47	141	129.33	124	128.37	
A6	128.47	141	129.33	124	128.37	
B2	130.04	154	130.74	137	129.81	
B6	130.04	154	130.74	137	129.81	
B1	131.37	29	131.66	22	130.33	
A1	133.81	33	135.22	25	134.04	
A4	150.84	28	151.94	21	150.36	
B4	156.33	24	157.59	20	156.12	
A4 Ac C=O	169.15	21	169.52	21	169.04	
α Ac C=O	169.73	24	170.04	19	169.41	
γ Ac C=O	170.57	24	170.68	17	169.98	
Proton shifts in CDCl ₃						
A γ Ac Me	1.98	s				
A α Ac Me	2.05	s				
B α	2.28	s				
A4 Ac Me	2.28	s				
γ 1	4.00	dd	11.7, 6.0			
γ 2	4.26	dd	11.7, 4.4			
β	4.64	m				
α	6.09	d	6.4			
B 3,5	6.85	d	8.5			
B 2,6	7.07	m				
A 3,5	7.07	m				
A 2,6	7.42	d	8.5			

Compound Number 272
¹³C


Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.48	82	20.23	94	20.08	33
γ Ac Me	20.72	56	20.55	73	20.39	31
β Ac Me	20.85	74	20.71	80	20.46	29
α Ac Me	21.01	71	20.83	81	20.65	33
OMe	56.31	166	56.58	179	56.03	62
OMe	56.31	166	56.58	179	56.03	62
γ	62.17	45	62.85	65	61.92	14
β	72.24	46	72.99	73	71.73	16
α	73.78	47	74.45	60	73.17	16
2	104.05	97	104.76	125	103.59	33
6	104.05	97	104.76	125	103.59	33
4	129.13	9	129.79	8	127.83	8
1	134.19	30	135.85	28	134.79	15
3	152.45	45	153.30	48	151.64	29
5	152.45	45	153.30	48	151.64	29
A4 Ac C=O	168.51	20	168.42	22	167.93	13
α Ac C=O	169.67	22	170.00	23	169.43	23
β Ac C=O	170.09	24	170.21	22	169.43	23
γ Ac C=O	170.43	19	170.65	21	169.95	11
Proton shifts in CDCl ₃						
γ Ac Me	2.06	s				
β Ac Me	2.08	s				
α Ac Me	2.10	s				
A4 Ac Me	2.33	s				
OMe	3.83	s				
γ1	3.83		hidden 1			
γ2	4.26	dd	2.1, 3.6			
β	5.42	m				
α	5.92	d	7.6			
2,6	6.61	s				

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.99	s	
β Ac Me	2.01	s	
α Ac Me	2.08	s	
A4 Ac Me	2.21	s	
OMe	3.81	s	
γ1	3.91	dd	12.1, 6.2
γ2	4.23	dd	12.1, 3.8
β	5.41	m	
α	5.95	d	6.8
2,6	6.80	s	

Notes:

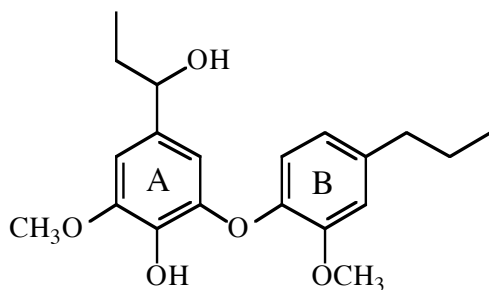
L. Landucci XXII-138D7 19mg

2:1 mix of isomers

 minor isomer shifts in acetone and CDCl₃

62.34, 72.99, 73.76, 104.67, 135.63, 153.19

61.42, 72.48, 73.03, 103.75, 134.19, 152.27



G-5-O-4-G

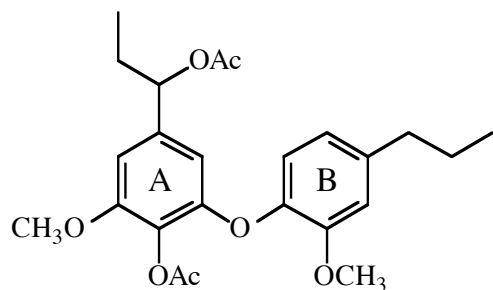
¹H (acetone)

Atom	H Shifts	Mult	J
A γ	0.83	t	J = 7.3
B γ	0.93	t	J = 7.3
A β ,B β	1.62	m	
B α	2.56	bt	J = 7.6
OMe	3.81	s	
OMe	3.86	s	
A α	4.39	bt	J = 6.1
A6	6.45	d	J = 1.5
B6	6.70	dd	J = 8.1, 1.5
B5	6.75	d	J = 8.1
A2	6.76	d	J = 1.5
B2	6.94	d	J = 1.5
A4-OH	7.39	s	

Notes:

FPL Collection 11mg
 Both A5 and A1 change order in CDCl₃ compared to acetone-d₆
 B4 and A4 assignments taken from 2D in CDCl₃
 gHSQC and gHMBC in all solvents

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ	10.16	38	10.48	51	10.06	40
B γ	13.85	47	14.05	49	13.68	40
B β	24.61	37	25.41	47	24.15	39
A β	31.83	34	33.20	43	32.05	30
B α	37.87	37	38.33	50	38.50	34
B OMe	55.95	36	56.27	49	55.57	37
A OMe	56.29	34	56.56	49	55.91	37
A α	75.94	30	75.40	27	73.36	30
A2	104.43	33	105.66	47	104.81	27
A6	109.38	34	109.81	49	108.57	28
B2	112.88	34	114.27	49	113.19	28
B5	119.57	33	119.64	48	118.00	29
B6	120.77	35	121.35	50	120.25	31
A4	136.18	12	137.28	9	135.77	23
A1	135.83	18	137.69	23	136.52	24
B1	139.42	17	139.25	21	137.60	24
B4	143.63	10	145.23	18	143.69	20
A5	144.59	11	145.44	18	144.24	20
A3	148.01	13	149.29	18	148.46	22
B3	150.27	13	151.45	20	149.79	21
Proton shifts in CDCl ₃	CDCl ₃ ppm	mult	CDCl ₃ J =			
A γ	0.86	t	7.6			
B γ	0.95	t	7.6			
A β ,B β	1.67	m				
B α	2.56	bt	7.6			
OMe	3.85	s				
OMe	3.91	s				
A α	4.43	bt	6.6			
A6	6.53	d	1.8			
A2,B6	6.69	m				
B2	6.79	d	2.0			
B5	6.88	d	8.1			



G-5-O-4-G diacetate

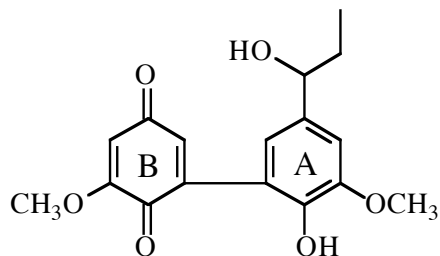
¹H (acetone)

Atom	H Shifts	Mult	J
A γ	0.82	t	J = 7.3
B γ	0.93	t	J = 7.3
B β	1.64	m	
A β	1.73	m	
A α Ac Me	1.96	s	
A4 Ac Me	2.18	s	
B α	2.58	bt	J = 7.3
B OMe	3.76	s	
A OMe	3.84	s	
A α	5.48	m	
A6	6.32	m	overlapped
B6	6.75	m	overlapped
A2	6.77	m	overlapped
B5	6.84	d	J = 8.1
B2	6.96	d	J = 1.7

Notes:

FPL Collection 6 mg
 gHSQC and gHMBC in CDCl₃ and acetone-d₆
 A4 upon acetylation appears as cluster of signals
 in acetone-d₆ B5 and B6 too close to assign definitively

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ	9.90	37	10.12	63	9.75	35
B γ	13.81	36	14.00	64	13.63	32
A4 Ac Me	20.42	33	20.22	54	20.09	32
A α Ac Me	21.19	31	20.94	50	20.78	31
B β	24.62	37	25.36	64	24.14	34
A β	29.31	36	30.11	60	28.91	27
B α	37.87	36	38.36	64	37.05	31
B OMe	55.98	36	56.18	61	55.64	36
A OMe	56.22	36	56.56	63	56.17	30
A α	76.92	35	77.23	60	76.07	22
A2	104.58	33	104.97	58	104.20	19
A6	108.53	33	107.93	58	106.52	25
B2	113.11	34	114.36	59	113.48	23
B6	120.49	34	121.58	64	120.55	25
B5	120.86	37	121.73	67	120.68	26
A4	129.59	8	129.57	8	128.30	11
A1	138.79	20	140.24	30	139.23	22
B1	139.73	18	141.00	28	139.90	22
B4	142.84	13	143.37	17	141.62	20
A5	150.39	14	151.63	19	150.02	16
B3	150.72	14	152.15	21	150.66	11
A3	152.46	15	153.60	20	152.18	17
A4 Ac C=O	168.48	12	168.46	19	168.05	19
A α Ac C=O	170.26	15	170.25	19	169.76	17
Proton shifts in CDCl ₃	CDCl ₃		CDCl ₃			
A γ	0.84	t	J = 7.6			
B γ	0.95	t	J = 7.6			
B β	1.65	m				
A β	1.76	m				
A α Ac Me	2.03	s				
A4 Ac Me	2.24	s				
B α	2.57	bt	J = 7.6			
B OMe	3.80	s				
A OMe	3.85	s				
A α	5.52	bt	J = 6.8			
A6	6.38	d	J = 1.7			
A2	6.63	dd	J = 2.0			
B6	6.69	dd	2.0, 8.1			
B2	6.78	d	J = 1.7			
B5	6.84	d	J = 8.1			



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.21	28	10.64	45	10.30	29
β	31.90	24	33.21	38	32.03	24
B OMe	56.19	24	56.46	45	55.87	28
A OMe	56.39	28	56.84	44	56.57	27
α	75.72	22	75.40	30	73.45	26
B2	107.16	26	107.77	42	107.06	23
A2	109.43	25	110.91	43	110.48	20
A5	118.56	14	120.61	63	120.06	22
A6	120.19	26	120.61	63	119.35	22
B6	135.42	26	135.34	38	134.11	20
A1	136.30	19	138.14	32	136.85	23
A4	143.07	16	144.12	24	144.04	14
B5	142.53	14	144.79	24	142.84	19
A3	146.78	17	148.08	25	147.29	18
B3	159.02	15	160.27	26	159.09	18
B4	180.27	12	180.63	19	179.87	3
B1	187.51	17	188.03	25	187.39	16

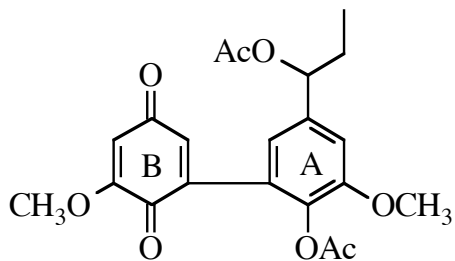
Proton shifts in CDCl ₃		Proton shifts in DMSO	
ppm	mult	ppm	mult
γ	t	0.82	t
β	m	1.58	m
B OMe	s	3.80	s
A OMe	s	4.33	m
α	bt	4.33	m
α OH	d	5.06	d
B2	d	6.14	d
A6	bd	6.61	d
B6	d	6.64	s
A2	bd	6.96	s
		8.81	s

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.4
β	1.70	m	
A OMe	3.88	s	
B OMe	3.89	s	
α	4.50	bt	J = 6.4
B2	6.07	d	J = 2.2
B6	6.69	d	J = 2.2
A6	6.77	d	J = 1.7
A2	7.07	d	J = 1.7
A4-OH	7.76	s	

Notes:

FPL Collection 5 mg
 SRX-84
 gHSQC and gHMBC in all solvents
 A5 is coincident with A6 in acetone-d6
 B5 and A4 change order in CDCl₃
 A6 and A5 change order in DMSO
 A and B OMe not definitively assigned in ¹³C DMSO-d6



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.06	60	10.22	29	9.84	13
A4 Ac Me	20.56	55	20.31	27	20.13	13
Aα Ac Me	21.28	55	21.02	26	20.88	15
β	29.33	61	30.13	01	28.85	9
A OMe	56.26	61	56.55	39	56.15	9
B OMe	56.53	59	56.91	28	56.60	9
α	77.29	60	77.01	27	75.82	6
B2	107.40	54	108.00	27	107.33	7
A2	112.23	50	112.42	26	111.63	6
A6	120.36	51	120.65	27	119.58	7
A5	126.86	46	128.45	9	127.00	5
B6	135.67	51	135.94	28	134.85	7
A4	137.30	27	138.05	5	136.35	3
A1	139.15	54	140.40	16	139.08	7
B5	141.95	39	142.79	9	141.15	5
A3	151.44	49	152.38	13	150.83	5
B3	158.88	47	159.98	10	158.74	4
A4 Ac C=O	168.19	46	168.42	10	167.88	6
Aα Ac C=O	170.44	46	170.38	10	169.95	8
B4	179.90	41	180.40	7	179.51	3
B1	186.98	45	187.46	11	186.80	5

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.3
β	1.88	m	
Aα Ac Me	2.06	s	
A4 Ac Me	2.11	s	
A OMe	3.87	s	
B OMe	3.89	s	
α	5.68	t	J = 6.9
B2	6.10	d	J = 2.2
B6	6.59	d	J = 2.2
A6	6.94	d	J = 1.7
A2	7.19	d	J = 1.7

Proton shifts in CDCl₃

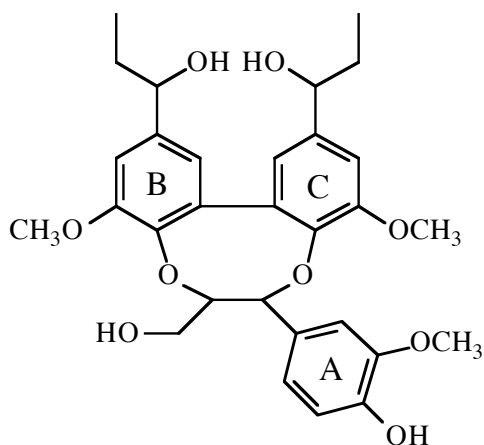
Atom	ppm	Mult	J
γ	0.93	mult	J
β	1.86		
Aα Ac Me	2.10		
A4 Ac Me	2.18		
A OMe	3.86		
α	5.66	t	J = 6.9
B2	5.99	d	J = 2.5
B6	6.70	d	J = 2.5
A6	6.81	d	J = 2.2
A2	7.00	d	J = 2.0

Notes:

FPL Collection

SRX-84 5 mg

beta carbon shift taken from DEPT-135, obscured by solvent in ¹³C acetone-d₆Compound began to degrade after being taken up in CDCl₃, shifts taken from mixture with unknown for CDCl₃ and DMSO-d₆



dibenzodioxicin

¹H (acetone)

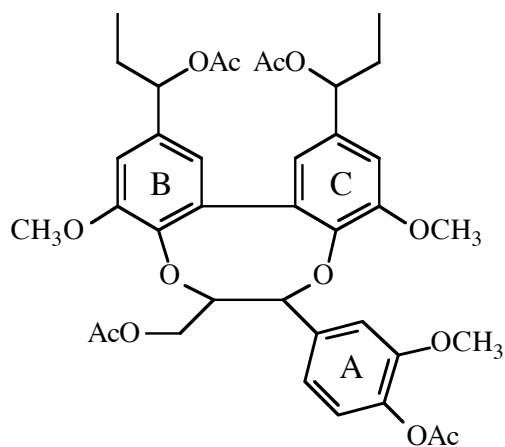
Atom	H Shifts	Mult	J
B,C γ	0.96	m	
B,C β	1.75	m	
Aγ1	3.48	m	
Aγ2	3.70	m	
OMe	3.77	s	
OMe	3.83	s	
OMe	3.92	s	
A β	4.03	m	
B,C α	4.60	m	
Aα	4.77	d	J = 10.0
A5	6.84	d	J = 8.1
A6	6.89	dd	J = 8.1, 1.7
C6	6.96	m	
A2	7.01	d	J = 1.7
B6	7.05	m	
C2	7.06, 7.08	d's	J = 2.0
B2	7.14, 7.16	d's	J = 2.0

Notes:

SRVII-81 16mg

Chiral centers at B and C alpha give rise to close isomeric chemical shifts for the B and C ring carbons. The Δ CS is less than 0.2 ppm and the reported shift is the average value.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B or C γ	10.34	97	10.71	60	10.39	32
B or C γ	10.38	97	10.77	60	10.49	31
B or C β	31.88	41	33.23	45	32.11	34
B or C β	32.08	48	33.30	45	32.11	34
OMe	55.78	108	56.06	50	55.54	31
A OMe	55.85	105	56.29	75	55.69	39
OMe	56.00	105	56.33	90	55.80	35
Aγ	62.97	47	62.97	32	60.66	16
B or C α	75.84	63	75.52	51	73.63	32
B or C α	75.84	63	75.52	51	73.63	32
Aα	84.82	38	85.18	29	83.34	13
A β	86.93	39	87.71	27	85.57	13
B2	108.86	23	110.17	19	109.45	16
C2	109.47	54	110.55	22	109.57	15
A2	109.47	54	111.94	38	111.82	18
A5	114.41	52	115.56	42	115.14	22
C6	118.92	41	119.26	31	117.93	21
B6	119.35	22	119.57	20	117.93	21
A6	120.90	52	121.33	41	120.11	17
A1	130.01	45	131.38	30	129.59	13
C5	133.19	15	133.24	14	131.87	10
B5	132.12	23	133.91	11	132.08	7
C1	141.36	21	143.38	18	142.41	12
B1	141.74	20	143.72	16	142.41	12
B4	144.75	22	145.95	16	144.87	9
C4	145.98	56	146.73	21	145.04	9
A4	145.98	56	147.43	35	146.31	20
A3	146.80	45	148.16	34	147.18	19
B3	151.72	22	152.75	15	151.68	21
C3	152.24	38	153.15	30	151.68	21
Proton shifts in CDCl ₃						
B,C γ	0.97					
B,C β	1.81					
Aγ	3.55					
OMe	3.76					
OMe	3.84					
OMe	3.92					
A β	4.14					
A,B,C α	4.59					
DMSO						
B,C γ	0.90					
B,C β	1.66					
Aγ1	3.22					
Aγ2	3.86					
A β	3.84					
B,C α	4.47					
Aα	4.81					

¹H (acetone)

Atom	H Shifts	Mult	J
B,C γ	0.93	m	
B,C β	1.91	m	
γAc Me	1.91	s	
B,C α AcMe	2.07	s	
A4 Ac Me	2.24	s	
OMe	3.79	s	
OMe	3.94	s	
γ1	4.05	dd	J = 12.0, 3.4
β	4.30	m	
γ2	4.43	dd	J = 12.0, 3.4
α	4.93	d	J = 10.0
B,C α	5.71	m	
A5,A,B,C6	7.00-7.06	m	from HSQC
B or C 2	7.09	m	from HSQC
B or C 2	7.13	m	from HSQC
A2	7.17	m	from HSQC

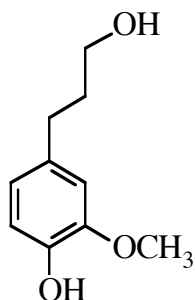
Notes:

SRVII-81Ac
gHSQC and gHMBC in d₆-acetone and CDCl₃
see also compound #277 notes

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bγ	10.19	90	10.43	66	10.02	40
Cγ	10.19	90	10.43	66	10.02	40
A4 Ac Me	20.74	98	20.50	71	20.36	42
AαAc Me	20.84	75	20.58	61	20.42	37
B Ac Me	21.40	85	21.10	63	20.90	34
C Ac Me	21.40	85	21.10	63	20.90	34
B or C β	29.28	31	30.08	20	28.75	26
B or C β	29.38	33	30.43	18	29.22	23
OMe	56.10	84	56.19	53	55.74	55
OMe	56.17	70	56.32	77	55.94	61
OMe	56.22	84	56.38	62	56.02	47
Aγ	63.93	41	64.33	33	63.14	28
B or Cα	77.26	24	77.49	31	76.34	32
B or Cα	77.51	24	77.62	30	76.39	32
A β	82.76	24	83.41	25	81.80	17
Aα	84.45	25	85.33	27	84.06	21
B or C2	110.27	20	110.79	15	109.96	18
B or C2	111.03	20	111.19	14	110.43	16
A2	111.51	32	112.78	34	112.08	26
B or C6	119.26	14	119.35	12	118.00	10
B or C6	119.74	14	120.00	16	118.71	12
A6	119.91	49	120.74	33	119.98	26
A5	122.76	43	123.46	39	122.61	35
B or C5	132.63	23	133.22	13	131.58	10
B or C5	132.63	23	133.42	13	131.77	14
A1	137.13	45	138.06	20	136.45	29
B or C1	137.28	26	138.57	14	137.33	15
B or C1	137.28	26	138.75	14	137.60	12
A4	139.95	39	140.80	22	139.23	34
B4	146.17	18	146.86	14	145.13	17
C4	146.57	16	147.24	13	145.55	22
A3	151.32	33	152.14	27	150.63	39
B or C3	152.32	27	153.35	22	151.98	19
B or C3	152.52	36	153.53	19	152.16	20
A4 Ac C=O	168.84	46	168.94	33	168.47	43
BorCAcC=O	170.48	27	170.45	28	169.89	44
BorCAcC=O	170.58	26	170.45	28	169.92	44
Aγ Ac C=O	170.76	44	170.74	30	170.07	50
Proton shifts in CDCl ₃	CDCl ₃					
B,C γ	0.94					
B,C β	1.88					
Ac Me	1.97					
Ac Me	2.08					
Ac Me	2.12					
Ac Me	2.30					
OMe	3.74					
OMe	3.82					
OMe	3.90					
γ1	4.08					
β	4.14					
γ2	4.49					
α	4.85					
B,C α	5.70					
aromatic H	6.87-7.05					

Compound Number 279

¹³C



dihydro-coniferyl alcohol

¹H (acetone)

Atom	H Shifts	Mult	J
β	1.78	m	
α	2.60	bt	J = 8.0
γ	3.55	bt	J = 5.4
OMe	3.82	s	
6	6.64	dd	J = 8.1, 1.7
5	6.73	d	J = 8.1
2	6.81	d	J = 1.7

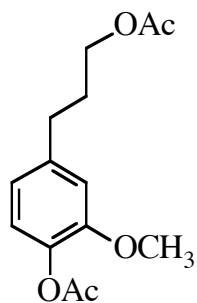
Notes:

J. Ralph 16 mg
gHSQC, gHMBC in d6-acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	31.72	24	32.44	33	32.62	26
β	34.43	24	35.85	27	35.99	26
OMe	55.84	25	56.21	31	56.95	30
γ	62.22	25	61.83	28	61.58	28
2	111.03	22	112.87	28	113.96	24
5	114.27	25	115.59	30	116.67	26
6	120.90	24	121.55	32	121.71	26
1	133.70	11	134.61	14	134.38	19
4	143.72	12	145.47	14	145.77	20
3	146.43	10	148.17	10	148.77	17
Proton shifts in CDCl ₃						
β	1.86					
α	2.63					
γ	3.67					
OMe	3.86					
6	6.68					
2	6.70					
5	6.83					
DMSO						
β	1.66					
α	2.48					
γ	3.40					
OMe	3.73					
γ OH	4.40					
6	6.55					
5	6.65					
2	6.72					
phenolic OH	8.60					

Compound Number 280

¹³C



dihydro-coniferyl alcohol diacetate

¹H (acetone)

Atom	H Shifts	Mult	J
β	1.94	m	
γ Ac Me	1.99	s	
A4 Ac Me	2.21	s	
α	2.68	bt	J = 7.8
OMe	3.79	s	
γ	4.05	t	J = 6.6
6	6.78	dd	J = 8.1, 1.7
5	6.94	d	J = 8.1
2	6.97	d	J = 1.7

Notes:

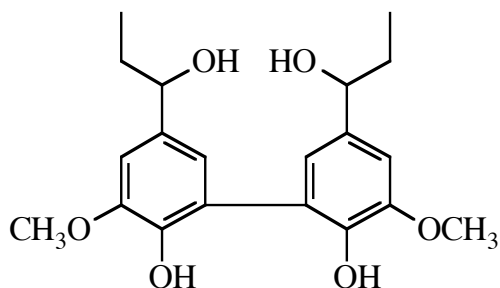
JRalph 25mg
gHSQC, gHMBC in d6-acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.49	65	20.79	36	20.31	46
γ Ac Me	20.78	52	20.50	44	20.61	47
β	30.02	80	31.08	50	29.67	45
α	32.03	79	32.63	54	31.34	41
OMe	55.68	81	56.14	52	55.59	48
γ	63.63	79	64.10	54	63.21	48
2	112.45	61	113.63	46	112.76	42
6	120.30	83	121.05	54	120.06	44
5	122.43	79	123.39	52	122.41	46
4	137.84	25	139.17	14	137.45	25
1	140.06	47	141.27	27	140.14	33
3	150.77	36	152.14	18	150.60	32
A4 Ac C=O	169.01	27	169.07	18	168.56	29
γAc C=O	170.94	23	171.00	15	170.38	25

Proton shifts in CDCl ₃			
β	1.95	m	
γ Ac Me	2.05	s	
A4 Ac Me	2.29	s	
α	2.67	bt	J = 7.8
OMe	3.81	s	
γ	4.10	t	J = 6.6
6	6.75	bdd	8.1, 1.5
2	6.78	bs	
5	6.93	d	J = 8.1

Compound Number 281

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.40	45	10.70	52	10.33	36
β	31.89	39	33.21	44	32.06	25
OMe	56.22	49	56.43	60	55.81	37
α	76.08	39	75.70	30	73.71	21
2	108.03	35	109.18	39	108.28	17
6	121.13	36	121.81	43	120.58	19
5	124.15	20	126.11	15	125.54	16
1	136.76	32	138.09	31	136.43	22
4	142.08	22	143.38	16	142.10	18
3	147.47	25	148.56	22	147.36	21

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.3
β	1.71	m	
OMe	3.88	s	
α	4.50	t	J = 6.36
6	6.85	d	J = 2.0
2	6.99	d	J = 2.0

Proton shifts in CDCl₃

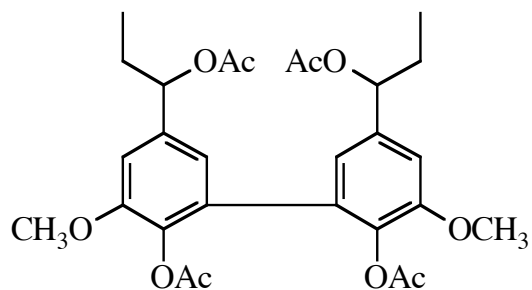
γ	0.93	t	J = 7.3
β	1.79	m	
OMe	3.92	s	
α	4.54	t	J = 6.36
6	6.87	d	J = 2.0
2	6.93	d	J = 2.0

DMSO

γ	0.84	t	J = 7.34
β	1.60	m	
OMe	3.81	s	
α	4.34	bs	
α OH	4.98	s	
6	6.66	d	J = 1.71
2	6.87	d	J = 1.71
4-OH	8.20	s	

Notes:

FPL Collection 10 mg
Compound has plane of symmetry



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.01	46	10.27	61	9.81	41
4 Ac Me	20.37	55	20.33	71	19.99	52
α Ac Me	21.23	43	21.04	63	20.82	42
β	29.46	34	30.20	70	28.90	30
OMe	56.10	48	56.46	66	56.04	40
α	76.86	49	77.29	56	76.03	30
2	110.14	29	110.87	44	110.20	19
6	120.24	19	120.41	24	118.88	13
5	131.15	20	131.87	26	130.12	22
4	137.00	14	137.91	17	136.15	18
1	138.66	21	140.04	31	138.82	23
3	151.37	24	152.64	38	151.14	27
Ac C=O	168.76	15	168.99	18	168.33	14
α Ac C=O	170.36	25	170.46	35	169.84	30

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.91	t	J = 7.34
β	1.87	m	
4 Ac Me	2.03	s	J = 6.6
α Ac Me	2.07	s	
OMe	3.87	s	
α	5.63	t	
6	6.79	bs	
2	7.11	bs	

1H in CDCl₃

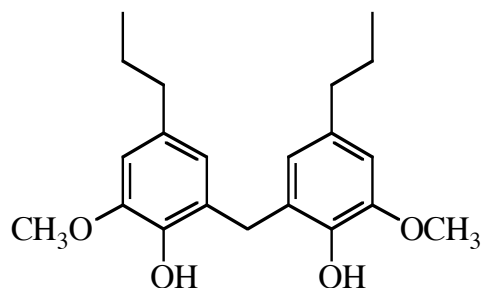
γ	0.90	t	J = 7.34
β	1.85	m	
4 Ac Me	2.08	s	J = 6.6
α Ac Me	2.09	s	
OMe	3.86	s	
α	5.63	t	
6	6.81	d	
2	6.90	d	

1H in DMSO

γ	0.86	t	J = 7.34
β	1.81	m	
4 Ac Me	2.02	s	J = 6.6
α Ac Me	2.07	s	
OMe	3.81	s	
a	5.58	t	
6	6.67	bs	
2	7.11	bs	

Notes:

FPL Collection 8mg
 Compound has plane of symmetry
 beta shifts in acetone taken from DEPT 135 spectrum
 g-HSQC, g-HMBC all solvents



biphenyl methane

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	13.78	39	14.04	47	13.59	23
β	24.79	32	25.57	45	24.34	20
CH2	29.39	20	29.56	34	28.74	10
α	27.80	38	38.42	49	37.10	21
OMe	55.93	43	56.27	49	55.73	23
2	109.14	39	110.18	37	109.62	17
6	122.36	33	123.13	45	121.77	18
5	126.13	22	127.59	31	127.08	17
1	134.02	18	133.74	31	132.02	18
4	141.01	13	142.84	30	141.72	14
3	146.41	21	147.75	29	147.05	15

¹H (acetone)

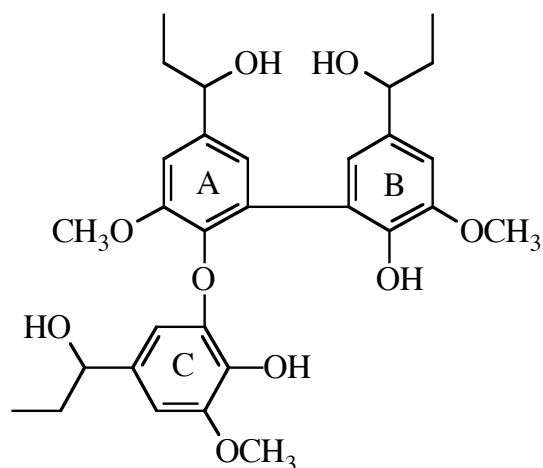
Atom	H Shifts	Mult	J
γ	0.87	t	J = 7.34
β	1.53	m	J = 7.34
α	2.41	dd	J = 7.34
OMe	3.79	s	
CH2	3.94	bs	
6	6.57	bd	J = 1.71
2	6.63	bd	J = 1.71
OH	7.23	bs	
CDCl ₃			
γ	0.91	t	J = 7.34
β	1.57	m	J = 7.34
α	2.46	dd	J = 7.34
OMe	3.85	s	
CH2	3.93	bs	
2	6.55	bd	J = 1.71
6	6.61	bd	J = 1.71
OH	6.00	bs	

¹H in DMSO

γ	0.82	t	J = 7.34
β	1.47	m	J = 7.34
α	2.35	bt	
OMe	3.75	s	
CH2	3.74	s	
6	6.37	bd	J = 1.71
2	6.59	bd	J = 1.71
OH	8.22	s	

Notes:

FPL Collection 20 mg
 plane of symmetry runs through molecule
 CH2 shift obscured by solvent in acetone, taken from Dept 135
 2 and 6 switch places in ¹H in CDCl₃

¹H (acetone)

Atom	H Shifts	Mult	J
B,C γ	0.76	m	
A γ	0.96	t	
B,C β	1.53	m	
A β	1.74	m	
OMe	3.75	s	
OMe	3.81	s	
C α	4.23	t	J = 6.36
B α	4.35	t	J = 6.36
A α	4.60	t	J = 6.36
C6	6.18	d	J = 1.7
C2	6.52	bd	J = 1.7
B6	6.75	d	J = 1.7
B2	6.86	d	J = 1.7
A6	6.98	d	J = 1.7
A2	7.11	d	J = 1.7

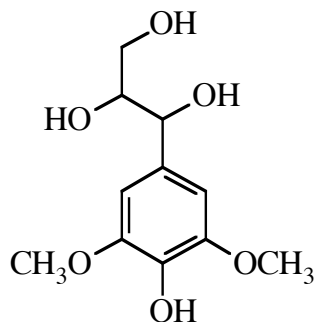
Notes:

FPL Collection 5 mg
g-HSQC and g-HMBC all solvents
many aromatic carbons show two close ¹³C signals in CDCl₃. Shift reported as average.
Obscured ¹H shifts taken from g-HSQC in CDCl₃
A1 and B4 may switch order in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.15	84	10.51	64	9.95	46
γ	10.25	100	10.59	74	10.06	39
γ	10.30	88	10.59	74	10.26	43
B β	31.42	59	32.97	45	32.06	61
C β	31.48	69	33.11	44	32.06	61
A β	32.00	66	33.27	56	32.06	61
OMe	56.15	108	55.34	81	55.68	60
OMe	56.15	108	55.34	81	55.74	51
OMe	56.30	75	56.52	43	55.83	65
A α	75.80	74	75.42	46	73.51	40
B α	75.80	74	75.57	45	73.60	39
C α	76.02	56	75.66	40	73.66	35
C2	103.82	17	104.50	32	103.06	16
C6	106.66	17	106.31	30	104.51	20
B2	108.03	27	109.13	31	108.35	17
A2	109.45	47	110.37	36	109.50	20
B6	120.98	35	121.58	36	120.18	19
A6	121.20	35	122.17	46	121.16	17
B5	123.38	11	124.87	13	124.13	18
A5	132.06	14	133.71	16	132.72	16
C4	134.74	16	135.37	14	133.50	24
C1	135.22	20	136.74	19	135.41	18
B1	136.04	15	137.33	26	135.91	21
A4	141.12	6	141.12	9	139.14	14
B4	142.24	22	143.44	17	142.18	17
A1	142.01	20	143.71	19	142.47	23
C5	145.59	13	147.29	19	146.54	19
B3	146.79	22	148.14	23	147.28	19
C3	147.44	21	148.53	16	147.59	23
A3	152.39	19	153.21	17	151.70	18
1H--CDCl ₃						
C α	4.25					
B α	4.40					
A α	4.63					
C6	6.14					
C2	6.41					
B6	6.76					
B2	6.78					
A6	6.97					
A2	7.04					
1H--DMSO						
B,C γ	0.66					
A γ	0.88					
B,C β	1.40					
A β	1.65					
B,C α	4.13					
A α	4.45					
C6	6.02					
C2	6.45					
B6	6.59					
B2	6.82					
A6	6.88					
A2	7.04					
C4 OH	7.93					
B4 OH	8.14					

Compound Number 285

¹³C



α -(4-hydroxy-3,5-dimethoxyphenyl)-glycerol

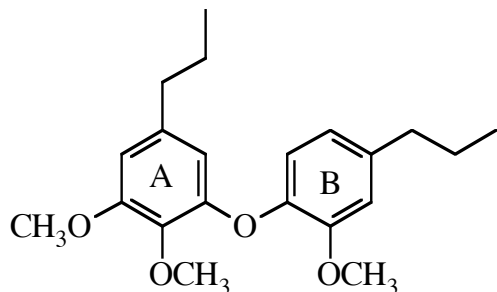
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.40	47	56.60	13	55.99	49
OMe	56.40	47	56.60	13	55.99	49
γ	63.24	19	64.24	6	63.10	20
β	74.69	20	76.26	9	75.49	20
α	75.99	22	76.26	9	74.24	20
2	103.03	42	105.32	12	104.72	39
6	103.03	42	105.32	12	104.72	39
1	131.60	10	133.98	4	133.58	18
4	134.57	10	135.90	3	134.31	19
3	147.28	20	148.32	7	147.42	34
5	147.28	20	148.32	7	147.42	34

¹H (acetone)

Atom	H Shifts	Mult	J
γ	3.63	d	J = 6.11
β	3.72	m	
OMe	3.81	s	
α	4.60	d	J = 6.11
2,6	6.71	s	
4 OH	7.09	bs	
CDCl ₃			
γ	3.77		
β	3.81		
OMe	3.91		
α	4.77		
2,6	6.64		
DMSO			
γ	3.42		
β	3.49		
OMe	3.72		
α	4.34		
2,6	6.58		

Notes:

FPL Collection 20 mg
 Marginally soluble in CDCl₃ and acetone-d₆
 g-HSQC and g-HMBC in all solvents
¹H shifts for β and γ taken from HSQC in DMSO
 β and α ¹³C shifts change order in DMSO (HSQC data)



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	13.67	29	13.93	10	13.54	38
γ	13.78	32	14.04	11	13.70	36
β	24.42	28	25.26	10	24.08	33
β	24.57	32	25.39	11	24.18	34
α	37.80	35	38.36	12	37.08	33
α	37.99	29	38.58	10	37.28	30
OMe	55.95	33	56.24	10	55.70	31
OMe	56.04	30	56.38	10	55.88	31
A4 OMe	60.94	22	60.67	7	60.21	26
A2	107.18	27	108.19	10	107.36	25
A6	111.16	27	111.12	10	109.83	26
B2	113.01	23	114.37	9	113.43	27
B5	119.20	27	120.54	10	119.39	28
B6	120.55	28	121.41	10	120.50	28
A4	137.70	5	138.59	2	136.89	11
A1	138.19	15	138.86	4	137.90	20
B1	138.63	14	139.80	4	138.71	20
B4	143.82	9	144.64	3	142.89	17
B3	150.37	9	151.82	3	150.31	34
A5	150.48	10	151.94	3	150.31	34
A3	153.27	10	154.67	3	153.26	18
1H-CDCl ₃						
γ	0.88					
γ	0.95					
Aβ	1.55					
Bβ	1.65					
Aα	2.43					
Bα	2.56					
B3 OMe	3.83					
A 3,4 OMe	3.87					
A6	6.26					
A2	6.47					
B6	6.68					
B 2,5	6.79					
1H-DMSO						
γ	0.82					
γ	0.90					
β	1.47					
β	1.60					
Aα	2.37					
Bα	2.53					
A4 OMe	3.67					
B3 OMe	3.73					
A3 OMe	3.79					
A6	6.09					
A2	6.58					
B6	6.70					
B5	6.75					
B2	6.94					

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.85	t	7.3
γ	0.93	t	7.3
Aβ	1.52	m	7.3
Bβ	1.64	m	7.3
Aα	2.41	bt	7.3
Bα	2.57	bt	7.3
A4 OMe	3.74	s	
B3 OMe	3.78	s	
A3 OMe	3.83	s	
A6	6.17	d	2.0
A2	6.58	d	2.0
B6	6.72	dd	1.7, 8.1
B5	6.78	d	8.1
B2	6.95	d	1.7

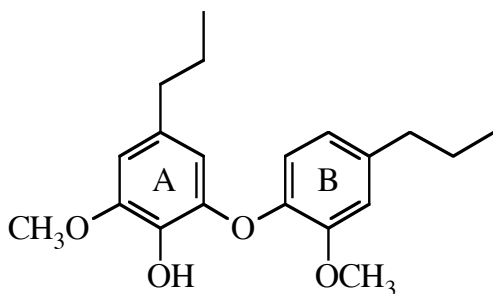
Notes:

SRX-110

12 mg

α,β,γ and B3, A5 are too close to assign with certainty

HSCQ and HMBC all solvents



4-O-5

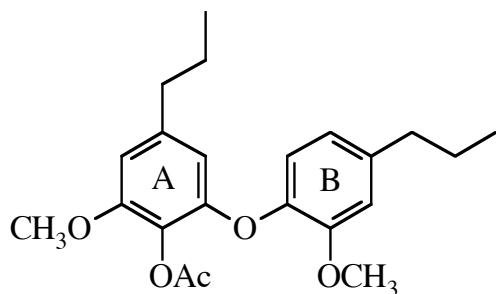
¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.85	t	7.3
γ	0.98	t	7.3
A β	1.52	m	7.3
B β	1.62	m	7.3
A α	2.41	bt	7.3
B α	2.55	bt	7.3
B OMe	3.80	s	
A OMe	3.83	s	
A6	6.25	d	2.0
A2	6.58	d	2.0
B6	6.69	dd	1.7, 8.3
B5	6.74	d	8.3
B2	6.92	d	1.7

Notes:

FPL Collection
12 mg
A5 and B4 may be switched in acetone but confirmed in CDCl₃ by 4-OH correlation to A5

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	13.49	63	13.91	38	13.48	31
γ	13.63	61	14.04	39	13.67	32
β	24.44	72	25.42	53	24.17	59
β	24.47	73	25.42	53	24.17	59
α	37.67	120	38.34	60	36.96	37
α	37.67	120	38.34	60	36.98	39
OMe	55.81	63	56.28	37	55.57	28
OMe	56.04	59	56.57	36	55.90	29
A2	107.05	57	108.23	36	107.39	23
A6	111.46	58	112.07	37	110.95	23
B2	112.75	60	114.27	34	113.17	24
B5	119.17	30	119.60	34	117.84	24
B6	120.53	61	121.37	33	120.27	25
A1	133.56	24	133.80	21	132.29	20
A4	134.79	20	136.58	10	135.22	19
B1	138.87	29	139.23	18	137.53	19
B4	143.84	19	145.27	14	143.77	16
A5	144.28	18	145.58	12	144.34	18
A3	147.59	20	149.43	13	148.71	19
B3	150.10	22	151.43	16	149.71	18
CDCl ₃						
γ	0.80					
γ	0.86					
A β	1.47					
B β	1.56					
A α	2.35					
B α	2.47					
B OMe	3.78					
A OMe	3.80					
4 OH	5.94					
A6	6.30					
A2	6.41					
B6	6.60					
B5	6.71					
B2	6.78					
DMSO						
γ	0.80					
γ	0.87					
A β	1.45					
B β	1.57					
A α	2.34					
B α	2.49					
B OMe	3.74					
A OMe	3.76					
A6	6.11					
A2	6.53					
B6	6.57					
B5	6.64					
B2	6.89					
4 OH	8.39					



4-O-5

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.86	t	7.3
γ	0.93	t	7.3
A β	1.53	m	7.3
B β	1.64	m	7.3
Ac Me	2.20	s	
A α	2.45	bt	7.3
B α	2.57	bt	7.3
B OMe	3.77	s	
A OMe	3.81	s	
A6	6.18	d	1.7
A2	6.63	d	1.7
B6	6.73	dd	2.0, 8.3
B5	6.82	d	8.3
B2	6.96	d	2.0

Notes:

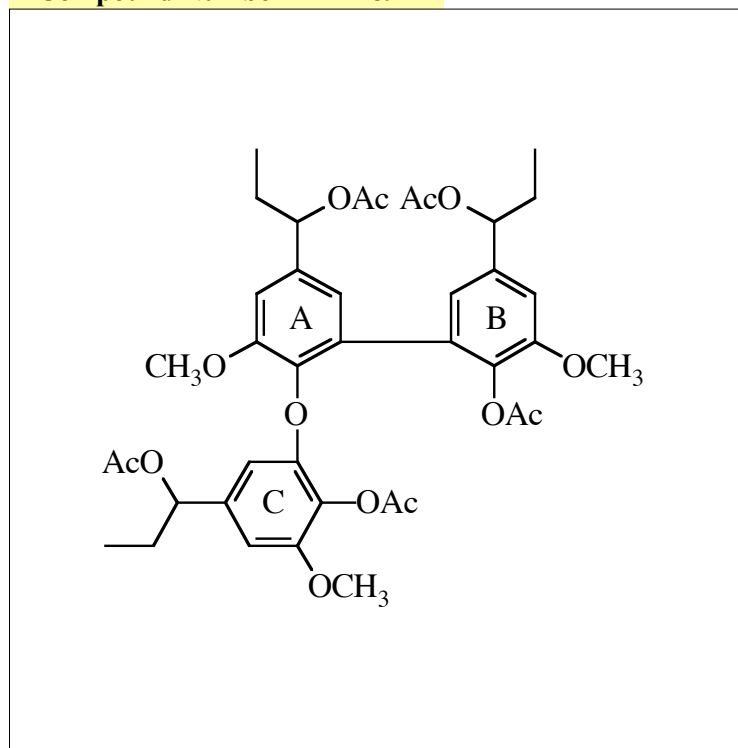
SRX-110BAc

12 mg

α, β, γ shifts are too close to assign with absolute certainty

B2 and B5 change order in CDC13 1H

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ	13.73	43	13.94	34	13.52	40
B γ	13.78	38	14.02	32	13.61	40
Ac Me	20.39	32	20.25	27	20.05	36
A β	24.33	38	25.22	31	24.00	36
B β	24.57	37	25.37	33	24.09	38
B α	37.83	36	38.37	32	37.03	32
A α	38.23	37	38.73	32	37.36	32
B OMe	56.08	62	56.24	30	55.63	37
A OMe	56.08	62	56.44	32	55.96	36
A2	106.59	36	107.26	31	106.58	26
A6	110.36	36	110.24	30	108.99	26
B2	113.16	35	114.39	28	113.39	28
B5	120.40	36	121.55	63	120.23	30
B6	120.82	36	121.55	63	120.53	21
A4	128.18	9	129.04	5	127.29	15
B1	139.36	20	140.62	14	139.39	16
A1	141.02	21	141.66	15	140.63	28
B4	143.25	15	143.86	9	142.07	22
A5	150.12	16	151.45	9	149.76	23
B3	150.73	17	152.14	11	150.53	25
A3	152.11	17	153.44	10	151.94	25
OAc C=O	168.70	14	168.57	9	168.04	19
1H--CDCl ₃						
γ	0.89					
γ	0.95					
A β	1.55					
B β	1.65					
Ac Me	2.24					
A α	2.45					
B α	2.56					
B OMe	3.82					
A OMe	3.82					
A6	6.25					
A2	6.49					
B6	6.68					
B2	6.78					
B5	6.85					
1H--DMSO						
γ	0.81					
γ	0.88					
A β	1.47					
B β	1.58					
Ac Me	2.15					
A α	2.39					
B α	2.51					
B OMe	3.70					
A OMe	3.74					
A6	6.09					
A2	6.62					
B6	6.69					
B5	6.74	6.92				
B2						

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.78		
γ	0.82		
B γ	0.91		
A,C β	1.73		
B β	1.88		
AcMe Cα	1.95		
AcMe Aα	2.04		
AcMe Bα	2.05		
AcMe B4	2.10		
AcMe C4	2.16		
OMe	3.73		
OMe	3.76		
OMe	3.81		
Cα	5.46		
Aα	5.55		
Bα	5.65		
C6	6.20		
C2	6.64		
B6	6.81		
A6	6.83		
A2	6.99		
B2	7.13		

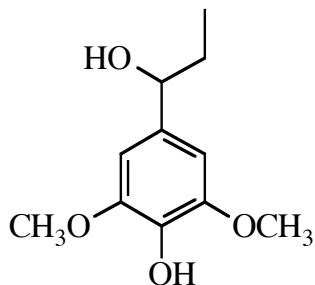
Notes:

FPL Collection
 2 mg
 COSY, HSQC and HMBC in acetone at 600MHz
 1H in CDCl₃ some shifts taken from HSQC and HMBC
 Aromatic carbon shifts in DMSO are weak, no 2D spectra in DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	9.79	39	10.19	65	9.57	63
γ	9.85	35	10.19	65	9.57	63
γ	9.90	40	10.19	65	9.57	63
C4AcMe	20.21	32	20.18	27	19.77	27
B4AcMe	20.32	26	20.18	27	19.88	23
AαAcMe	21.12	25	20.46	20	20.59	18
CαAcMe	21.16	36	21.25	40	20.68	27
BαAcMe	21.22	29	21.36	27	20.80	29
β	28.94	17	29.77	20	28.50	22
β	29.21	12	29.97	20	28.68	15
B β	29.46	25	30.18	20	28.84	24
OMe	56.00	46	56.38	46	55.89	34
OMe	56.00	46	56.38	46	55.89	34
OMe	56.07	32	56.65	32	55.89	34
α	76.83	27	77.28	35	75.94	37
α	76.88	27	77.28	35	75.94	37
α	76.88	27	77.28	35	75.94	37
C2	103.60	8	104.30	12	103.38	8
C6	105.82	11	106.11	10	106.53	8
A2	110.40	16	110.99	14	110.12	8
B2	110.70	15	111.63	12	110.88	11
B6	120.30	12	119.42	12	119.39	6
A6	120.78	14	120.81	15	119.64	15
C4	128.02	3	128.90	7	127.11	7
A5	130.86	8	131.83	8	130.23	8
B5	131.77	12	133.47	6	130.83	6
A4	136.95	6	137.91	7	136.20	10
B1	137.84	7	139.40	10	138.03	10
A1	138.16	16	139.65	13	138.31	15
C1	138.16	16	139.65	13	138.50	10
B4	140.05	6	140.78	8	138.96	9
C5	150.42	8	151.59	10	149.99	4
A3	151.11	9	152.36	9	150.84	13
B3	152.20	20	153.33	14	151.80	14
C3	152.20	20	153.33	14	151.80	14
C4AcC=O	167.92	8	167.62	7	167.29	8
B4AcC=O	168.77	9	169.09	8	168.23	9
AαAcC=O	170.30	12	169.09	9	169.71	18
CαAcC=O	170.40	17	170.37	12	169.71	18
BαAcC=O	170.40	17	170.50	15	169.71	18
<u>1H</u>	<u>1H</u>				<u>1H</u>	
γ	0.72				0.71	
γ	0.79				0.78	
B γ	0.89				0.86	
β	1.72				1.67	
β	1.72				1.67	
B β	1.86				1.84	
AcMe Cα	1.99				1.92	
AcMe Aα	2.07					
AcMe Bα	2.10					
AcMe B4	2.16					
AcMe C4	2.21				2.15	
OMe	3.71				3.67	
OMe	3.74				3.72	
OMe	3.79				3.76	
Cα	5.45				5.42	
Aα	5.54				5.49	
Bα	5.63				5.61	
C6	6.13				6.03	
C2	6.46				6.62	
B6	6.82				6.70	
A6	6.76				6.70	
A2	6.81				6.99	
B2	6.87				7.13	

Compound Number 290

¹³C



1-(3,5-dimethoxy-4-hydroxy)-propanol

¹H (acetone)

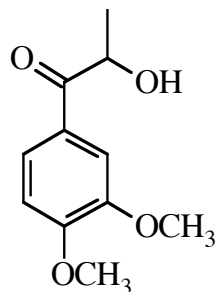
Atom	H Shifts	Mult	J
γ	0.87	t	7.3
β	1.66	m	
OMe	3.79	s	
α	4.44	bt	6.4
2,6	6.63	s	
4 OH	6.99	s	
CDCl ₃			
γ	0.91		
β	1.75		
OMe	3.88		
α	4.50		
2,6	6.57		
DMSO			
γ	0.79		
β	1.56		
OMe	3.72		
α	4.30		
2,6	6.54		
4 OH	8.08		

Notes:

FPL Collection
22 mg
HSQC and HMBC in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.19	27	10.61	47	10.32	25
β	31.87	27	33.24	36	32.16	21
OMe	56.23	57	56.59	93	55.95	48
OMe	56.23	57	56.59	93	55.95	48
α	76.20	24	75.81	29	73.92	20
2	102.60	45	104.32	87	103.33	35
6	102.60	45	104.32	87	103.33	35
4	133.91	11	135.66	11	134.10	14
1	135.87	16	137.56	22	136.44	17
3	146.91	23	148.41	25	147.65	31
5	146.91	23	148.41	25	147.65	31

Compound Number 291



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	22.77	60	22.59	67	21.09	67
OMe	55.97	68	56.14	89	55.54	63
OMe	56.06	60	56.24	81	55.75	62
β	68.78	57	69.53	46	68.31	62
5	110.13	59	111.62	80	110.89	105
2	110.68	52	111.95	77	110.89	105
6	123.32	62	124.22	81	123.31	68
1	126.16	8	127.80	9	127.38	15
3	149.25	8	150.30	9	148.61	12
4	153.96	7	155.01	7	153.11	10
α	200.73	10	201.30	8	200.09	15

¹H (acetone)

Atom	H Shifts	Mult	J
γ	1.35	d	6.85
OMe	3.87	s	
OMe	3.90	s	
β	5.14	q	6.85
5	7.06	d	8.6
2	7.54	d	2.0
6	7.68	dd	8.6, 2.0
CDCl ₃			
γ	1.43		
OMe	3.92		
OMe	3.93		
β	5.10		
5	6.89		
2	7.49		
6	7.49		

¹H--DMSO

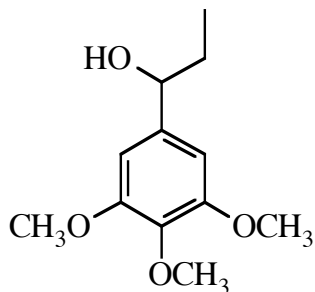
γ	1.27
OMe	3.81
OMe	3.84
β	5.05
β OH	5.21
5	7.06
2	7.48
6	7.69

Notes:

SRX-115G
 26 mg
 HSQC in acetone and CDCl₃
 HMBC in acetone
 HSQC shows that C2 is downfield of C5 for acetone and CDCl₃
 C2 = C5 in DMSO

Compound Number 292

¹³C



1-(3,4,5-trimethoxyphenyl)-1-propanol

¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.89	t	7.3
β	1.67	m	
4 OMe	3.68	s	
OMe	3.79	s	
α	4.12	d	4.0
α OH	4.48	bt	6.4
2,6	6.65	s	
CDCl ₃			
γ	0.93		
β	1.76		
4 OMe	3.82		
OMe	3.86		
α	4.52		
2,6	6.58		

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.06	46	10.58	79	10.29	90
β	31.84	66	33.20	83	32.08	91
OMe	55.86	97	56.32	142	55.78	183
OMe	55.86	97	56.32	142	55.78	183
4 OMe	60.57	24	60.44	38	59.98	60
α	75.80	34	75.69	55	73.81	92
2	102.68	113	104.06	144	103.00	179
6	102.68	113	104.06	144	103.00	179
4	136.84	3	137.95	3	136.05	9
1	140.60	9	142.75	12	142.09	30
3	152.96	16	154.08	14	152.55	38
5	152.96	16	154.08	14	152.55	38

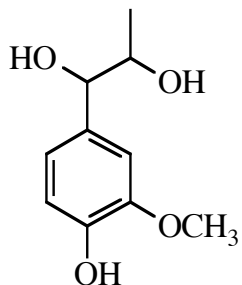
¹H--DMSO

γ	0.81
β	1.56
4 OMe	3.60
OMe	3.73
α	4.35
αOH	5.08
2,6	6.59

Notes:

SRX-115S
39 mg
HSQC and HMBC in acetone

Compound Number 293



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
major						
γ	18.34	55	18.08	82	18.42	41
OMe	56.83	67	56.20	74	55.56	52
β	72.25	46	72.03	65	70.67	38
α	78.37	49	78.15	66	76.83	40
2	110.18	52	111.20	70	111.04	30
5	115.09	53	115.09	70	114.65	34
6	120.61	54	120.32	74	119.26	36
1	133.49	10	134.95	14	134.56	22
4	146.17	10	146.39	11	145.16	20
3	147.55	7	147.81	8	146.97	16
minor						
γ	19.67	19	19.30	33	19.00	16
OMe	56.83	67	56.20	74	55.56	52
β	73.15	19	72.68	25	70.89	16
α	80.27	17	79.80	26	77.79	14
2	110.12	25	111.27	34	111.12	15
5	115.16	26	115.21	31	114.76	17
6	120.90	22	120.66	29	119.50	14
1	134.08	4	134.90	9	133.98	10
4	146.40	4	146.77	4	145.46	9
3	147.61	4	148.02	4	147.04	9

¹H (acetone)

Atom	H Shifts	Mult	J
γ	1.02 (0.92)	d	6.4
β	3.81 (3.69)	m	
OMe	3.80 (3.80)	s	
α	4.45 (4.20)	d	5.1 (7.3)
5	6.73 (6.73)	d	8.1
6	6.77 (6.77)	dd	8.1, 1.7
2	6.98 (6.95)	d	1.7
CDCl ₃			
γ	1.03 (0.96)		
β	3.87 (3.74)		
OMe	3.81 (3.81)		
α	4.49 (4.20)		
DMSO			
γ	0.93 (0.77)		
β	3.56 (3.56)		
OMe	3.69 (3.69)		
α	4.20 (4.09)		
5,6	6.64 (6.64)		
2	6.83 (6.81)		

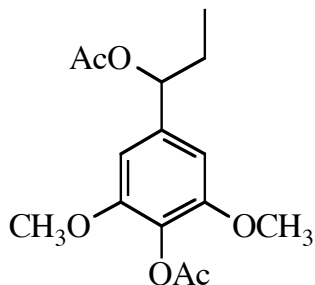
Notes:

FPL Collection
 20 mg
 g-HSQC and g-HMBC in d₆-acetone
 2 isomers

¹H minor shifts and j's in ()

Compound Number 294

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	10.01	40	10.29	66	9.93	59
4 Ac Me	20.41	32	20.26	47	20.14	57
α Ac Me	21.20	26	21.04	37	20.90	54
β	29.30	50	30.13	112	28.96	50
OMe	56.10	88	56.45	135	55.98	116
OMe	56.10	88	56.45	135	55.98	116
α	77.26	49	77.61	71	76.49	52
2	103.29	97	103.86	121	102.85	93
6	103.29	97	103.86	121	102.85	93
4	128.18	3	129.21	3	127.27	11
1	138.92	11	140.45	14	139.33	38
3	152.01	17	153.13	14	151.60	55
5	152.01	17	153.13	14	151.60	55
4 Ac C=O	168.65	6	168.55	10	168.14	27
α Ac C=O	170.25	5	170.39	8	169.89	24

¹H (acetone)

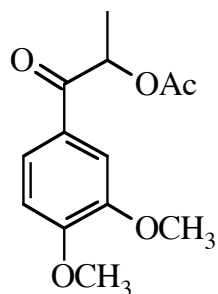
Atom	H Shifts	Mult	J
γ	0.88	t	7.3
β	1.83	m	
α Ac Me	2.05	s	
4 Ac Me	2.21	s	
OMe	3.80	s	
α	5.61	dd	7.3
2,6	6.71	s	

1H	CDCl ₃	DMSO
γ	0.91	0.85
β	1.85	1.80
Ac Me	2.09	2.07
Ac Me	2.33	2.22
OMe	3.82	3.74
α	5.62	5.56
2,6	6.58	6.68

Notes:

SRX-115SSMAc
19 mg
C4 has very long T1, D1 set to 6 sec.

Compound Number 295



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	17.40	60	17.70	61	17.32	48
AcMe	20.69	42	20.60	38	20.42	38
OMe	55.92	68	56.12	65	55.55	46
OMe	56.03	59	56.25	58	55.80	43
β	70.95	57	71.98	53	71.13	45
5	110.10	58	111.66	75	110.45	37
2	110.66	56	111.69	75	111.05	44
6	122.92	61	123.75	61	123.08	44
1	127.29	14	128.23	10	126.48	11
3	149.23	10	150.39	8	148.83	10
4	153.70	10	154.98	8	153.57	10
Ac C=O	170.35	11	170.47	7	169.78	10
α	195.21	12	195.54	7	194.95	11

¹H (acetone)

Atom	H Shifts	Mult	J
γ	1.46	d	6.85
AcMe	2.05	s	
3 OMe	3.86	s	
4 OMe	3.90	s	
β	5.97	q	6.85
5	7.06	d	8.6
2	7.50	d	2.0
6	7.67	dd	8.6, 2.0

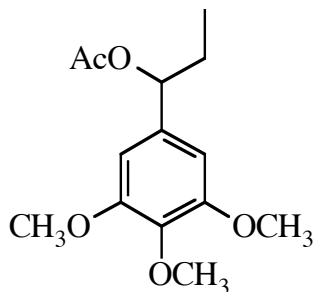
Notes:

SRX-115GAc
12 mg
g-HSQC and g-HMBC in d6-acetone

1H	CDCl ₃	DMSO
γ	1.53	1.40
AcMe	2.15	2.06
OMe	3.93	3.81
OMe	3.96	3.85
β	5.96	5.99
5	6.91	7.08
2	7.52	7.43
6	7.59	7.68

Compound Number 296

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	9.92	60	10.30	53	9.90	46
α Ac Me	21.13	38	21.05	29	20.89	32
β	29.20	59	30.13	53	28.90	42
3 OMe	55.98	120	56.43	96	55.86	83
5 OMe	55.98	120	56.43	96	55.86	83
4 OMe	60.63	38	60.45	31	59.91	29
α	77.41	63	77.75	49	76.60	44
2	103.58	117	104.71	76	103.49	77
6	103.58	117	104.71	76	103.49	77
1	136.12	18	137.56	11	136.39	16
4	137.45	5	138.71	4	136.85	4
3	153.08	24	154.32	14	152.80	20
5	153.08	24	154.32	14	152.80	20
α Ac C=O	170.26	10	170.37	6	169.83	9

1H	CDCl ₃	DMSO
γ	0.90	0.82
β	1.85	1.77
α Ac Me	2.09	2.05
4 OMe	3.83	3.63
3,5 OMe	3.87	3.76
α	5.59	5.52
2,6	6.55	6.60

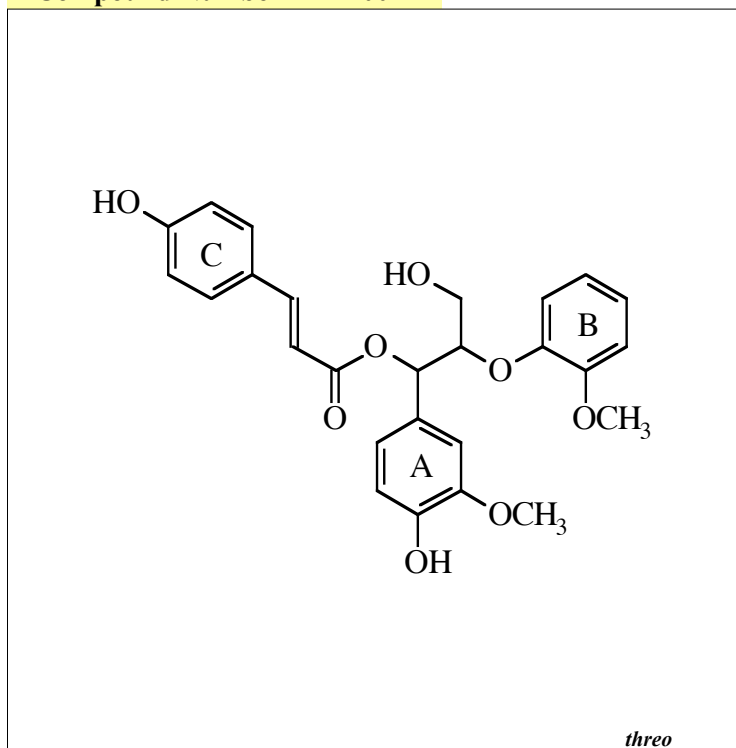
¹H (acetone)

Atom	H Shifts	Mult	J
γ	0.86	t	7.3
β	1.82	m	
α Ac Me	2.03	s	
4 OMe	3.69	s	
3,5 OMe	3.81	s	
α	5.56	bt	6.6
2,6	6.64	s	

Notes:

SRX-115SAc
29mg
g-HMBC in d6-acetone

Compound Number 1001



3-(4-Hydroxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	3.51	dd	7.2, 5.3
γ2	3.68	dd	7.2, 3.7
β	4.58	m	
α	6.16	d	7.3
C β	6.30	d	16.0
C α	7.51	d	15.6

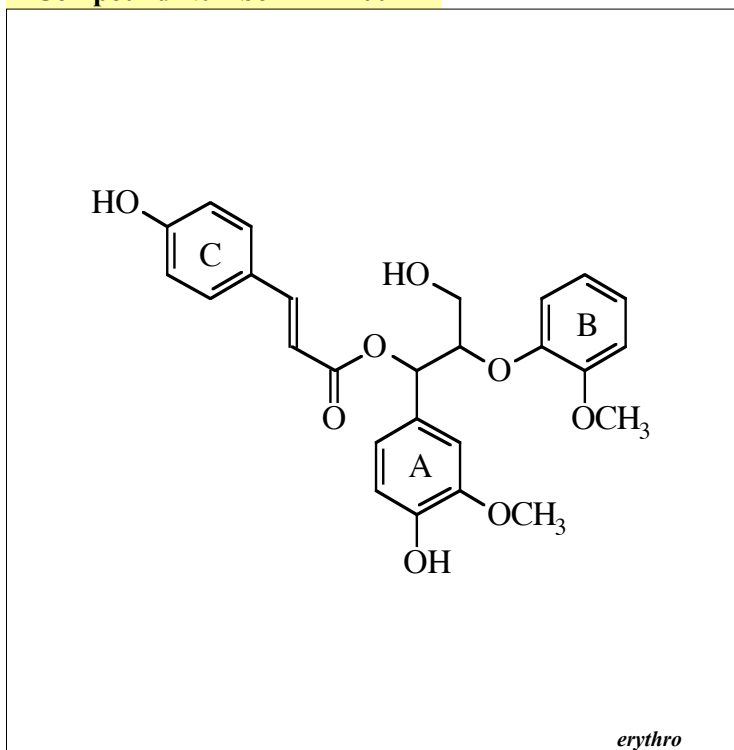
Notes:

R. Helm

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.25			
OMe			56.31			
γ			61.76			
α			75.88			
β			85.20			
A2			112.04			
B2			113.58			
A5			115.58			
C β			115.81			
C3			116.64			
C5			116.64			
B5			119.36			
A6			121.23			
B6			121.78			
B1			123.24			
C1			127.04			
A1			130.16			
C2			130.91			
C6			130.91			
C α			145.39			
A4			147.48			
A3			148.18			
B4			149.82			
B3			157.87			
C4			160.48			
C γ			166.51			

Compound Number 1002

¹³C

3-(4-Hydroxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	3.68	dd	11.7, 4.8
γ2	3.79	dd	11.8, 5.7
β	4.66	m	
α	6.12	d	4.8
C β	6.35	d	16.0
C α	7.56	d	16.0

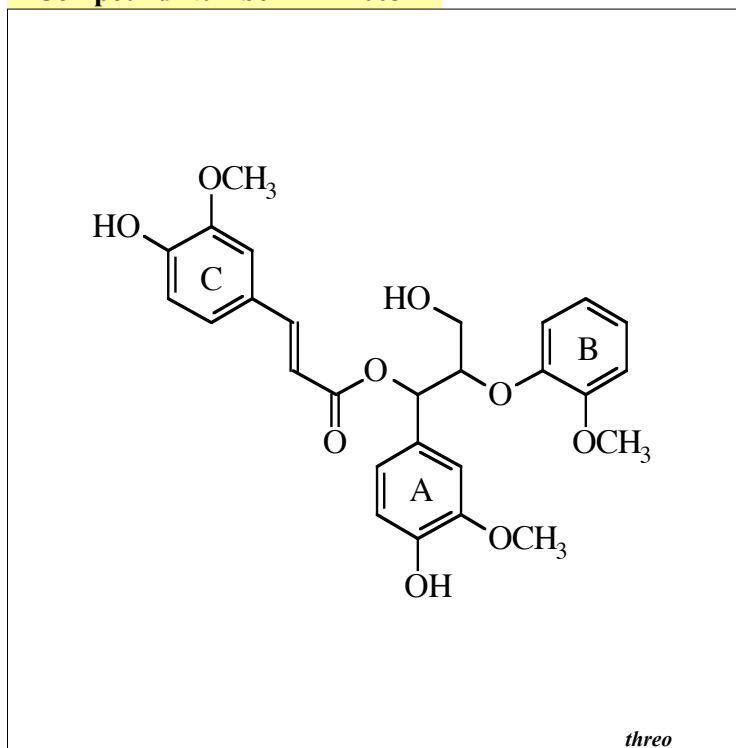
Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.29			
OMe			56.29			
γ			61.49			
α			75.08			
β			84.09			
A2			112.57			
B2			113.67			
A5			115.21			
C β			115.62			
C3			116.67			
C5			116.67			
B5			119.18			
B6			121.75			
A6			121.79			
B1			123.31			
C1			126.97			
A1			129.64			
C2			130.96			
C6			130.96			
C α			145.65			
A4			147.35			
A3			147.99			
B4			149.22			
B3			157.86			
C4			160.59			
C γ			166.32			

Compound Number 1003

¹³C



3-(4-Hydroxy-3-methoxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	3.52	dd	11.9, 5.3
γ2	3.69	dd	11.9, 3.8
β	4.58	m	
α	6.16	d	2.3
C β	6.34	d	15.9
C α	7.49	d	15.9

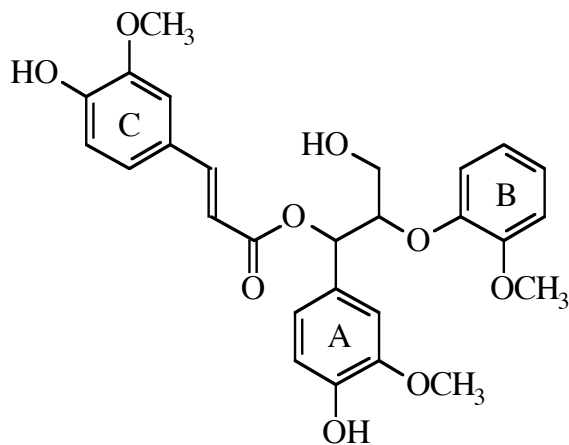
Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.22			
OMe			56.31			
OMe			56.31			
γ			61.74			
α			75.87			
β			85.13			
C2			111.26			
A2			112.04			
B2			113.54			
A5			115.59			
C β			115.99			
C5			116.03			
B5			119.25			
A6			121.20			
B6			121.76			
B1			123.21			
C6			123.91			
C1			127.44			
A1			130.15			
C α			145.77			
A4			147.50			
A3			148.19			
C3			148.70			
B4			149.78			
C4			150.02			
B3			157.82			
C γ			166.55			

Compound Number 1004

¹³C



erythro

3-(4-Hydroxy-3-methoxyphenyl)acrylic acid 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

¹H (acetone)

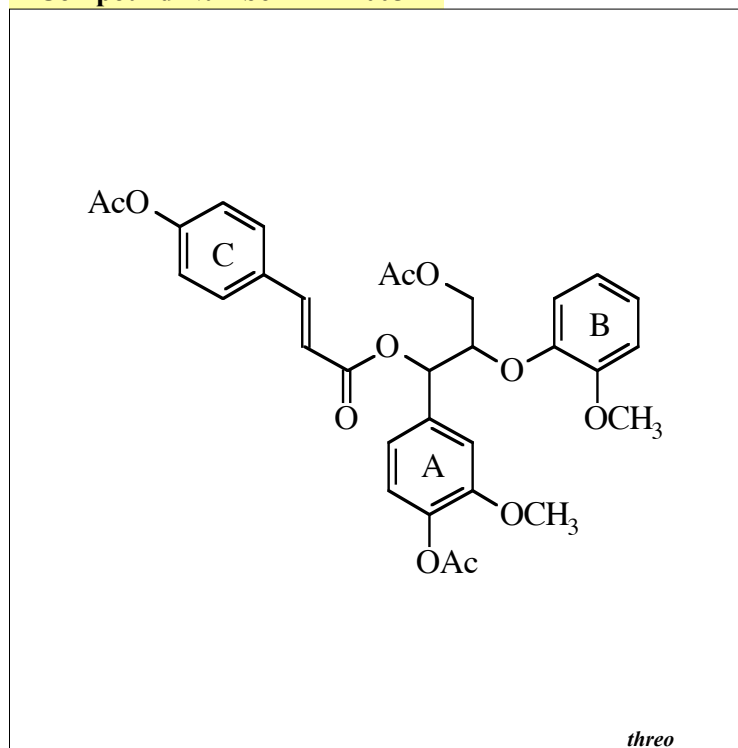
Atom	H Shifts	Mult	J
γ 1	3.60	dd	11.7, 4.8
γ 2	3.79	dd	11.5, 5.8
β	4.67	m	
α	6.13	d	4.8
C β	6.39	d	15.9
C α	7.55	d	15.9

Notes:

R. Helm
CDCl₃ column is D₂O/Acetone-d₆

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
	Acet /D ₂ O					
OMe	56.30		56.28			
OMe	56.31		56.30			
OMe	56.33		56.32			
γ	61.38		61.48			
α	75.10		75.09			
β	84.00		84.02			
C2	111.32		111.29			
A2	112.64		112.60			
B2	113.68		113.66			
A5	115.17		115.22			
Cβ	115.84		115.83			
C5	116.01		116.04			
B5	119.07		119.10			
B6	121.77		121.96			
A6	121.82		121.80			
B1	123.28		123.30			
C6	124.00		123.99			
C1	127.40		127.40			
A1	129.62		129.63			
C α	146.02		146.02			
A4	147.32		147.36			
A3	147.97		147.98			
C3	148.72		148.71			
B4	149.23		149.19			
C4	150.08		150.09			
B3	157.85		157.84			
C γ	166.35		166.34			

Compound Number 1005



3-(4-Acetoxyphenyl)acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.08	dd	11.9, 5.6
γ2	4.31	dd	11.9, 4.1
β	4.89	m	
α	6.24	d	6.6
C β	6.52	d	16.0
C α	7.63	d	16.0

Notes:

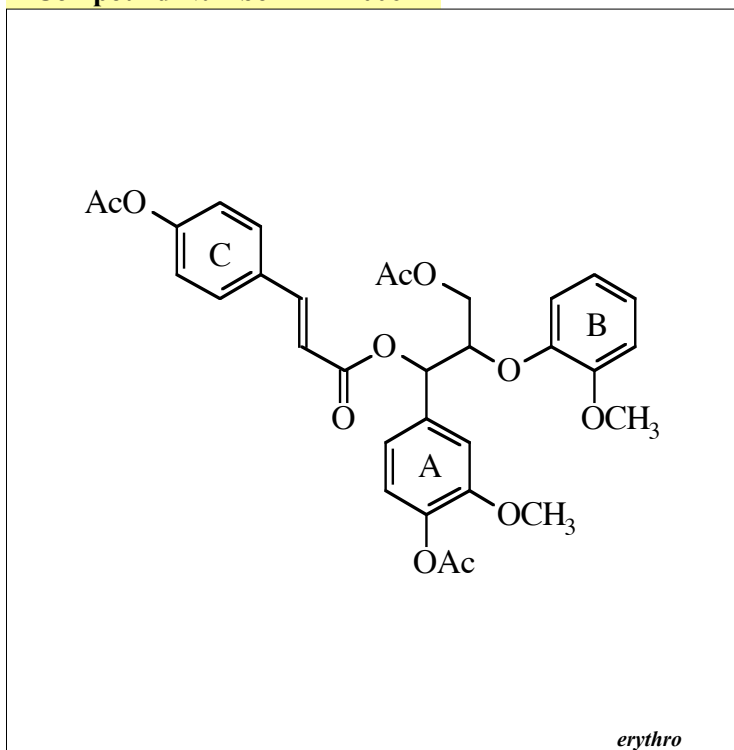
R. Helm

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.60			
Ac Me			20.94			
OMe			56.16			
OMe			56.32			
γ			63.70			
α			75.81			
β			80.87			
A2			112.71			
B2			113.66			
Cβ			118.76			
B5			119.33			
A6			120.31			
B6			121.65			
C3			123.21			
C5			123.21			
A5			123.61			
B1			123.78			
C2			130.22			
C6			130.22			
C1			132.82			
A1			136.74			
A4			140.95			
C α			144.91			
B4			149.12			
B3			157.89			
A3			152.24			
C4			153.52			
C γ			165.90			
Ac C=O			168.86			
Ac C=O			169.42			
Ac C=O			170.69			

Compound Number 1006

¹³C



3-(4-Acetoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

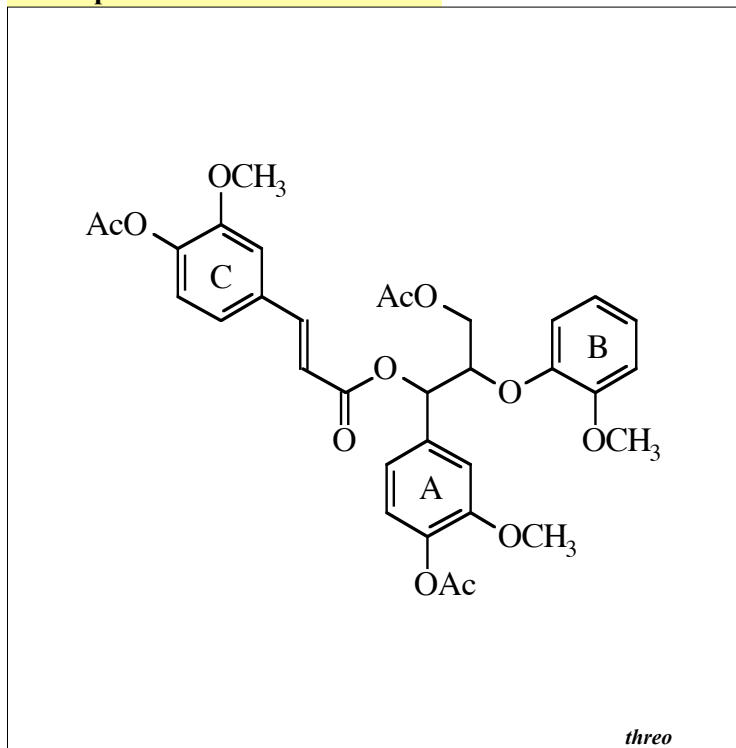
Atom	H Shifts	Mult	J
γ 1	4.29	dd	11.9, 4.4
γ 2	4.41	dd	11.9, 6.1
β	4.93	m	
α	6.22	d	4.7
C β	6.61	d	16.1
C α	7.71	d	16.1

Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.61			
Ac Me			20.94			
OMe			56.22			
OMe			56.30			
γ			63.16			
α			74.96			
β			80.44			
A2			112.79			
B2			113.80			
C β			118.67			
B5			119.89			
A6			120.45			
B6			121.68			
C3			123.24			
C5			123.24			
A5			123.40			
B1			124.08			
C2			130.28			
C6			130.28			
C1			132.82			
A1			136.63			
A4			140.83			
C α			145.12			
B4			148.39			
B3			152.06			
A3			152.14			
C4			153.58			
C γ			165.79			
Ac C=O			168.89			
Ac C=O			169.42			
Ac C=O			170.75			

Compound Number 1007



3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.09	dd	11.9, 5.6
γ2	4.30	dd	11.9, 4.1
β	4.89	m	
α	6.24	d	6.5
C β	6.56	d	
C α	7.60	d	15.8

Notes:

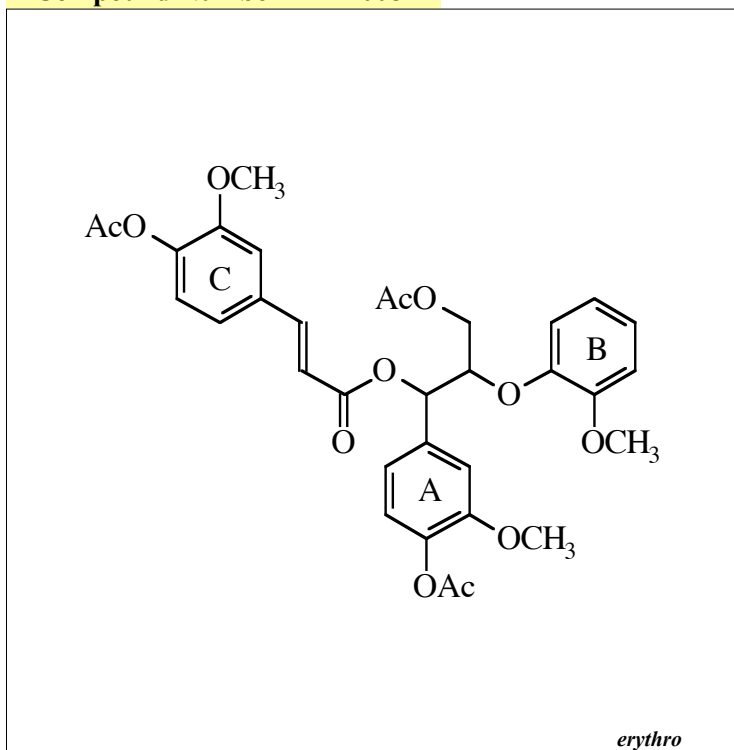
R. Helm
16mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.44			
Ac Me			20.60			
OMe			56.16			
OMe			56.32			
OMe			56.40			
γ			63.70			
α			75.82			
β			80.88			
C2			112.42			
A2			112.72			
B2			113.65			
C β			118.85			
B5			119.30			
A6			120.30			
B6			121.65			
C6			122.27			
A5			123.61			
B1			123.77			
C5			124.12			
C1			134.15			
A1			136.77			
A4			140.95			
C4			142.76			
C α			145.36			
B4			149.13			
B3			157.88			
A3			152.24			
C3			152.67			
C γ			165.96			
Ac C=O			168.79			
Ac C=O			168.86			
Ac C=O			170.69			

Compound Number 1008

¹³C



3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

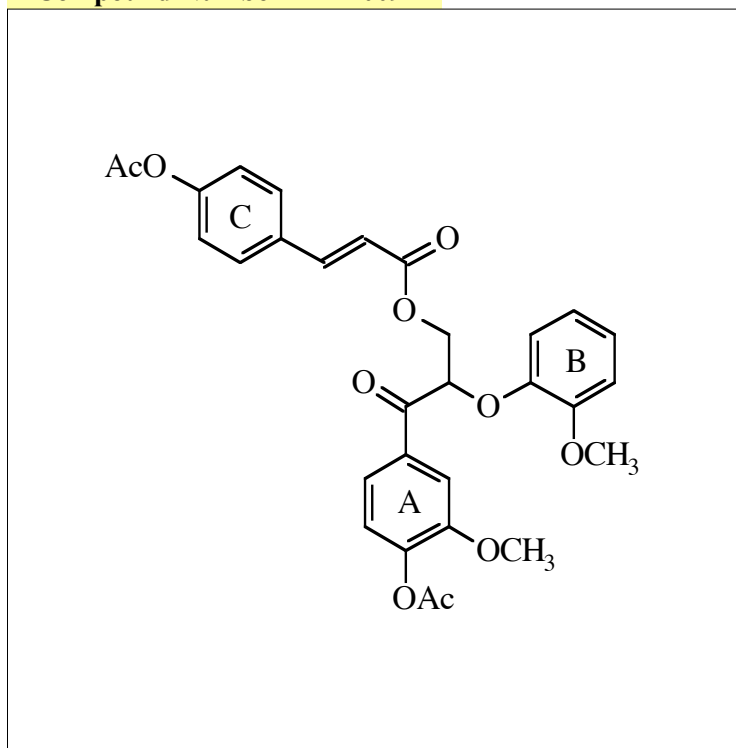
Atom	H Shifts	Mult	J
γ1	4.28	dd	11.8, 4.4
γ2	4.40	dd	11.8, 6.1
β	4.96	m	
α	6.22	d	4.7
C α	6.65	d	16.0
C β	7.68	d	16.0

Notes:

R. Helm
19mg
Acetone run at 300 K

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.44			
Ac Me			20.61			
OMe			56.22			
OMe			56.30			
OMe			56.41			
γ			63.16			
α			74.97			
β			80.39			
C2			112.46			
A2			112.79			
B2			113.79			
C β			118.75			
B5			119.85			
A6			120.43			
B6			121.68			
C6			122.35			
A5			123.41			
B1			124.08			
C5			124.14			
C1			134.13			
A1			136.61			
A4			140.83			
C4			142.82			
C α			145.57			
B4			148.37			
B3			152.05			
A3			152.14			
C3			152.69			
C γ			165.89			
Ac C=O			168.79			
Ac C=O			168.90			
Ac C=O			170.76			

Compound Number 1009



3-(4-Acetoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)-3-oxopropyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.62	dd	12.0, 6.5
γ2	4.81	dd	12.0, 3.8
β	5.91	dd	6.5, 3.8
C β	6.48	d	16.0
C α	7.60	d	16.0

Notes:

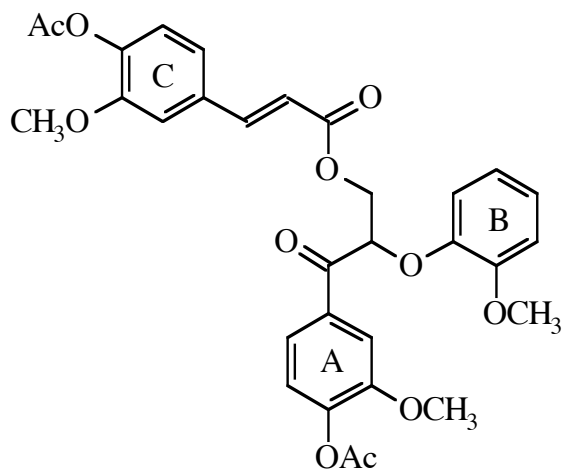
R. Helm
25.5mg
acetone-d6 at 300 K

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.94			
OMe			56.10			
OMe			56.42			
γ			64.97			
β			80.56			
A2			113.46			
B2			113.84			
C β			118.32			
B5			118.69			
B6			121.64			
A6			122.88			
C3			123.24			
C5			123.24			
A5			124.02			
B1			124.07			
C2			130.27			
C6			130.27			
C1			132.68			
A1			134.86			
C α			145.09			
A4			145.34			
B4			147.84			
B3			157.42			
A3			152.49			
C4			153.58			
C γ			166.76			
Ac C=O			168.58			
Ac C=O			169.42			
α			195.13			

Compound Number 1010

¹³C



3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy)-3-oxopropyl ester

¹H (acetone)

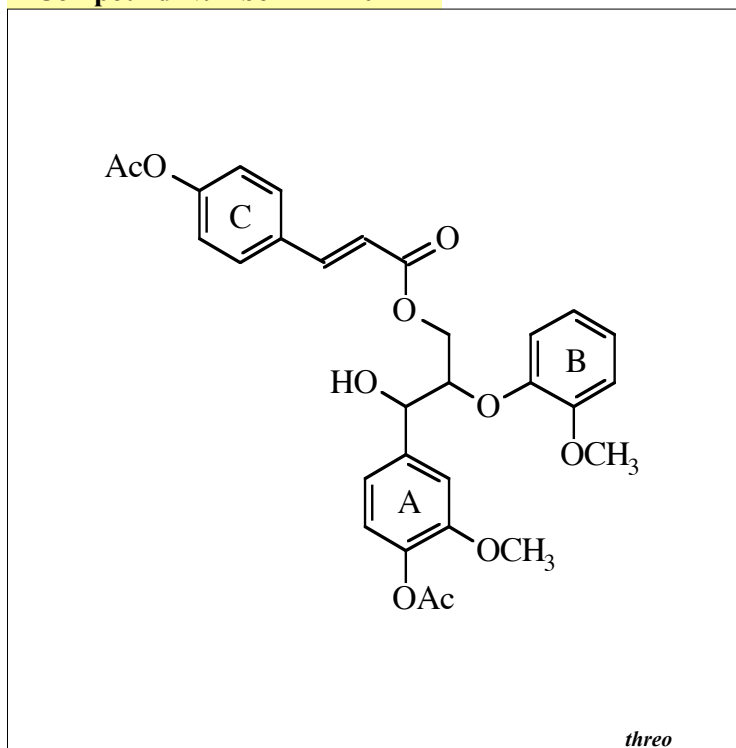
Atom	H Shifts	Mult	J
γ1	4.61	dd	12.0, 6.5
γ2	4.81	dd	12.0, 3.8
β	5.91	dd	6.5, 3.8
Cβ	6.52	d	16.0
Cα	7.58	d	16.0

Notes:

R. Helm
25mg
300k, acetone-d6

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
Ac Me			20.44			
OMe			56.10			
OMe			56.40			
OMe			56.43			
γ			64.93			
β			80.54			
C2			112.41			
A2			113.48			
B2			113.83			
Cβ			118.44			
B5			118.62			
B6			121.64			
C6			122.35			
A6			122.87			
A5			124.03			
B1			124.06			
C5			124.15			
C1			134.01			
A1			134.85			
C4			142.83			
A4			145.35			
Cα			145.50			
B4			147.82			
B3			157.40			
A3			152.50			
C3			152.69			
Cγ			166.81			
Ac C=O			168.58			
Ac C=O			168.80			
α			195.11			

Compound Number 1011



3-(4-Acetoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
α	5.08	d	4.3
α OH	4.75		
β	4.64	m	
γ1	4.17	dd	11.9, 6.3
γ2	4.44	dd	11.9, 3.7
C β	6.46	d	16.1
C α	7.54	d	16.0

Notes:

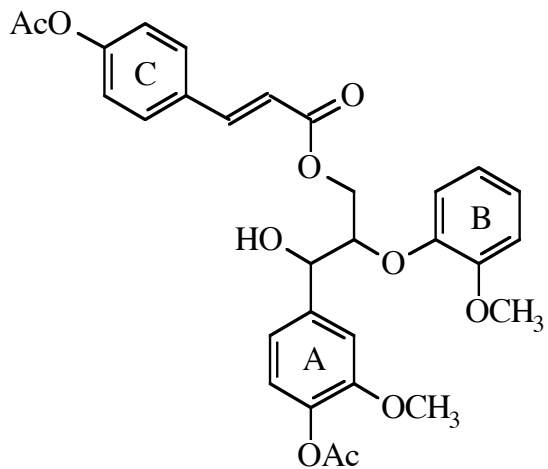
R. Helm

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			64.28			
α			73.58			
β			83.80			
C β			118.73			
C α			144.57			
C γ			166.68			

Compound Number 1012

¹³C



erythro

3-(4-Acetoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

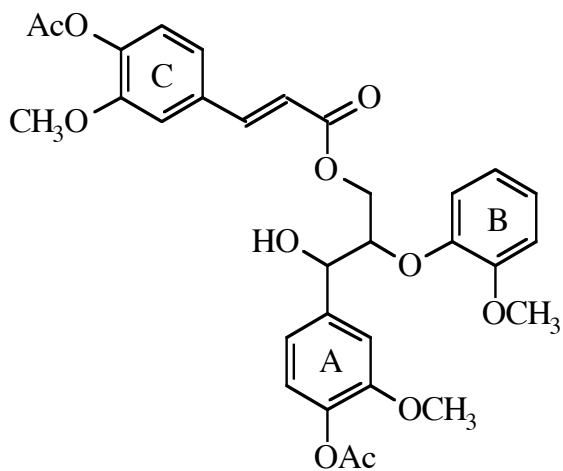
Atom	H Shifts	Mult	J
α	5.09	d	4.4
α OH	4.80		
β	4.70	m	
γ1	4.45	dd	11.8, 3.7
γ2	4.52	dd	11.8, 6.3
C β	6.41	d	16.1
C α	7.50	d	16.1

Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			63.95			
α			73.16			
β			83.22			
C β			118.83			
C α			144.36			
C γ			166.79			

Compound Number 1013



threo

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
α	5.08	d	4.2
α OH	4.75		
β	4.64	m	
γ1	4.17	dd	11.9, 6.2
γ2	4.44	dd	11.9, 3.7
Cβ	6.49	d	16.0
C α	7.51	d	16.0

Notes:

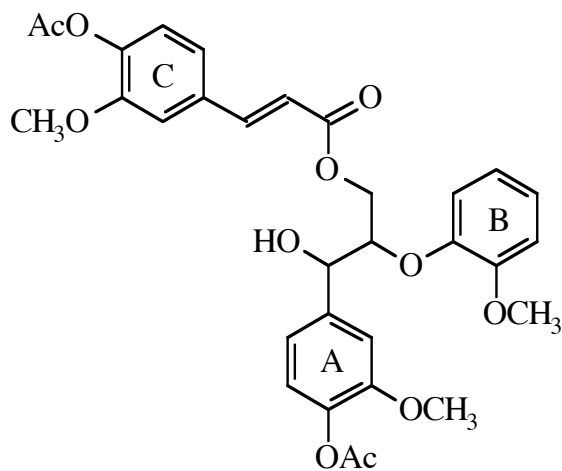
R. Helm

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			64.27			
α			73.56			
β			83.73			
Cβ			118.81			
C α			144.94			
Cγ			166.72			

Compound Number 1014

¹³C



erythro

3-(4-Acetoxy-3-methoxyphenyl) acrylic acid 3-(4-acetoxy-3-methoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
α	5.08	d	4.4
α OH	4.79		
β	4.70	m	
γ1	4.45	dd	11.8, 3.7
γ2	4.58	dd	11.8, 6.2
C β	6.44	d	16.0
C α	7.47	d	16.0

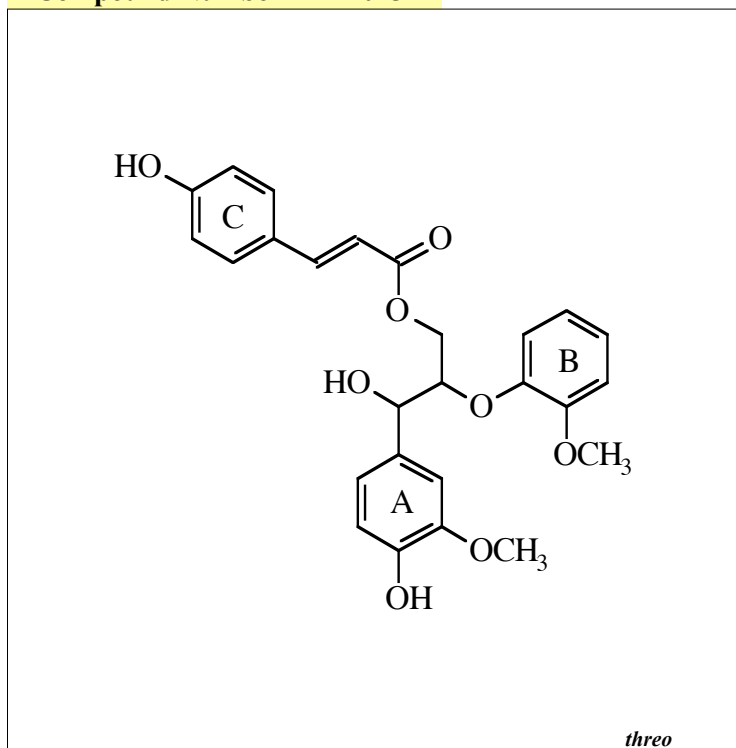
Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ			63.93			
α			73.14			
β			83.18			
C β			118.91			
C α			144.79			
C γ			166.83			

Compound Number 1015

¹³C



3-(4-Hydroxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.10	dd	12.0, 6.2
γ2	4.36	dd	12.0, 3.5
β	4.56	m	
α OH	4.59	d	3.9
α	4.97	dd	6.2, 3.9
C β	6.29	d	16.0
C α	7.47	d	16.0

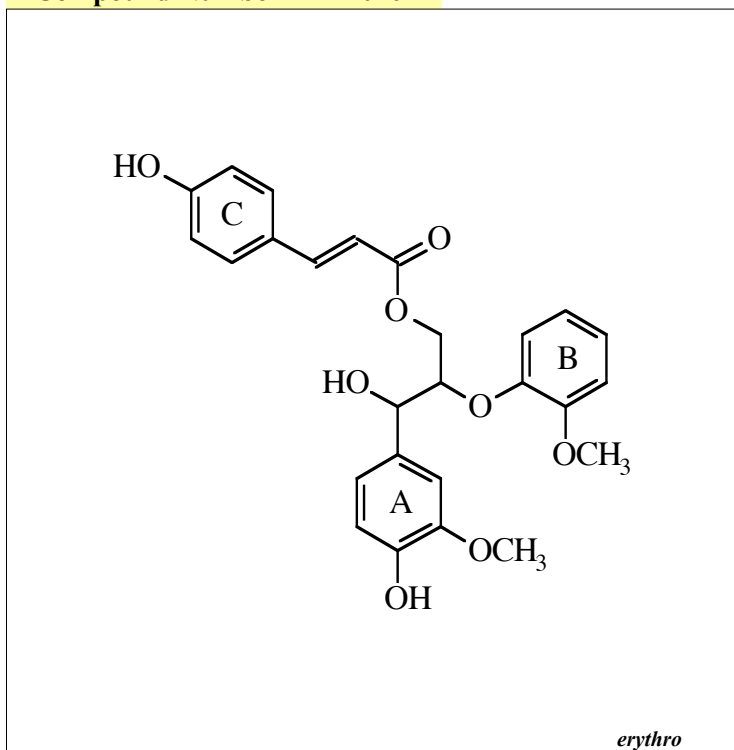
Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.19			
OMe			56.25			
γ			64.18			
α			73.95			
β			84.52			
A2			111.46			
B2			113.59			
C β			115.22			
A5			115.34			
C3			116.66			
C5			116.66			
B5			119.42			
A6			120.56			
B6			121.81			
B1			123.55			
C1			126.89			
C2			130.94			
C6			130.94			
A1			133.16			
C α			145.57			
A4			147.02			
A3			148.09			
B4			149.36			
B3			157.79			
C4			160.63			
C γ			167.15			

Compound Number 1016

¹³C



3-(4-Hydroxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

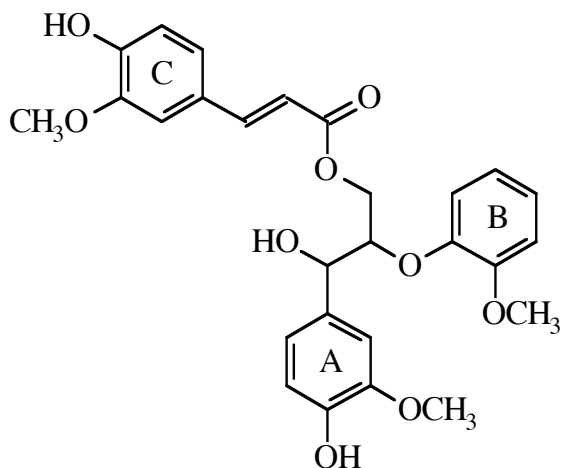
Atom	H Shifts	Mult	J
γ1	4.39	dd	11.8, 3.6
γ2	4.46	dd	11.8, 6.6
β	4.66	m	
α	4.91	d	4.9
C β	6.24	d	16.0
C α	7.42	d	16.0

Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.20			
OMe			56.22			
γ			63.98			
α			73.28			
β			83.54			
A2			111.20			
B2			113.64			
C β			115.24			
			115.34			
A5			116.64			
C3			116.64			
C5			119.67			
B5			120.32			
A6			121.71			
B6			123.51			
B1			126.91			
C1			130.88			
C2			130.88			
C6			133.59			
A1						
			145.39			
C α			146.72			
A4			148.02			
A3			148.86			
B4			152.02			
B3			160.52			
C4						
			167.28			
C γ						

Compound Number 1017



threo

3-(4-Hydroxy-3-methoxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
α	4.96	d	6.3
β	4.56	m	
γ ₂	4.36	dd	12.0, 3.5
γ ₁	4.10	dd	12.0, 6.2
C β	6.33	d	16.0
C α	7.45	d	16.0

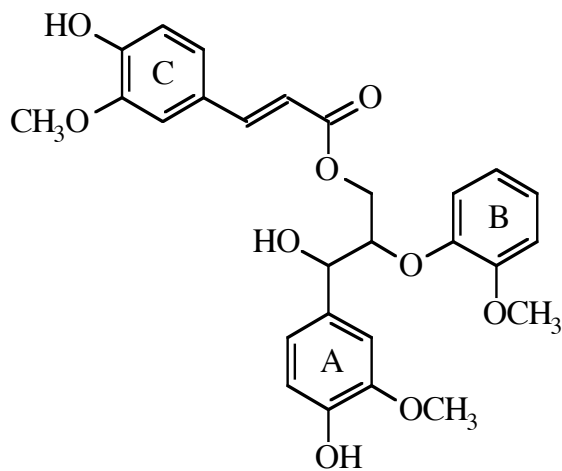
Notes:

R. Helm

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.20			
OMe			56.26			
OMe			56.32			
γ			64.16			
α			73.94			
β			84.48			
C2			111.37			
A2			111.46			
B2			113.60			
A5			115.33			
C β			115.47			
C5			116.05			
B5			119.39			
A6			120.56			
B6			121.81			
B1			123.54			
C6			123.90			
C1			127.35			
A1			133.16			
C α			145.91			
A4			147.01			
A3			148.08			
C3			148.71			
B4			149.36			
C4			150.09			
B3			151.80			
C γ			167.14			

Compound Number 1018

¹³C*erythro*

3-(4-Hydroxy-3-methoxyphenyl) acrylic acid 3-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

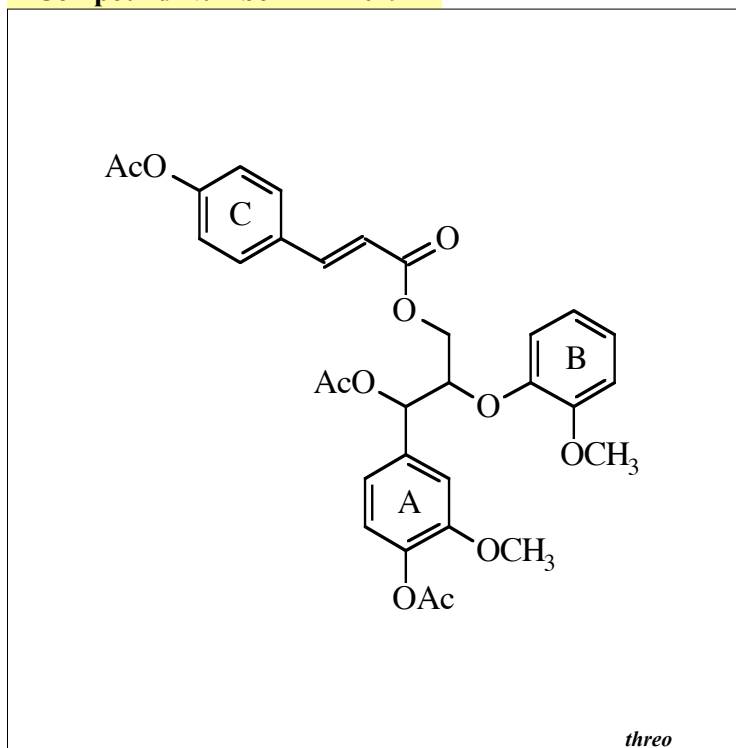
Atom	H Shifts	Mult	J
γ1	4.40	dd	3.7,
γ2	4.46	dd	6.7,
β	4.66	m	
α	4.97	d	4.9
C α	6.28	d	15.9
C β	7.40	d	15.9

Notes:

R. Helm
27mg
300K, acetone-d6

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.23			
OMe			56.23			
OMe			56.31			
γ			63.94			
α			73.26			
β			83.57			
A2			111.21			
C2			111.29			
B2			113.66			
A5			115.25			
C β			115.59			
C5			116.03			
B5			119.63			
A6			120.31			
B6			121.73			
B1			123.49			
C6			123.86			
C1			127.37			
A1			133.63			
C α			145.74			
A4			146.74			
A3			148.05			
C3			148.70			
B4			148.86			
C4			150.04			
B3			152.04			
C γ			167.28			

Compound Number 1019



3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.17	dd	5.6,
γ2	4.40	dd	4.0,
β	4.88	m	
α	6.18	d	6.5
C β	6.51	d	16.0
C α	7.57	d	16.1

Notes:

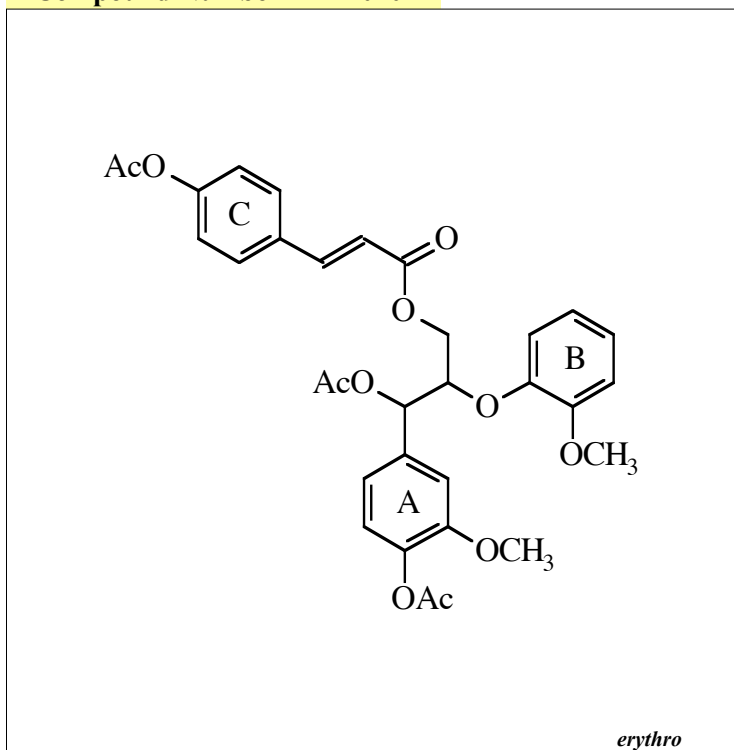
R. Helm
18mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.94			
Ac Me			20.94			
OMe			56.20			
OMe			56.28			
γ			63.94			
α			75.54			
β			80.89			
A2			112.70			
B2			113.73			
C β			118.57			
B5			119.36			
A6			120.32			
B6			121.69			
C3			123.21			
C5			123.21			
A5			123.59			
B1			123.81			
C2			130.25			
C6			130.25			
C1			132.81			
A1			136.71			
A4			140.91			
C α			144.75			
B4			149.12			
B3			157.90			
A3			152.22			
C4			153.52			
C γ			166.61			
Ac C=O			168.87			
Ac C=O			169.43			
Ac C=O			170.02			

Compound Number 1020

¹³C



3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

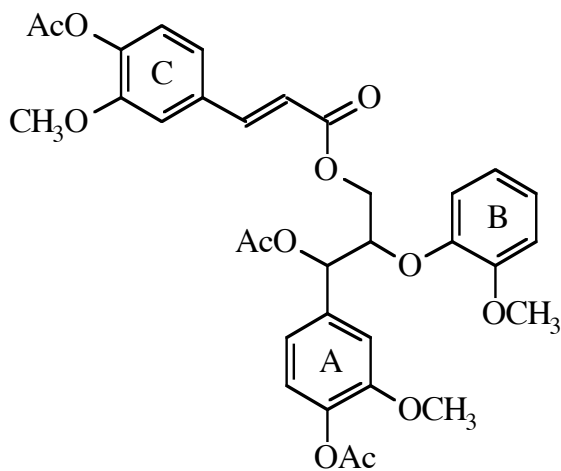
Atom	H Shifts	Mult	J
γ1	4.40	dd	11.9, 4.2
γ2	4.48	dd	11.9, 5.9
β	4.92	m	
α	6.13	d	5.1
C β	6.45	d	16.0
C α	7.56	d	16.1

Notes:

R. Helm

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.46			
Ac Me			20.89			
Ac Me			20.94			
OMe			56.19			
OMe			56.26			
γ			63.33			
α			74.71			
β			80.52			
A2			112.74			
B2			113.76			
C β			118.54			
B5			119.99			
A6			120.44			
B6			121.64			
C3			123.20			
C5			123.20			
A5			123.37			
B1			124.10			
C2			130.21			
C6			130.21			
C1			132.78			
A1			136.73			
A4			140.77			
C α			144.71			
B4			148.30			
B3			152.09			
A3			152.11			
C4			153.49			
C γ			166.60			
Ac C=O			168.89			
Ac C=O			169.41			
Ac C=O			169.92			

Compound Number 1021



threo

3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.16	dd	12.0, 5.6
γ2	4.40	dd	12.0, 3.9
β	4.88	m	
α	6.18	d	6.6
C β	6.55	d	16.0
C α	7.54	d	16.0

Notes:

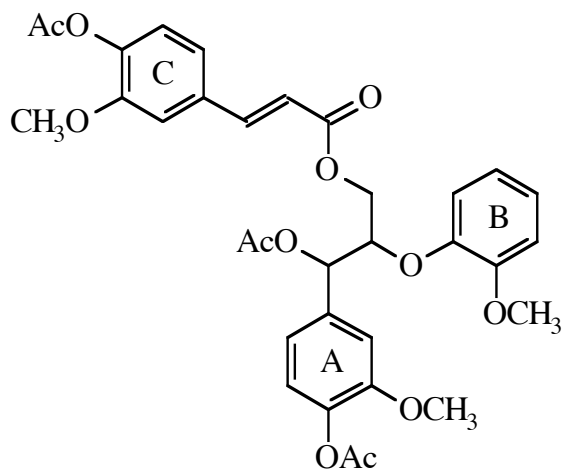
R. Helm
18.5mg
300K

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.45			
Ac Me			20.95			
OMe			56.20			
OMe			56.29			
OMe			56.42			
γ			63.96			
α			75.57			
β			80.88			
C2			112.45			
A2			112.69			
B2			113.73			
C β			118.64			
B5			119.33			
A6			120.32			
B6			121.69			
C6			122.30			
A5			123.60			
B1			123.80			
C5			124.12			
C1			134.13			
A1			136.69			
A4			140.92			
C4			142.76			
C α			145.20			
B4			149.10			
B3			151.89			
A3			152.23			
C3			152.68			
C γ			166.68			
Ac C=O			168.82			
Ac C=O			168.89			
Ac C=O			170.05			

Compound Number 1022

¹³C



erythro

3-(4-acetoxyphenyl) acrylic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

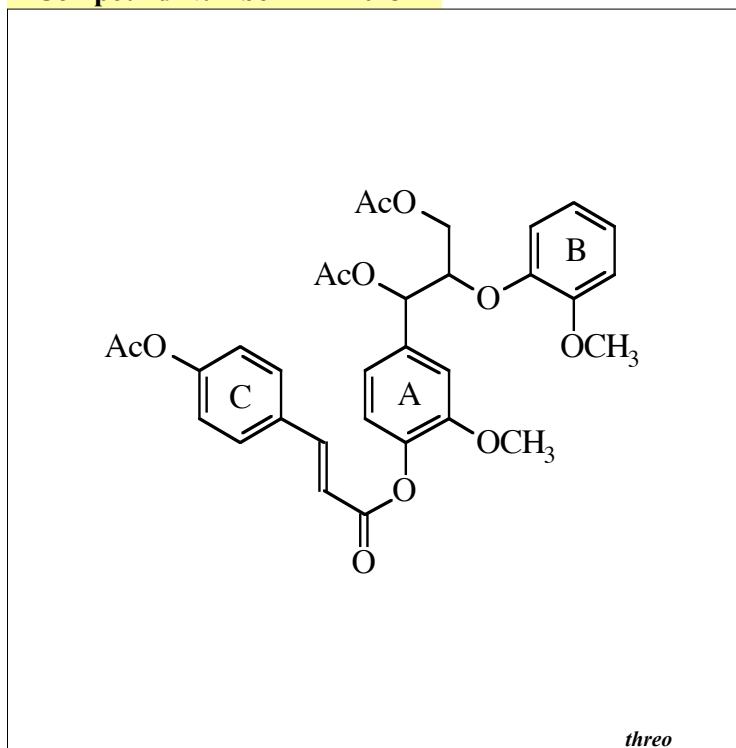
Atom	H Shifts	Mult	J
γ1	4.40	dd	11.9, 4.2
γ2	4.49	dd	11.9, 5.9
β	4.92	m	
α	6.13	d	5.1
C β	6.48	d	16.0
C α	7.53	d	16.0

Notes:

R. Helm
18.5mg
300K

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
Ac Me			20.45			
Ac Me			20.89			
OMe			56.19			
OMe			56.28			
OMe			56.40			
γ			63.33			
α			74.70			
β			80.50			
C2			112.44			
A2			112.74			
B2			113.77			
C β			118.63			
B5			119.97			
A6			120.44			
B6			121.65			
C6			122.25			
A5			123.38			
B1			124.41			
C5			124.41			
C1			134.11			
A1			136.73			
A4			140.79			
C4			142.74			
C α			145.16			
B4			148.30			
B3			152.10			
A3			152.12			
C3			152.67			
C γ			166.67			
Ac C=O			168.80			
Ac C=O			168.90			
Ac C=O			169.94			

Compound Number 1023



3-(4-acetoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
C α	7.84	d	16.1
C β	6.74	d	16.1
α	6.14	d	6.5
β	4.81	m	
γ1	4.28	dd	11.9, 4.2
γ2	4.04	dd	11.9, 5.6

Notes:

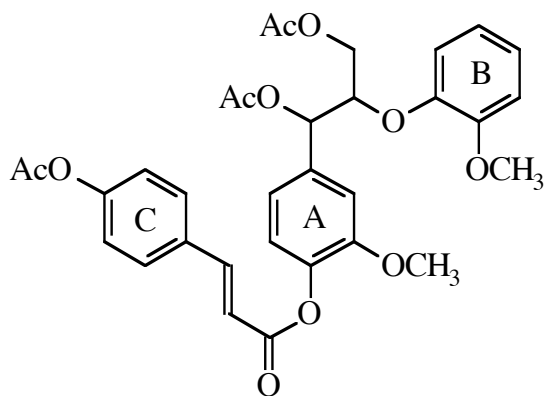
R. Helm
20.6mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.59			
Ac Me			20.92			
Ac Me			20.96			
OMe			56.30			
OMe			56.20			
γ			63.60			
α			75.40			
β			80.70			
A2			112.70			
B2			113.74			
C β			117.92			
B5			119.23			
A6			120.34			
B6			121.68			
C3			123.31			
C5			123.31			
A5			123.64			
B1			123.72			
C2			130.44			
C6			130.44			
C1			132.72			
A1			136.78			
A4			140.83			
C α			146.05			
B4			149.08			
B3			151.84			
A3			152.30			
C4			153.74			
C γ			164.91			
Ac C=O			169.42			
Ac C=O			170.01			
Ac C=O			170.68			

Compound Number 1024

¹³C



erythro

3-(4-acetoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester

¹H (acetone)

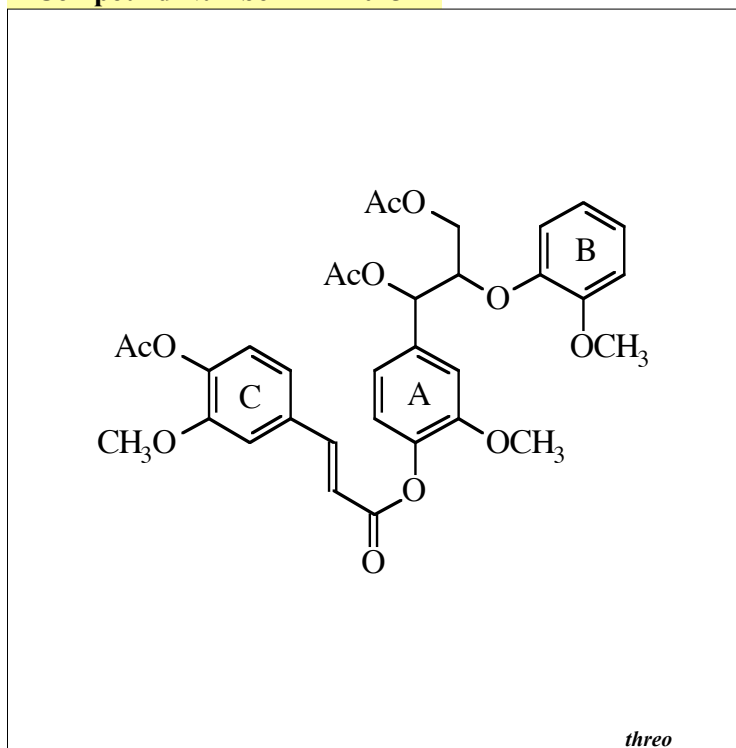
Atom	H Shifts	Mult	J
C α	7.84	d	15.7
C β	6.74	d	16.1
α	6.10	d	5.1
β	4.85	m	
γ1	4.39	dd	11.9, 5.9
γ2	4.24	dd	11.9, 4.2

Notes:

R. Helm
25mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.61			
Ac Me			20.87			
Ac Me			20.96			
OMe			56.20			
OMe			56.28			
γ			63.00			
α			74.60			
β			80.32			
A2			112.77			
B2			113.79			
C β			117.95			
B5			119.82			
A6			120.45			
B6			121.64			
C3			123.31			
C5			123.31			
A5			123.45			
B1			124.06			
C2			130.44			
C6			130.44			
C1			132.73			
A1			136.78			
A4			140.71			
C α			146.02			
B4			148.27			
B3			152.06			
A3			152.19			
C4			153.74			
C γ			164.95			
Ac C=O			169.42			
Ac C=O			169.92			
Ac C=O			170.76			

Compound Number 1025



3-(4-acetoxy-3-methoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
C α	7.81	d	15.9
C β	6.77	d	16.0
α	6.14	d	6.5
β	4.81	m	
γ1	4.28	dd	11.9, 4.2
γ2	4.04	dd	11.9, 5.6

Notes:

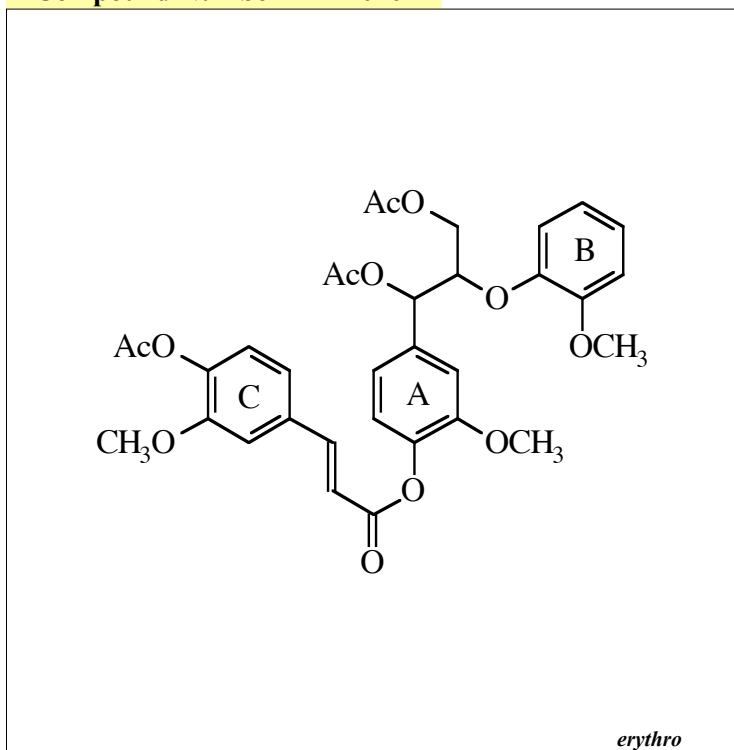
R. Helm
20.6mg
std conditions

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.46			
Ac Me			20.59			
Ac Me			20.93			
OMe			56.20			
OMe			56.30			
OMe			56.44			
γ			63.61			
α			75.40			
β			80.70			
C2			112.61			
A2			112.70			
B2			113.75			
C β			118.03			
B5			119.23			
A6			120.34			
B6			121.68			
C6			122.52			
A5			123.64			
B1			123.72			
C5			124.20			
C1			134.04			
A1			136.77			
A4			140.83			
C4			142.98			
C α			146.46			
B4			149.08			
B3			151.84			
A3			152.30			
C3			152.76			
C γ			164.97			
Ac C=O			168.79			
Ac C=O			170.01			
Ac C=O			170.69			

Compound Number 1026

¹³C



3-(4-acetoxy-3-methoxyphenyl) acrylic acid 4-[1,3-diacetoxy-2-(2-methoxyphenoxy) propyl] phenyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
C α	7.81	d	15.8
C β	6.78	d	16.0
α	6.10	d	5.1
β	4.85	m	
γ1	4.39	dd	11.9, 5.6
γ2	4.24	dd	11.9, 4.2

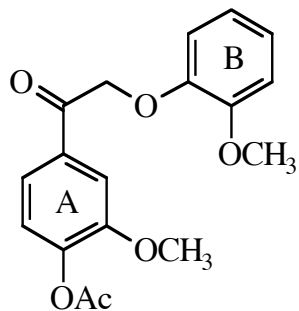
Notes:

R. Helm
20.9mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.46			
Ac Me			20.60			
Ac Me			20.86			
OMe			56.20			
OMe			56.27			
OMe			56.44			
γ			63.00			
α			74.60			
β			80.32			
C2			112.60			
A2			112.77			
B2			113.79			
C β			118.06			
B5			119.82			
A6			120.45			
B6			121.64			
C6			122.52			
A5			123.44			
B1			124.06			
C5			124.20			
C1			134.04			
A1			136.77			
A4			140.70			
C4			142.97			
C α			146.44			
B4			148.27			
B3			152.06			
A3			152.19			
C3			152.76			
C γ			165.00			
Ac C=O			168.80			
Ac C=O			169.92			
Ac C=O			170.76			

Compound Number 1027

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
OMe			56.21			
OMe			56.44			
β			72.50			
A2			112.66			
B2			113.63			
B5			115.72			
B6			121.54			
A6			122.13			
B1			122.79			
A5			123.99			
A1			134.59			
A4			145.22			
B4			148.97			
B3			150.88			
A3			152.58			
Ac C=O			168.63			
α			194.31			

Acetic acid 2-methoxy-4-[2-(2-methoxyphenoxy) acetyl] phenyl ester

¹H (acetone)

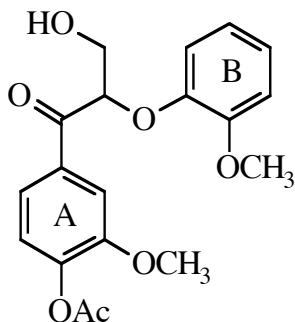
Atom	H Shifts	Mult	J
β	5.43		

Notes:

R. Helm
crystalline

Compound Number 1028

¹³C



Acetic acid 4-[3-hydroxy-2-(2-methoxyphenoxy) propionyl]-2-methoxy phenyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
β	5.55		
γ's	4.09		

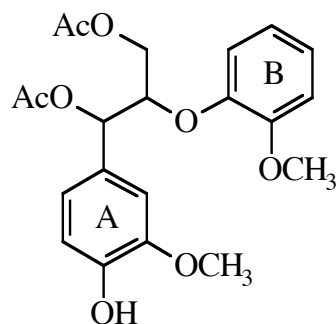
Notes:

R. Helm
20mg
300K acetone-d6

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.44			
OMe			56.12			
OMe			56.35			
γ			63.90			
β			84.22			
A2			113.43			
B2			113.73			
B5			117.45			
B6			121.60			
A6			122.81			
B1			123.34			
A5			123.80			
A1			135.27			
A4			145.05			
B4			148.29			
B3			151.13			
A3			152.36			
Ac C=O			168.60			
α			196.80			

Compound Number 1029

¹³C



threo

Acetic acid 3-acetoxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
α	6.04	d	7.13
β	4.77	m	
γ1	4.21	dd	11.9, 3.6
γ2	3.95	dd	11.9, 5.6

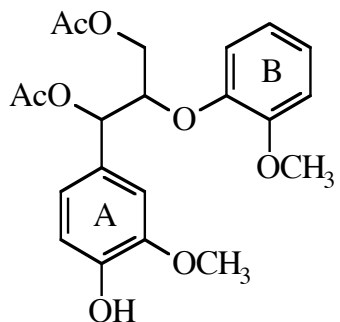
Notes:

R. Helm
19.6mg
acetone-d6

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.58			
Ac Me			20.97			
OMe			56.21			
OMe			56.30			
γ			63.86			
α			75.87			
β			80.99			
A2			111.89			
B2			113.77			
A5			115.64			
B5			119.13			
A6			121.19			
B6			121.67			
B1			123.57			
A1			129.17			
A4			147.71			
A3			148.26			
B4			149.31			
B3			151.83			
Ac C=O			169.95			
Ac C=O			170.66			

Compound Number 1030

¹³C



erythro

Acetic acid 3-acetoxy-3-(4-hydroxy-3-methoxyphenyl)-2-(2-methoxyphenoxy) propyl ester

¹H (acetone)

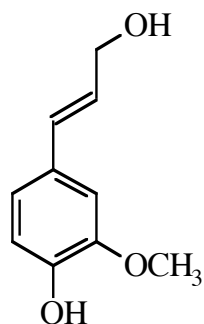
Atom	H Shifts	Mult	J
α	5.99	d	4.99
β	4.81	m	
γ1	4.34	dd	11.9, 6.2
γ2	3.98	dd	11.9, 4.0

Notes:

R. Helm
15mg
std conditions

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.60			
Ac Me			20.90			
OMe			56.20			
OMe			56.29			
γ			63.30			
α			74.89			
β			80.40			
A2			112.01			
B2			113.78			
A5			115.41			
B5			119.56			
A6			121.28			
B6			121.61			
B1			123.83			
A1			129.07			
A4			147.53			
A3			148.15			
B4			148.49			
B3			152.00			
Ac C=O			169.90			
Ac C=O			170.75			

Compound Number 2001

¹³C*trans*

coniferyl alcohol

4-hydroxy-3-methoxy cinnamyl alcohol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.78	100	56.09	92	55.56	100
γ	63.66	67	63.37	100	61.73	64
2	108.40	59	109.91	71	109.72	67
5	114.48	69	115.73	99	115.47	68
6	120.18	81	120.55	100	119.43	70
β	126.05	92	127.96	90	127.49	65
1	129.18	48	130.16	40	128.52	52
α	131.23	80	130.41	97	129.00	69
4	145.51	53	147.07	45	146.17	54
3	146.64	31	148.36	34	147.72	55

¹H (acetone)

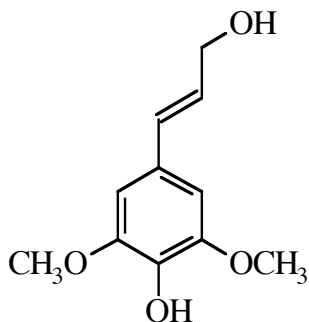
Atom	H Shifts	Mult	J
γ OH	3.78	t	5.65
OMe	3.85	s	
γ	4.18	td	1.5, 5.6
β	6.22	dt	15.9, 5.5
α	6.49	dt	15.9, 1.5
5	6.76	d	8.1
6	6.84	dd	8.1, 1.9
2	7.04	d	1.9
Ar OH	7.63	s	

Notes:

S. Quideau
 Assignments confirmed in all three solvents
 JAFc 1992-40(7)
 1108-1110

Compound Number 2002

¹³C



sinapyl alcohol

4-hydroxy-3,5-dimethoxy cinnamyl alcohol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.27	100	56.48	39	55.92	100
OMe	56.27	100	56.48	39	55.92	100
γ	63.76	52	63.33	21	61.62	42
2	103.35	94	104.65	32	103.79	76
6	103.35	94	104.65	32	103.79	76
β	126.58	49	128.27	19	127.89	41
1	128.22	22	128.99	10	127.40	28
α	131.50	50	130.62	100	129.17	42
4	134.80	20	136.52	8	135.17	14
3	147.13	41	148.71	16	148.01	50
5	147.13	41	148.71	16	148.01	50

¹H (acetone)

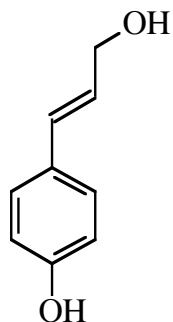
Atom	H Shifts	Mult	J
γ OH	3.88	t	5.65
OMe	3.82	s	
γ	4.20	td	5.6, 1.5
β	6.24	dt	15.8, 5.5
α	6.48	dt	15.8, 1.5
2,6	6.71	s	
4 OH	7.30	s	

Notes:

S. Quideau
 Note A1 and β change places in DMSO
 Assignments confirmed in CDCL3 and Acetone
 JAFC 1992-40(7)
 1108-1110

Compound Number 2003

¹³C



p-coumaryl alcohol
4-hydroxy-cinnamyl alcohol

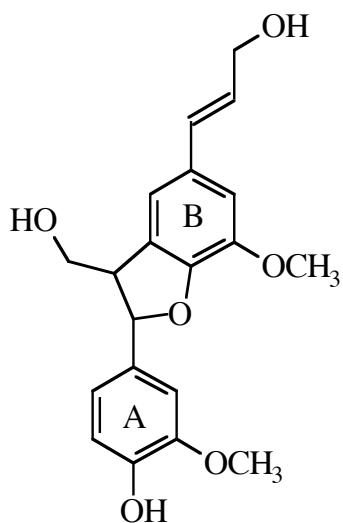
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ	63.79	46	63.41	41	61.72	49
3	115.50	100	116.15	84	115.37	85
5	115.50	100	116.15	84	115.37	85
β	125.74	46	127.71	42	127.15	50
2	127.73	98	128.33	100	127.38	100
6	127.73	98	128.33	100	127.38	100
1	128.90	24	129.68	18	127.92	27
α	131.08	48	130.13	44	128.70	50
4	156.12	31	157.76	18	156.80	27

¹H (acetone)

Atom	H Shifts	Mult	J
γ OH	3.85	t	5.65
g's	4.19	td	5.6, 1.6
β	6.19	dt	15.9, 5.6
α	6.50	dt	15.9, 1.6
3,5	6.78	m	
2,6	7.25	m	
4 OH	8.40	s	

Notes:

S. Quideau
JAFC-1992-40(7)
1108-1110



4-[3-Hydroxymethyl-5-(3-hydroxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2-methoxyphenol

¹H (acetone)

Atom	H Shifts	Mult	J
β	3.53	br q	
γ + γ OH	3.78-3.88	m	
A3 OMe	3.81	s	
B3 OMe	3.85	s	
B γ OH	4.16	t	5.0
B γ	4.19	td	5.2, 1.5
α	5.56	d	6.5
B β	6.23	dt	15.8, 5.5
B α	6.52	dt	15.8, 1.5
A5	6.80	d	8.1
A6	6.87	ddd	8.1, 2.0, 0.5
B2	6.94	br s	
B6	6.97	br s	
A2	7.03	d	2.0
A4 OH	7.73	br s	

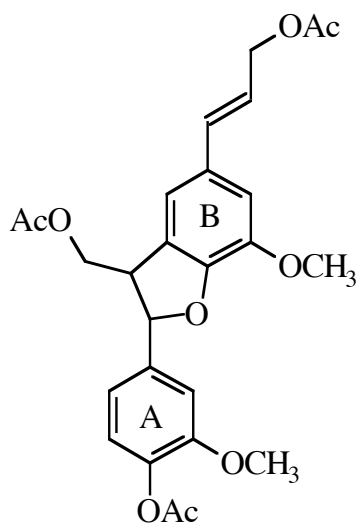
Notes:

S. Quideau-Ag₂O oxidation of coniferyl alcohol.
Assignments confirmed in acetone.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	53.53	70	54.73	73	53.02	41
A OMe	55.99	97	56.26	94	55.68	46
B OMe	56.01	100	56.38	100	55.73	100
B γ	63.83	89	63.39	79	61.70	77
γ	64.00	72	64.60	68	62.98	32
α	88.24	72	88.51	100	87.26	45
A2	108.75	73	110.48	99	110.37	59
B2	110.54	73	111.72	85	110.37	59
A5	114.33	78	115.67	60	115.00	38
B6	114.78	72	116.08	97	115.37	52
A6	119.43	75	119.57	99	118.58	55
B β	126.45	70	128.33	85	128.02	46
B5	128.09	50	130.40	59	129.52	48
B α	131.33	80	130.54	100	129.04	73
B1	130.87	47	131.91	54	130.56	78
A1	132.87	49	134.36	55	132.39	69
B3	144.47	42	145.14	50	143.72	70
A4	145.74	52	147.27	26	146.42	87
A3	146.68	44	148.36	32	147.13	56
B4	148.38	28	148.84	32	147.60	78

Compound Number 2005

¹³C



Acetic acid 4-[3-acetoxymethyl-5-(3-acetoxypentenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2-methoxyphenyl ester

¹H (acetone)

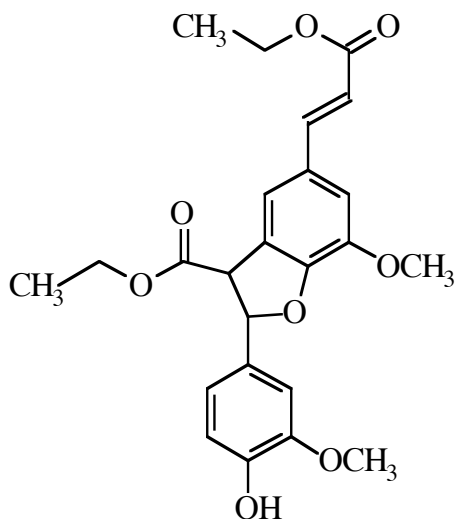
Atom	H Shifts	Mult	J
γ Ac Me	2.0	s	
B γ Ac Me	2.01	s	
A4 Ac Me	2.22	s	
β	3.78	m	
A3 OMe	3.79	s	
B3 OMe	3.88	s	
γ1	4.34	dd	11.1, 7.6
γ2	4.46	dd	11.1, 5.4
B γ	4.66	dd	6.5, 1.3
α	5.61	d	6.7
Bβ	6.24	dt	15.8, 6.5
B α	6.63	dt	15.8, 1.3
A6	7.0	br dd	8.1, 1.8
B6	7.03	br s	
B2	7.049	br s	
A5	7.054	d	8.1
A2	7.18	d	1.8

Notes:

S.Quideau-Ag2O oxidation of coniferyl alcohol + acetylation. Assignments confirmed in CDCl₃ and acetone

A1 and A4 switch places in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.51	91	20.43	94	20.41	68
γ Ac Me	20.68	81	20.67	92	20.61	78
B γ Ac Me	20.90	84	20.78	77	20.79	84
β	50.36	71	51.33	85	49.53	46
A OMe	55.79	100	56.24	97	55.84	100
B OMe	55.92	95	56.41	92	55.84	100
B γ	65.06	83	65.47	100	64.57	60
γ	65.22	61	65.96	75	64.90	37
α	87.91	72	88.34	89	87.01	47
A2	109.84	77	111.07	88	110.59	50
B2	110.56	60	112.20	79	111.08	35
B6	115.23	69	116.32	76	115.36	40
A6	118.08	78	118.67	90	118.00	50
B β	121.16	72	122.30	86	121.53	45
A5	122.79	79	123.76	94	123.01	50
B5	127.21	63	128.82	61	127.84	50
B1	130.59	60	131.65	58	130.28	47
B α	134.13	76	134.64	87	133.52	47
A4	139.56	46	140.70	38	139.14	40
A1	139.30	58	140.99	54		46
B3	144.30	56	145.39	53		47
B4	148.03	39	149.21	37	139.59	35
A3	151.16	57	152.38	44	143.96	53
					147.55	
A4 Ac C=O	168.82	52	168.98	44	150.92	42
γ C=O	170.63	53	170.97	43		51
B γ C=O	170.76	43	170.80	32	168.60	44
					170.41	
					170.27	



5-(2-Ethoxycarbonylvinyl)-2-(4-hydroxy-3-methoxyphenyl)-7-methoxy-2,3-dihydrobenzofuran-3-carboxylic acid ethyl ester

¹H (acetone)

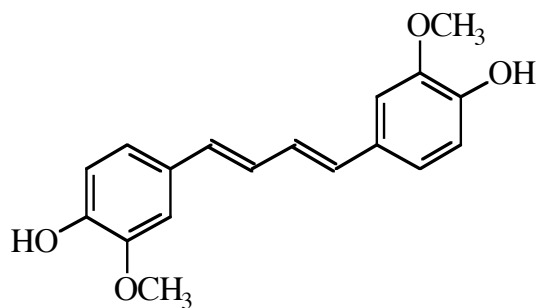
Atom	H Shifts	Mult	J
CH3	1.27	t	7.1
CH3	1.27	t	7.1
A3 OMe	3.82	s	
B3 OMe	3.91	s	
CH2	4.18	q	7.1
CH2	4.25	m	
β	4.43	d	8.0
α	6.03	d	8.0
B β	6.41	d	15.9
A5	6.84	d	8.1
A6	6.91	dd	8.1, 1.9
A2	7.08	d	1.9
B6	7.27	br s	
B2	7.31	br s	
B α	7.62	d	15.9
A4 OH	7.87	s	

Notes:

S. Quideau-Ag₂O oxidation of ethyl ferulate.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A CH3	14.24	95	14.48	94	14.12	100
B CH3	14.31	96	14.63	92	14.32	91
β	55.54	77	56.06	88	54.33	42
A OMe	55.98	100	56.31	98	55.78	96
B OMe	56.08	94	56.49	100	56.04	78
A CH2	61.83	87	62.20	89	61.49	80
B CH2	60.37	85	60.56	89	59.99	67
α	87.46	80	88.34	89	87.36	45
A2	108.74	90	110.74	79	110.86	59
B2	111.93	71	113.30	83	112.55	37
A5	114.49	95	115.82	64	115.48	57
B β	115.93	78	116.69	87	115.84	45
B6	117.86	75	118.91	90	118.31	41
A6	119.44	93	120.18	91	119.41	58
B5	125.85	65	127.41	57	126.35	53
B1	128.61	70	129.46	59	128.23	53
A1	131.44	67	132.10	42	129.97	57
B α	144.50	77	145.22	85	144.66	43
B3	144.69	63	145.82	50	147.83	66
A3	146.69	63	148.56	35	144.44	60
A4	146.03	65	147.97	34	149.50	47
B4	149.90	42	150.99	34	147.19	59
B γ	167.18	58	167.28	53	166.65	57
γ	170.20	64	171.10	53	170.42	65

Compound Number 2007



trans

1,4-bis-(4-hydroxy-3-methoxyphenyl)-1,3-butadiene

¹H (acetone)

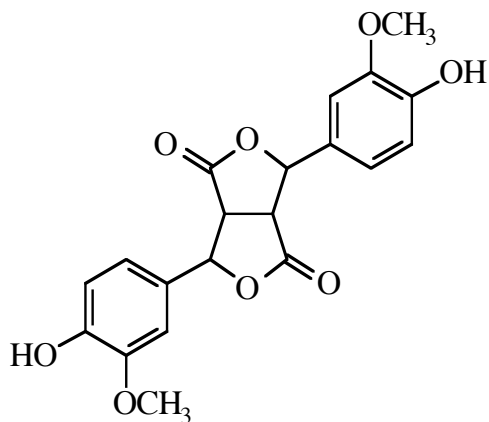
Atom	H Shifts	Mult	J
OMe	3.87	s	
α	6.56	m	
A5	6.78	d	8.1
β, A6	6.85-6.92	m	
A2	7.12	d	1.9
Ar OH	7.71	s	

Notes:

S. Quideau
 From LiBH₄ red. of dilactone
 As this compound has a plane of symmetry
 the shifts for the other half are identical.

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.89	100	56.21	100	55.55	100
2	107.95	90	109.76	84	109.38	61
5	114.55	90	115.96	77	115.55	57
6	120.29	93	120.95	96	119.81	67
β	127.35	87	128.07	85	126.90	49
1	130.25	48	130.81	41	128.96	35
α	131.72	88	132.49	80	131.37	59
4	145.45	57	147.41	44	146.43	45
3	146.69	53	148.60	42	147.80	52



dilactone from ferulic acid

3,6-Bis-(4-hydroxy-3-methoxyphenyl) tetrahydrofuro [3,4-c]
furan-1,4-dione

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.85	s	
β	4.09	t	1.0
α	5.77	br s	
5	6.86	d	8.2
6	6.92	dd	8.2, 1.8
2	7.05	d	1.8
4 OH	7.90	s	

Notes:

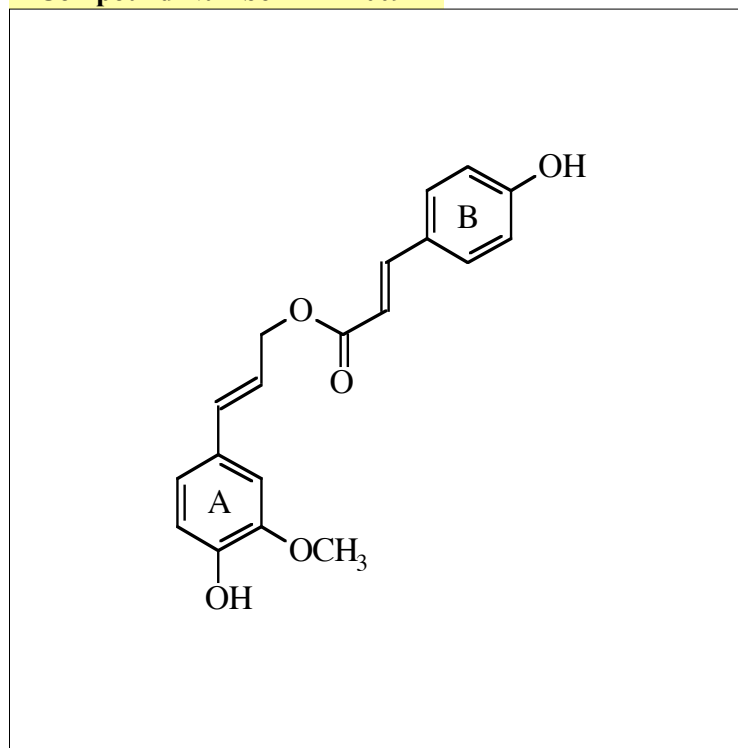
S. Quideau

As this compound has a plane of symmetry
the shifts for the other half are identical.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	48.39	83	49.11	95	48.11	83
OMe	56.13	95	56.39	95	55.81	74
α	81.90	86	83.22	94	82.06	75
2	107.52	100	110.40	88	110.64	98
5	114.98	92	116.00	81	115.46	85
6	117.41	92	119.57	100	119.22	100
1	129.81	52	130.82	49	129.00	73
4	146.35	53	148.17	42	147.36	70
3	147.06	47	148.72	36	147.88	85
γ	174.94	48	175.99	48	175.40	75

Compound Number 2009

¹³C



coniferyl p-coumarate

3-(4-Hydroxyphenyl) acrylic acid 3-(4-hydroxy-3-methoxyphenyl) llyl e
ster

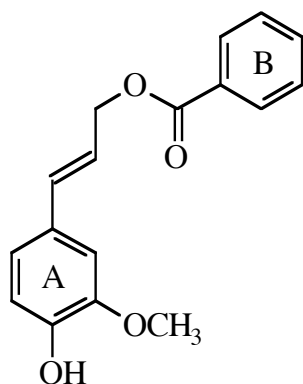
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
γ	4.78	dd	6.5, 1.3
β	6.25	dt	15.8, 6.5
B β	6.37	d	15.9
α	6.65	dt	15.8, 1.3
A5	6.79	d	8.1
B3,5	6.88	m	
A6	6.91	dd	8.1, 2.0
A2	7.11	d	2.0
B2,6	7.54	m	
B α	7.63	d	15.9
ArOH	7.76	s	
ArOH	9.03	s	

Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.87	55	56.20	47	55.61	77
γ	65.35	43	65.49	55	64.62	34
A2	108.44	51	110.20	47	109.91	52
B β	114.45	53	115.45	43	114.13	44
A5	114.98	47	115.83	40	115.46	51
B3	115.93	100	116.68	67	115.81	96
B5	115.93	100	116.68	67	115.81	96
A6	120.62	54	121.19	46	120.12	53
β	120.89	52	121.72	44	120.61	49
B1	126.81	32	126.90	24	125.12	38
A1	128.83	30	129.39	22	127.59	43
B2	130.00	96	130.91	100	130.37	100
B6	130.00	96	130.91	100	130.37	100
α	134.43	50	134.90	45	133.9	49
Bα	145.07	41	145.49	43	144.90	43
A4	145.84	32	147.80	22	146.87	39
A3	146.63	31	148.53	17	147.79	47
B4	158.26	32	160.65	17	159.89	37
B γ	167.57	28	167.27	23	166.46	40



conferyl benzoate

3-Phenyl-acrylic acid 3-(4-hydroxy-3-methoxyphenyl)allyl ester

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	55.86	43	56.21	59	55.61	58
γ	65.74	45	66.35	60	65.55	45
A2	108.39	41	110.25	57	109.96	46
A5	114.44	40	115.84	43	115.45	44
A6	120.64	43	121.29	64	120.23	80
β	120.81	44	121.32	64	120.23	80
B3	128.32	95	129.37	100	128.82	96
B5	128.32	95	129.37	100	128.82	96
A1	128.76	21	129.31	100	127.52	30
B2	129.61	100	130.17	94	129.20	100
B6	129.61	100	130.17	94	129.20	100
B1	130.24	13	131.30	17	129.78	24
B4	132.93	45	133.86	59	133.39	50
α	134.50	44	135.34	60	134.29	50
A3	146.63	20	148.54	18	147.79	36
A4	145.91	23	147.89	18	146.93	31
B α C=O	166.46	16	166.58	16	165.62	25

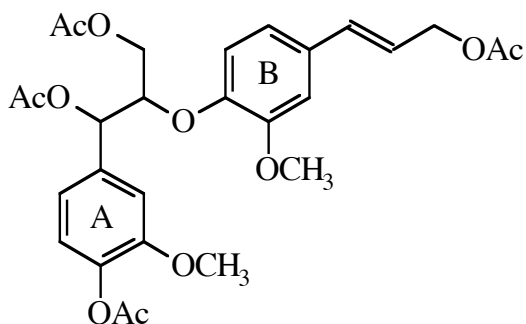
¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.86	s	
γ	4.94	dd	6.5, 1.3
β	6.34	dt	15.8, 6.5
α	6.72	dt	15.8, 1.3
A5	6.80	d	8.1
A6	6.93	dd	8.1, 2.0
A2	7.14	d	2.0
B3,5	7.50	m	
B4	7.62	m	
B2,6	8.03 - 8.06	m	
ArOH	7.76	s	

Notes:

S. Quideau
isolated from gum s.am

Compound Number 2011

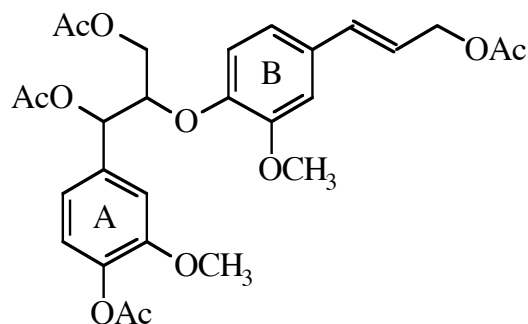
 ^{13}C *threo*Guaiacylglycerol- β -coniferyl ether peracetate ^1H (acetone)

Atom	H Shifts	Mult	J

Notes:

S. Quideau

Atom	CDCl_3		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.63		20.44		20.38	
α Ac Me	20.68		20.58		20.46	
γ Ac Me	20.99		20.78		20.75	
$B\gamma$ Ac Me	21.02		20.91		20.72	
A3 OMe	55.81		56.24		55.67	
B3 OMe	55.93		56.29		55.84	
γ	63.02		63.56		62.49	
$B\gamma$	65.08		65.36		64.45	
α	74.40		75.32		74.28	
β	80.19		80.56		78.95	
B2	110.17		111.31		110.22	
A2	111.66		112.64		111.65	
B5	118.31		118.74		116.99	
A6	119.54		120.30		119.46	
B6	119.82		120.54		119.56	
$B\beta$	122.13		123.26		122.35	
A5	122.83		123.56		122.74	
B1	131.54		132.35		130.64	
$B\alpha$	133.87		134.16		132.99	
A1	135.18		136.61		135.40	
A4	139.92		140.92		139.23	
B4	148.02		149.09		147.56	
B3	150.71		151.75		150.09	
A3	151.12		152.22		150.73	
A4 Ac C=O	168.76		168.89		168.48	
α Ac C=O	169.65		170.00		169.45	
γ Ac C=O	170.54		170.68		170.05	
$B\gamma$ Ac C=O	170.84		170.77		170.21	

*erythro*

Guaiacyl glycerol- β -coniferyl ether peracetate
Acetic acid 4-{1,3-diacetoxy-2-[4-(3-acetoxypropenyl)-2-methoxyphenoxy] propyl}-2-methoxyphenyl ester

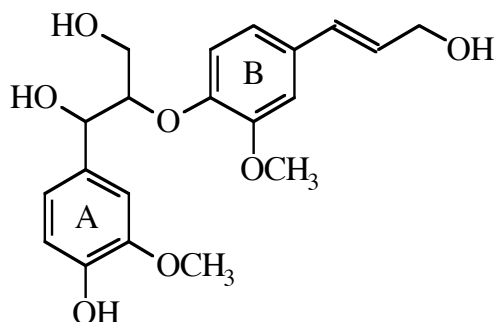
¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.93	s	
B γ Ac Me	2.02	s	
α Ac Me	2.07	s	
A4 Ac Me	2.21	s	
A3 OMe	3.82	s	
B3 OMe	3.85	s	
γ 1	4.22	dd	11.9, 4.1
γ 2	4.36	dd	11.9, 5.9
B γ	4.66	dd	6.4, 1.4
β	4.85	m	
α	6.06	d	5.1
B β	6.26	dt	15.9, 6.4
B α	6.62	dt	15.9, 1.4
B6	6.93	dd	8.3, 2.0
B5	6.97	d	8.3
A5	7.02	d	8.1
A6	7.05	dd	8.1, 1.8
B2	7.13	d	2.0
A2	7.25	d	1.8

Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.64		20.45	87	20.39	
α Ac Me	20.74		20.59	92	20.47	
γ Ac Me	20.99		20.77	86	20.69	
B γ Ac Me	20.99		20.85	90	20.75	
A3 OMe	55.80		56.25	100	55.72	
B3 OMe	55.91		56.27	100	55.78	
γ	62.53		62.98	71	61.92	
B γ	65.07		65.34	93	64.43	
α	73.70		74.49	83	73.07	
β	80.17		80.27	88	78.29	
B2	110.24		111.38	86	110.40	
A2	111.94		112.73	76	111.69	
B5	119.11		119.36	82	117.51	
A6	119.65		120.39	80	119.37	
B6	119.80		120.48	80	119.56	
B β	122.23		123.37	97	122.48	
A5	122.60		123.35	97	122.58	
B1	131.86		132.63	49	130.93	
B α	133.85		134.12	82	132.96	
A1	135.28		136.59	63	135.34	
A4	139.78		140.79	38	139.11	
B4	147.23		148.27	44	146.63	
B3	150.98		151.98	46	150.32	
A3	151.02		152.11	46	150.60	
A4 Ac C=O	168.80		168.90	38	168.51	
α Ac C=O	169.49		169.88	45	169.33	
γ Ac C=O	170.76		170.74	77	170.12	
B γ Ac C=O	170.83		170.74	77	170.21	

*threo*Guaiacylglycerol- β -coniferyl ether

1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(3-hydroxypropenyl)-2-methoxyphenoxy]propane-1,3-diol

¹H (acetone)

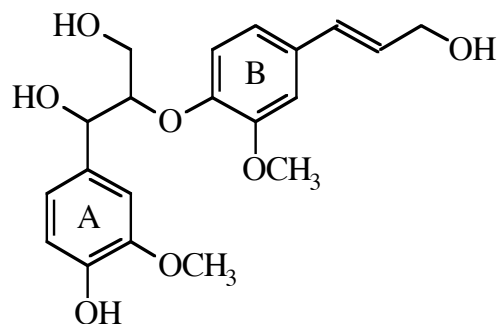
Atom	H Shifts	Mult	J
γ 1	3.48	dd	11.9, 5.7
γ 2	3.67	dd	11.9, 3.7
A,B γ OH	3.80-3.90		
A3 OMe	3.80	s	
B3 OMe	3.88	s	
B γ	4.20	br dd	5.3, 1.6
β	4.20	m	
α OH	4.45	d	3.9
α	4.87	br d	5.5
B β	6.28	dt	15.9, 5.4
B α	6.52	dt	15.9, 1.6
A5	6.76	d	8.1
A,B 6	6.88-6.91	m	
A2	7.08	d	1.9
B2	7.09	d	1.9
B5	7.11	d	8.4
A4 OH	7.50	br s	

Notes:

S. Quideau

 α (e/t) and γ shifts (e/t) interchange from sample to sample, probably due toH-exchange of OH's in d₆-acetone.CDCl₃ and DMSO shifts not substantiated.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	55.97	83	56.19	100	55.44	75
B3 OMe	56.03	100	56.31	90	55.83	69
γ	61.21	22	61.88	60	60.16	50
B γ	63.56	57	63.25	100	61.65	100
β	74.07	21	73.83	50	71.01	35
α	89.47	54	88.37	80	84.36	36
B2	108.94	44	110.85	50	109.84	42
A2	110.00	68	111.42	40	111.05	38
A5	114.37	32	115.21	30	114.71	39
B5	120.15	63	119.57	90	115.53	42
B6	120.29	55	120.31	60	119.05	29
A6	120.83	53	120.54	80	119.10	51
B β	128.24	67	129.63	70	128.58	83
B α	130.53	67	129.85	90	128.60	83
B1	131.55	19	132.96	40	130.18	46
A1	133.15	28	133.82	40	132.97	43
A4	144.75	26	146.83	30	145.46	64
A3	145.71	16	148.03	30	147.03	48
B4	147.47	33	149.15	40	147.88	42
B3	151.33	35	151.69	40	149.70	25

*erythro*Guaiacylglycerol- β -coniferyl ether

1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(3-hydroxypropenyl)-2-methoxyphenoxy]propane-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
γ 1	3.69	dd	11.8, 4.0
γ 2	3.81	dd	11.8, 6.2
A,B γ OH	3.80-3.90		
A3 OMe	3.80	s	
B3 OMe	3.84	s	
B γ	4.19	br dd	5.4, 1.6
β	4.29	m	
α OH	4.57	d	4.6
α	4.89	br d	5.2
B β	6.26	dt	15.9, 5.4
B α	6.50	dt	15.9, 1.6
A5	6.75	d	8.1
A,B6	6.86-6.89	m	
B5	6.91	d	1.9
B2	7.05	d	1.9
A2	7.10	d	8.4
A4 OH	7.47	br s	

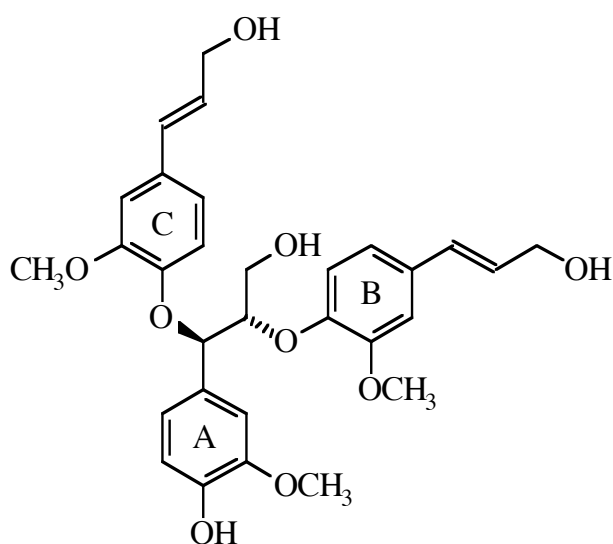
Notes:

S. Quideau

α (e/t) and γ shifts (e/t) interchange from sample to sample, probably due to H-exchange of OH's in d6-acetone.

CDCl₃ and DMSO shifts not substantiated.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	55.97	84	56.21	100	55.64	100
B3 OMe	56.03	100	56.29	100	55.64	100
γ	60.87	16	61.82	60	60.16	92
B γ	63.56	58	63.25	99	61.65	92
α	72.96	11	73.81	70	71.67	24
β	87.34	43	86.63	49	83.75	23
B2	108.82	44	110.99	87	109.93	29
A2	110.05	68	111.44	92	111.47	24
A5	114.37	32	115.13	43	114.60	26
B5	119.14	42	119.27	58	115.60	38
B6	120.09	45	120.23	62	119.05	27
A6	120.79	54	120.46	86	119.54	27
B β	128.19	63	129.54	55	128.52	34
B α	130.56	61	129.87	92	128.60	78
B1	131.86	10	132.84	35	130.08	34
A1	133.11	34	134.24	35	133.23	28
A4	143.98	20	146.65	21	145.46	60
A3	145.27	14	147.96	27	147.00	40
B4	146.75	25	148.55	29	147.60	29
B3	151.62	22	151.88	31	149.75	44

*erythro*

Guaiacylglycerol- α,β -bis-coniferyl ether
4-{3-Hydroxy-1,2-bis-[4-(3-hydroxypropenyl)-2-methoxy
phenoxy]propyl}-2-methoxyphenol

¹H (acetone)

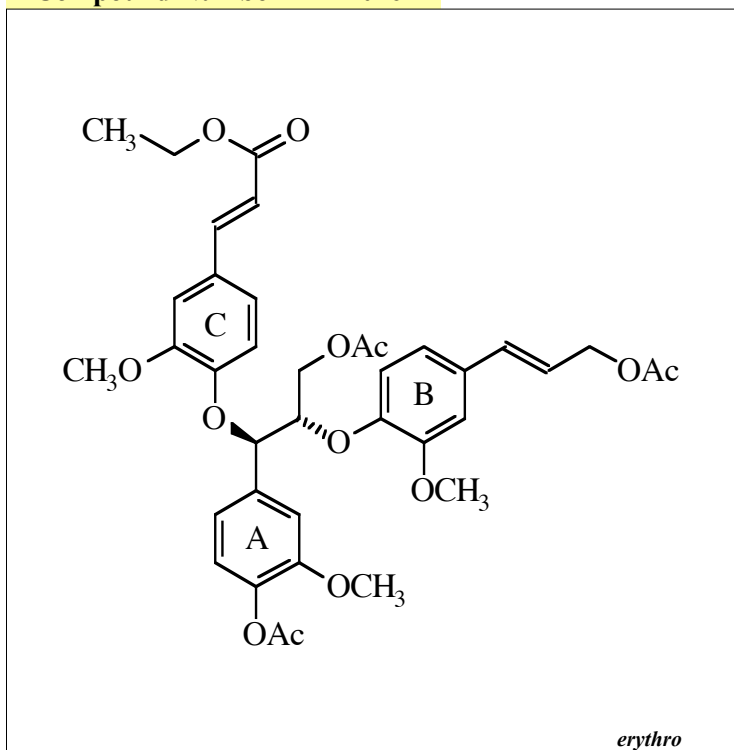
Atom	H Shifts	Mult	J
A α	5.46	d	5.5
A β	4.56	m	
A γ 1	3.81	dd	11.7, 7.1
A γ 2	3.93	dd	11.7, 4.1

Notes:

S. Quideau
 Shifts for α and β 's and A,B,C 1's change
 places in CDCl₃ and DMSO

S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzfororschung*, 1994, 48(2), 124-132.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	55.76	82	56.18	83	55.41	88
B3 OMe	55.85	92	56.20	83	55.61	100
C3 OMe	55.93	100	56.32	76	55.80	100
γ	62.17	40	61.75	46	59.74	31
B γ	63.56	61	63.25	100	61.52	71
C γ	63.63	64	63.25	100	61.58	72
α	81.68	52	81.15	49	79.01	39
β	85.42	56	85.31	57	82.53	40
C2	109.38	61	110.74	50	109.93	62
B2	109.54	56	110.93	51	109.93	62
A2	109.77	62	112.11	53	111.91	41
A5	114.26	54	115.23	46	114.74	31
C5	115.94	57	117.02	54	115.71	48
B5	119.13	58	119.04	59	116.15	41
C6	119.49	64	119.90	67	118.87	58
B6	119.74	61	120.15	66	119.00	53
A6	120.33	55	121.49	57	120.34	35
C β	127.10	68	129.22	56	128.32	72
B β	127.60	70	129.45	61	128.47	58
B α	130.59	62	129.85	100	130.49	79
C α	130.79	62	129.85	100	130.49	79
A1	130.43	49	130.39	41	128.24	40
C1	130.85	66	132.05	38	128.71	58
B1	132.09	45	132.74	41	128.82	58
A4	145.49	50	147.18	32	146.07	45
C4	146.64	47	147.77	33	146.27	58
A3	146.85	44	148.10	31	147.11	45
B4	147.08	45	148.61	36	147.36	58
C3	149.80	47	151.17	41	149.73	61
B3	150.81	46	151.71	40	149.80	61



3-(4-{3-Acetoxy-1-(4-acetoxy-3-methoxyphenyl)-2-[4-(3-acetoxypropenyl)-2-methoxyphenoxy]propoxy}-3-methoxyphenyl) acrylic acid ethyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ1	4.45	dd	11.8, 3.8
γ2	4.53	dd	11.9, 6.0
B γ	4.66	dd	6.4, 1.3
β	4.88	m	
α	5.71	d	5.3
B β	6.25	dt	15.8, 6.4
C β	6.39	d	15.9
B α	6.61	dt	15.8, 1.3
C α	7.53	d	15.9

Notes:

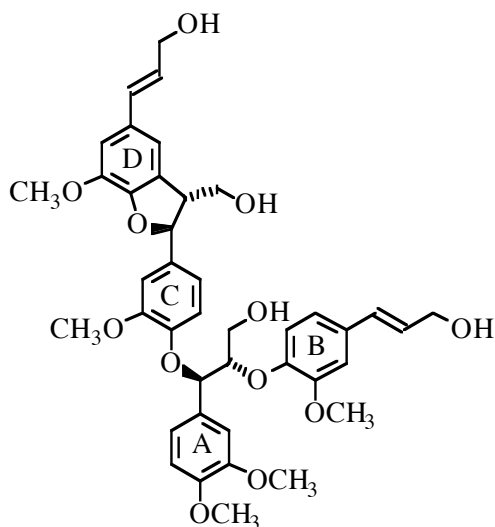
S. Quideau

Shifts substantiated in d₆-acetone but not CDCl₃ or DMSO.

γ and B γ Ac C=O shifts may be interchanged

S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Me	14.33	90	14.57	85	14.19	73
A4 Ac Me	20.65	94	20.43	100	20.33	77
γ Ac Me	20.74	84	20.60	62	20.43	81
B γ Ac Me	21.00	88	20.77	100	20.71	100
A OMe	55.73	61	56.16	92	55.67	97
B OMe	55.96	82	56.20	62	55.80	54
C OMe	55.98	100	56.44	62	55.95	61
CH ₂	60.39	75	60.56	62	59.79	53
γ	63.22	44	63.41	38	62.33	24
B γ	65.09	87	65.37	54	64.41	59
α	79.99	42	80.47	38	78.45	27
β	81.98	50	81.70	46	79.57	33
B2	110.14	72	111.19	38	110.22	37
C3	110.73	65	111.92	38	111.40	41
A2	111.17	48	112.80	46	111.89	38
C5	115.87	54	116.69	38	115.28	34
C β	116.51	47	117.15	46	116.25	39
B5	119.10	58	119.28	69	117.18	40
A6	119.34	42	120.33	54	119.35	28
B6	119.82	62	120.47	62	119.50	45
C6	122.08	75	122.57	62	122.33	39
B β	122.15	75	123.17	69	122.24	43
A5	122.66	68	123.36	46	122.49	25
C1	128.62	52	129.41	46	127.56	39
B1	131.71	50	132.37	46	130.59	43
B α	133.90	79	134.18	69	133.00	53
A1	136.48	56	137.19	31	135.93	31
A4	139.64	57	140.63	46	138.94	51
C α	144.28	58	144.96	46	144.23	42
B4	147.35	39	148.51	23	146.96	50
C4	149.33	52	150.06	31	148.42	47
C3	150.23	53	151.36	46	149.75	44
B3	150.96	55	151.86	23	150.12	53
A3	151.20	43	152.12	38	150.49	38
C γ C=O	167.13	52	167.23	69	166.40	53
A4 Ac C=O	168.78	48	168.90	54	168.36	44
γ Ac C=O	170.77	27	170.81	31	170.09	48
B γ Ac C=O	170.86	55	170.82	69	170.14	54

*erythro*Veratrylglycerol- α -dehydroiconifyl- β -con.ether¹H Acetone/D2O

Atom	H Shifts	Mult	J
A α	5.48	d	5.8
A β	4.62	m	
A γ 1	3.80	dd	11.9, 6.5
A γ 2	3.91	dd	11.9, 4.9
C α	5.51	d	5.8
C β	3.43	m	
C γ 1	3.69	s	
C γ 2	3.80	s	

Notes:

S. Quideau

Run only in Acetone:D2O (9:1)

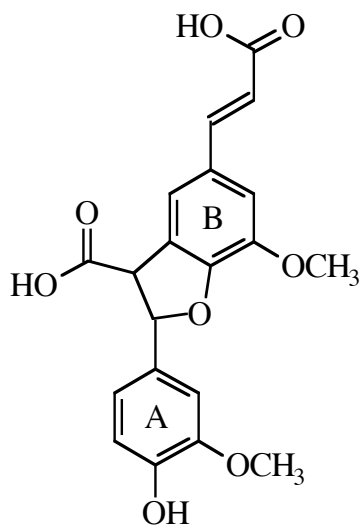
S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzfororschung*, 1994, 48(2), 124-132.

Note: Two erythro isomers!! Resolvable pairs are:

80.10, 80.05 54.28, 54.21 136.08, 136.05 110.98, 110.89

147.31, 147.30 116.41, 116.42 118.42, 118.40

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C β			Note* 54.28	30		
A3 OMe			55.83	100		
A4 OMe			55.80	72		
B OMe			56.09	100		
D OMe			56.20	100		
C OMe			56.33	86		
γ			61.20	46		
B γ			62.77	94		
D γ			62.85	50		
C γ			64.18	52		
α			80.10	29		
β			83.86	46		
C α			87.80	55		
B2			110.71	66		
C2			110.98	29		
D2			111.35	46		
A5			111.67	44		
A2			112.04	47		
D6			115.96	59		
C5			116.41	24		
B5			117.55	49		
C6			118.42	49		
B6			119.99	64		
A6			120.96	36		
D β			127.73	65		
B β			128.64	64		
B α			130.02	85		
D5			129.64	33		
D α			130.57	39		
A1			130.94	39		
D1			131.83	53		
B1			132.11	46		
C1			136.08	24		
D3			144.75	61		
C4			147.31	25		
B4			147.98	48		
D4			148.27	24		
A3			149.45	53		
A4			149.48	53		
C3			150.58	50		
B3			150.83	50		



beta-5-dehydrodiferulic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe	56.03	55	56.31	82	55.61	80
B3 OMe	56.15	47	56.49	70	55.85	80
β	53.76	46	56.22	100	55.10	20
α	87.53	24	88.56	49	87.72	29
A2	108.77	93	110.72	57	110.61	70
B2	112.26	18	113.34	41	112.10	38
A5	114.53	20	115.78	57	115.30	61
B β	114.91	79	116.75	42	116.43	100
B6	118.63	26	118.95	42	117.93	49
A6	119.49	100	120.08	60	119.50	73
B5	125.93	24	128.05	35	127.82	43
B1	128.29	26	129.38	34	130.69	24
A1	131.44	29	132.49	31	137.46	15
B α	146.74	46	145.59	41	144.09	49
B3	144.71	80	145.73	34	144.19	49
A4	146.06	30	147.81	30	146.79	31
A3	146.74	46	148.53	31	147.60	60
B4	150.32	28	150.96	24	149.16	49
B γ	171.34	28	168.18	42	167.79	49
γ	173.67	31	172.55	38	171.66	42

¹H (acetone)

Atom	H Shifts	Mult	J
α	6.05	d	7.8
β	4.39	d	7.8
A2	7.08	d	2.0
A5	6.83	d	8.1
A6	6.91	dd	8.1, 2.0
A3 OMe	3.83	s	
B α	7.62	d	15.9
B β	6.39	d	15.9
B2	7.29	br s	
B6	7.33	br s	
B3 OMe	3.91	s	

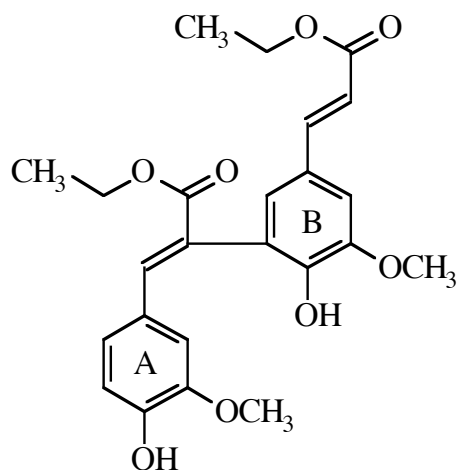
Notes:

S. Quideau

B α changes in CDCl₃

JCS Perkin 1, 3485-98 (1994)

Cmpd 13



3-(4-Hydroxy-3-methoxyphenyl)-2-[2-hydroxy-3-methoxy-5-(2-propoxycarbonylvinyl)phenyl] acrylic acid ethyl ester

¹H (acetone)

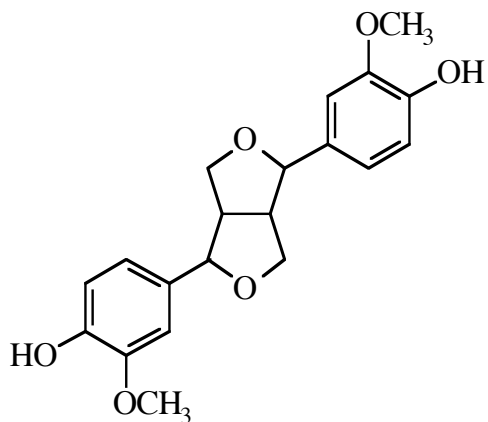
Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
CH3	1.24	t	7.1
A3 OMe	3.44	s	
B3 OMe	3.96	s	
CH2	4.16	q	7.1
CH2	4.17	q	7.1
B β	6.38	d	15.9
A2	6.696	d	2.1
A5	6.702	d	8.2
A6	6.83	dd	8.2, 2.1
B6	7.00	d	2.0
B2	7.38	d	2.0
B α	7.56	d	15.9
A α	7.76	s	

Notes:

S. Quideau

B5,B6 and A6 switch in acetone and DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.28	100	14.61	100	14.14	100
CH3	14.28	100	14.62	100	14.16	94
A3 OMe	55.24	74	55.51	81	54.66	78
B3 OMe	56.12	72	56.58	88	56.05	74
CH2	60.35	71	60.47	79	59.62	64
CH2	61.09	69	61.05	74	60.15	61
B2	108.68	58	110.25	76	110.05	38
A2	111.57	61	113.28	81	112.92	48
A5	114.29	65	115.63	81	115.02	45
B β	116.00	63	116.31	76	115.17	50
β	123.29	41	124.92	38	123.97	44
B5	124.76	43	126.56	45	125.09	45
B6	124.82	62	125.71	76	124.61	42
A6	125.82	61	126.37	81	125.16	48
B1	126.81	48	127.31	50	125.56	51
A1	126.94	50	127.58	50	125.66	49
α	141.45	53	141.37	71	140.11	39
B α	144.30	60	145.25	74	144.49	42
A3	145.86	45	147.87	45	147.02	58
B4	146.05	44	148.03	43	147.11	46
A4	147.11	51	148.99	52	148.16	52
B3	147.31	44	149.10	45	148.23	59
B γ	167.11	43	167.29	40	166.44	52
γ	167.46	34	167.77	33	166.83	43



Pinoresinol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	54.15	98	55.23	86	53.59	72
OMe	55.94	98	56.24	93	55.62	100
γ	71.66	98	72.20	88	70.91	70
α	85.86	98	86.62	83	85.17	72
2	108.60	95	110.60	80	110.43	72
5	114.27	93	115.52	69	115.15	73
6	118.95	100	119.59	100	118.64	75
1	132.91	51	134.17	46	132.26	61
4	145.24	59	146.86	47	145.91	66
3	146.70	48	148.32	32	147.53	66

¹H (acetone)

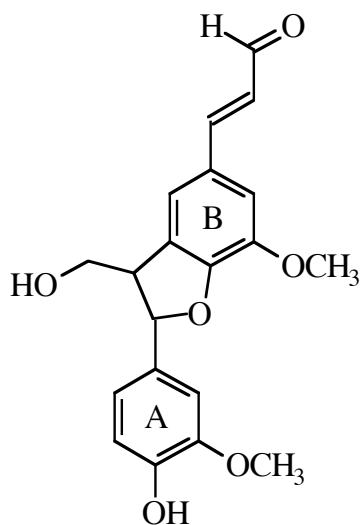
Atom	H Shifts	Mult	J
β	3.08	m	
γ1	3.80	dd	9.1, 3.8
OMe	3.83	s	
γ2	4.19	dd	9.0, 7.0
α	4.66	d	4.25
A5	6.78	d	8.1
A6	6.83	dd	8.1, 1.8
A2	6.98	d	1.8
Ar OH	7.48	s	

Notes:

S. Quideau
As this compound has a plane of symmetry
the shifts for the other half are identical.

Compound Number 2021

¹³C



erythro

3-[2-(4-Hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-2,3-dihydrobenzofuran-5-yl] prop-2-enal

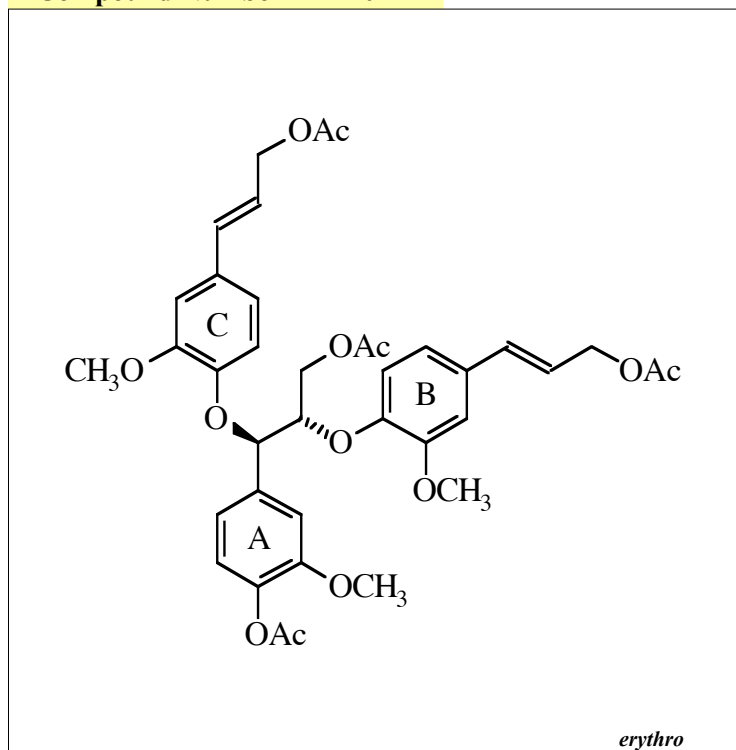
¹H (acetone)

Atom	H Shifts	Mult	J
β	3.61	br q	
A3 OMe	3.82	s	
B3 OMe	3.91	s	
γ	3.87-3.91	m	
α	5.65	d	6.6
B β	6.65	dd	15.8, 7.7
A5	6.81	d	8.1
A6	6.88	dd	8.1, 2.0
A2	7.04	d	2.0
B2	7.29	bro	
B6	7.32	bro	
B α	7.59	d	15.8
B γ	9.63	d	7.7

Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			54.25	59		
A3 OMe			56.29	100		
B3 OMe			56.46	81		
γ			64.32	54		
α			89.39	82		
A2			110.59	94		
B2			113.56	67		
A5			115.76	61		
B6			119.64	85		
A6			119.73	83		
B β			127.14	76		
B5			129.00	59		
B1			131.24	41		
A1			133.75	40		
B3			145.65	41		
A4			147.55	31		
A3			148.46	23		
B4			152.41	22		
B α			154.10	77		
B γ			193.77	87		

Guaiacylglycerol- α,β -bis coniferyl ether acetate¹H (acetone)

Atom	H Shifts	Mult	J
A α	5.62		
A β	4.87		
A γ 1	4.45		
A γ 2	4.53		

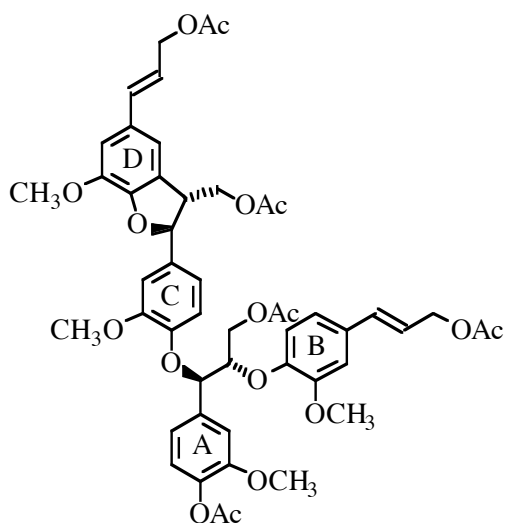
Notes:

S. Quideau

 α and β of B and C can interchange in CDCl₃

S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.63	45	20.44	57	20.33	87
γ Ac Me	20.73	40	20.62	57	20.42	87
C γ Ac Me	20.98	100	20.76	58	20.70	92
B γ Ac Me	20.98	77	20.78	55		
					20.70	92
A3 OMe	55.73	37	56.23	100	55.59	89
B3 OMe	55.91	44	56.23	100	55.64	89
C3 OMe	55.94	44	56.39	100	55.78	94
γ	63.37	20	63.56	28	62.39	31
C γ	65.08	35	65.37	55	64.39	100
B γ	65.12	41	65.37	55	64.39	100
α	80.17	25	80.85	31	78.68	38
β	81.92	24	81.74	36	79.56	31
C2	109.94	29	111.16	36	110.15	52
B2	110.11	29	111.32	41	110.21	52
A2	111.29	25	112.74	35	111.87	38
C5	116.41	28	117.41	35	115.81	52
B5	118.92	28	119.23	44	117.06	48
C6	119.49	26	120.45	51	119.43	70
B6	119.77	37	120.50	51	119.48	70
A6	119.79	37	120.51	51	119.50	70
C β	121.69	31	122.99	44	122.12	58
B β	122.03	31	123.18	47	122.19	59
A5	122.50	26	123.26	39	122.38	31
C1	130.61	24	131.73	38	130.12	45
B1	131.55	24	132.34	41	130.51	50
C α	133.92	32	134.22	91	133.00	76
B α	134.02	35	134.22	91	133.00	76
A1	136.80	24	137.52	40	136.19	57
A4	139.53	21	140.65	26	138.88	49
C4	147.45	26	148.20	39	146.38	48
B4	147.47	26	148.66	29	146.99	54
C3	150.18	25	151.43	40	149.75	49
B3	150.90	23	151.91	40	150.09	58
A3	151.09	22	152.12	32	150.45	52
A4 Ac C=O	168.76	23	168.85	35	168.34	50
A γ Ac C=O	170.76	29	170.72	32	170.07	73
D γ Ac C=O	170.83	29	170.74	32	170.10	73
C γ Ac C=O	170.83	29	170.77	40	170.12	73

*erythro*

Guaiacylglycerol- α -dehydrodiconiferyl-bis-ether peracetate diastereomeric mixture

¹H (acetone)

Atom	H Shifts	Mult	J
A α	5.62	d	5.4
A β	4.88	m	
A γ 1	4.46	dt	11.9, 3.8
A γ 2	4.53	dt	11.9, 5.8
C α	5.49	d	6.9
C β	3.72	s	
C γ 1	4.28	dd	11.1, 7.5
C γ 2	4.40	dd	11.1, 5.4

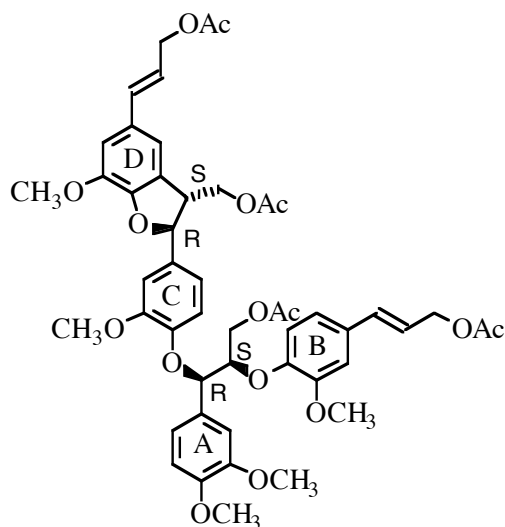
Notes:

S. Quideau

S. Quideau

S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzfororschung*, 1994, 48(2), 124-132.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me	20.52	88	20.43	97	20.32	
A γ Ac Me	20.61	88	20.61	89	20.42	
C γ Ac Me	20.74	100	20.65	89	20.48	
B γ Ac Me	20.98	89	20.78	95	20.70	
D γ Ac Me	20.98	89	20.78	95	20.70	
OMe			56.39	78		
OMe			56.31	77		
OMe			56.17	100		
OMe			56.15	100		
C β	50.25	35	51.04	49	49.16	
γ	63.36	35	63.52	50	62.38	
B γ	65.06	84	65.36	85	64.40	
D γ	65.16	84	65.48	35	64.49	
C γ	65.28	43	65.84	55	68.42	
α	80.13	34	80.73	42	78.62	
β	81.87	47	81.63	48	79.49	
C α	88.38	30	88.61	38	87.25	
B2	110.09	75	111.17	30	110.20	
C2	110.17	75	111.36	57	110.74	
D2	110.61	55	112.02	30	110.93	
A2	111.33	32	112.69	45	111.89	
D6	115.31	39	116.24	32	115.24	
C5	116.39	41	117.29	31	115.76	
C6	118.64	29	119.11	31	118.35	
B5	118.89	62	119.11	31	117.00	
A6	119.51	38	120.45	81	119.43	
B6	119.77	70	120.46	81	119.49	
D β	121.13	60	122.13	66	121.31	
B β	122.01	67	123.10	74	122.18	
A5	122.47	52	123.24	57	122.38	
D5	127.53	32	128.99	42	127.93	
D1	130.49	41	131.41	48	129.99	
B1	131.52	45	132.23	49	130.48	
B α	133.90	69	134.20	74	133.00	
D α	134.31	65	134.69	74	133.50	
C1	134.49	65	135.94	27	134.13	
A1	136.76	39	137.49	28	136.18	
A4	139.52	43	140.56	47	138.88	
D3	144.36	42	145.32	44	143.83	
C4	147.36	45	147.96	37	146.31	
B4	147.45	45	148.56	46	146.95	
D4	148.22	27	149.22	46	147.51	
C3	150.35	27	151.33	30	149.63	
B3	150.87	47	151.82	55	150.07	
A3	151.06	36	152.05	46	150.44	
A4 Ac C=O	168.72		168.84		168.33	
B γ Ac C=O	170.74		170.74		170.12	
D γ Ac C=O	170.74		170.74		170.12	
A γ Ac C=O	170.80		170.76		170.12	
C γ Ac C=O	170.83		170.90		170.23	

*threo*

Veratrylglycerol- α -dehydrodiconiferyl- β -coniferyl-bis-ether peracetate, diastereomeric mixture

¹H (acetone)

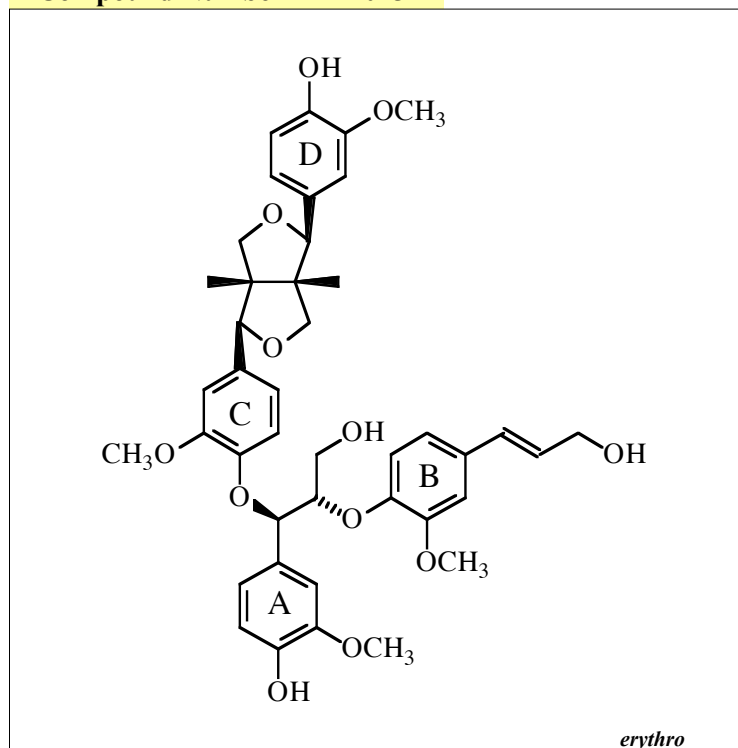
Atom	H Shifts	Mult	J
A α	5.54	d	5.2
A β	4.87	s	
A γ 1	4.44	td	11.8, 3.7
A γ 2	4.52	td	11.8, 6.2
C α	5.48	d	6.9
C β	3.70	s	
C γ 1	4.28	dt	11.1, 7.5
C γ 2	4.39	dt	11.1, 5.5

Notes:

S. Quideau

A3 and A4, C and D OMe's, and B and D γ 's can be interchanged in all solvents. Shifts are confirmed for AcetoneS. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via a silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, *Holzforchung*, 1994, 48(2), 124-132.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ Ac Me	20.75	72	20.64	98	20.45	97
C γ Ac Me	20.75	72	20.64	98	20.45	97
B γ Ac Me	20.98	100	20.79	98	20.70	97
D γ Ac Me	20.98	100	20.79	98	20.70	97
A4 OMe	55.75	89	55.97	94	55.33	99
A3 OMe	55.82	94	56.06	100	55.59	99
B3 OMe	55.86	94	56.22	100	55.70	99
C3 OMe	56.06	64	56.38	85	55.79	99
D3 OMe	55.97					
C β	50.18	28	51.08	39	49.16	54
γ	63.67	28	63.86	52	62.64	40
B γ	65.09	79	65.38	98	64.41	100
D γ	65.17	87	65.49	98	64.50	100
C γ	65.28	50	65.90	59	64.71	49
α	80.14	33	80.89	46	78.77	29
β	81.80	31	81.73	53	79.57	38
C α	88.43	28	88.65	44	87.28	52
B2	110.02	56	111.28	81	110.17	63
C2	110.33	29	111.45	39	110.63	29
D2	110.17	43	112.16	69	110.93	58
A5	110.56	56	112.22	69	111.25	45
A2	110.79	42	112.31	69	111.12	32
D6	115.29	38	116.31	52	115.24	46
C5	116.53	23	117.46	29	115.95	26
B5	118.47	51	118.91	48	116.79	46
C6	118.59	51	119.11	40	118.27	28
B6	119.73	57	120.48	73	119.49	66
A6	119.95	57	120.98	28	119.81	25
D β	121.16	48	122.19	76	121.32	61
B β	121.91	47	123.04	65	122.09	58
D5	127.57	30	129.06	38	127.93	53
A1	130.18	24	130.90	28	129.46	30
D1	130.49	32	131.46	49	129.99	58
B1	131.24	36	132.08	40	130.30	51
B α	133.94	58	134.26	75	133.03	76
C 1	134.12	38	135.74	28	133.92	39
D α	134.32	64	134.71	81	133.51	67
D3	144.37	43	145.37	49	143.83	63
C4	147.38	28	148.11	32	146.38	34
B4	147.71	33	148.83	40	147.12	51
D4	148.21	35	149.29	40	147.51	51
A3	148.83	32	150.20	44	148.37	51
A4	148.93	31	150.23	44	148.48	48
C3	150.39	25	151.42	31	149.69	33
B3	150.78	37	151.81	47	150.02	58
D γ Ac C=O	170.70		170.76		170.05	
B γ Ac C=O	170.77		170.76		170.10	
A γ Ac C=O	170.82		170.79		170.13	
C γ Ac C=O	170.85		170.90		170.23	



Guaiacylglycerol- α -pinoresinol- β -coniferyl-bis-ether diastereomeric mixture

¹H (acetone)

Atom	H Shifts	Mult	J
A α	5.45	d	5.6
A β	4.55	m	
A γ 1	3.82	dd	11.5, 6.5
A γ 2	3.92	dd	11.5, 5.2
C α	4.63		
C β	3.04		
C γ 1	3.77		
C γ 2	4.17		

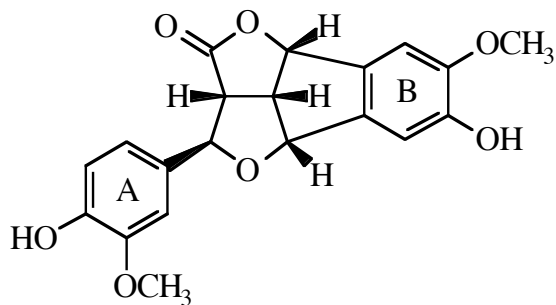
Notes:

S. Quideau

Only run in acetone

S. Quideau, and J. Ralph, A biomimetic route to lignin model compounds via silver (I) oxide oxidation. 2. NMR characterization of non-cyclic benzyl aryl ethers, Holzforschung, 1994, 48(2), 124-132.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
D β			55.15	100		
C β			55.15	100		
D3 OMe			56.22	75		
A3 OMe			56.25	75		
B3 OMe			56.25	74		
C3 OMe			56.44	52		
γ			61.82	28		
B γ			63.27	44		
D γ			72.23	71		
C γ			72.23	71		
α			81.21	28		
β			85.38	36		
C α			86.37	51		
D α			86.58	36		
D2			110.59	52		
B2			111.05	43		
C2			111.43	22		
A2			112.21	19		
A5			115.28	32		
D5			115.50	45		
C5			116.83	24		
C6			118.96	20		
B5			119.06	43		
D6			119.61	61		
B6			120.17	42		
A6			121.53	23		
B β			129.50	37		
B α			129.88	42		
A1			130.53	27		
B1			132.78	33		
D1			134.10	32		
C1			136.29	22		
D4			146.85	26		
A4			147.24	12		
C4			147.61	23		
A3			148.15	16		
D3			148.30	22		
C3			151.12	17		
B3			151.75	21		



11-hydroxy-(4-hydroxy-3-methoxyphenyl)-10-methoxy-3a,4,6,6a-tetrahydro 3H-3,4-benzofuro [3,4-c]furan-1-one

¹H (acetone)

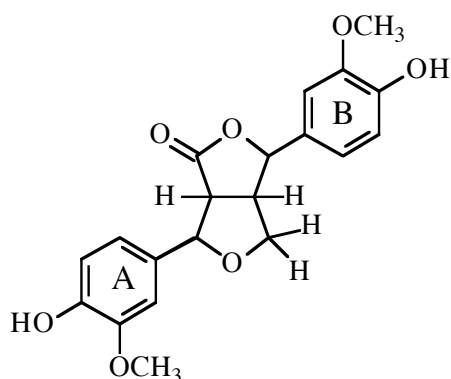
Atom	H Shifts	Mult	J
β	3.36	dd	10.7, 6.4
B β	4.24	dddd	10.6, 7.5, 6.9, 0.6
α	4.72	dquin	6.3, 0.6
B α	5.73	br d	
B γ	5.60	dq	

Notes:

S. Quideau

Ref: S. Quideau and John Ralph. J. Chem Soc. Perkin Trans. 1 1993 - issue 6 - 653-659.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	50.40	100	51.13	86	49.78	54
β	53.87	88	54.58	81	53.16	50
B3 OMe	56.14	90	56.38	94	55.67	99
A3 OMe	55.95	93	56.25	92	55.58	100
α	82.38	87	84.18	90	83.14	62
B α	83.33	88	84.22	100	83.27	58
B γ	85.74	91	86.62	87	85.15	61
B2	106.87	84	108.57	78	108.24	50
A2	108.61	91	110.78	90	110.60	65
B5	110.88	83	112.10	66	111.46	54
A5	114.39	87	115.56	72	115.12	66
A6	118.82	90	119.80	90	118.98	65
A1	131.09	40	132.41	41	130.35	58
B1	132.06	37	133.24	34	131.52	63
B6	133.95	37	135.28	43	133.78	51
A4	145.52	40	147.28	35	146.38	65
A3	146.60	42	148.30	33	147.50	60
B4	148.42	40	150.03	42	149.01	63
B3	148.69	44	150.43	29	149.63	57
γ	176.43	43	177.32	46	176.86	65



4-cis-8-trans-bis(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo
[3-3-0] octan-2-one

¹H (acetone)

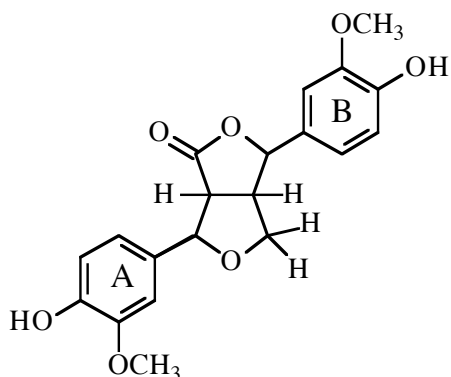
Atom	H Shifts	Mult	J
β	3.63	t	8.8
B β	3.35	ddd	9.0, 6.6, 4.6
α	5.05	br d	8.6
B α	5.23	br d	6.6
B γ cis	3.88	dd	9.5, 4.8
B γ trans	4.28	br d	9.5

Notes:

S. Quideau

S. Quideau and John Ralph. J. Chem. Soc. Perkin Trans. 1 1993 issue 6 653-659.
Cmpd 14

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	51.31	89	52.02	97	50.42	58
β	51.67	91	52.43	93	51.54	73
A3 OMe	55.97	92	56.28	94	55.81	100
B3 OMe	56.11	100	56.35	93	55.91	61
B γ	71.63	91	72.08	87	71.06	58
α	84.00	93	84.43	95	83.07	54
B α	85.65	90	86.32	89	85.45	61
B2	107.89	96	110.68	96	110.88	60
A2	108.78	92	111.21	89	110.96	67
A5	114.43	99	115.39	76	115.28	55
B5	114.59	97	115.80	86	115.54	68
B6	118.83	100	120.06	100	119.27	68
A6	119.65	98	120.32	93	119.48	97
A1	127.88	46	129.78	49	128.41	54
B1	131.26	48	132.60	53	130.80	61
A4	145.81	60	147.15	35	146.24	57
B4	146.15	58	147.82	38	147.03	65
A3	146.60	46	147.99	35	147.35	71
B3	146.99	43	148.62	42	147.96	84
γ	174.51	30	174.93	38	174.99	62



4-trans-8-cis-bis(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo [3-3-0] octan-2-one

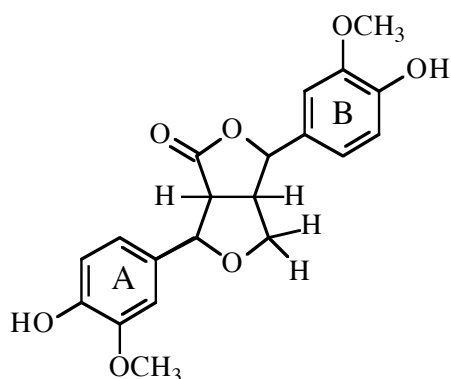
¹H (acetone)

Atom	H Shifts	Mult	J
β	3.65	dd	8.7, 2.6
B β	3.71	m	
γ	5.16	br d	2.6
B α	5.82	br d	5.9
B γ cis	3.80	m	
B γ trans	3.47	dd	9.2, 6.7

Notes:

S. Quideau
S. Quideau and J. Ralph. J. Chem Soc . Perkin Trans. 1 1993 (6) 653-659

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	45.43	90	46.14	77		
β	54.80	99	55.35	78		
A3 OMe	56.00	82	56.26	100		
B3 OMe	56.13	93	56.34	82		
B γ	68.66	86	69.98	78		
B γ	80.37	89	81.09	78		
γ	83.70	88	84.56	81		
B2	107.47	85	109.50	73		
A2	108.17	91	110.24	74		
A5	114.41	100	115.65	37		
B5	114.65	82	115.87	42		
B6	117.76	88	118.57	74		
A6	118.11	97	119.17	85		
B1	127.90	53	129.22	36		
A1	132.46	44	133.48	41		
A4	145.33	63	147.10	17		
B4	145.56	45	147.24	19		
A3	146.67	44	148.39	14		
B3	146.80	49	148.54	15		
γ	177.07	54	177.77	38		



3,6-bis(4-hydroxy-3-methoxyphenyl)-tetrahydro-furo[3,4-c]furan-1-one
 4-cis-8-cis-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo
 [3-3-0] octan-2-one

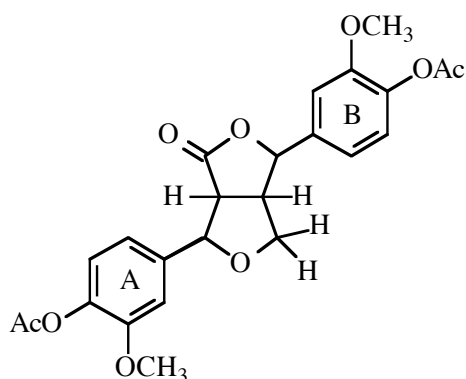
¹H (acetone)

Atom	H Shifts	Mult	J
β	3.65	ddd	9.2, 3.7, 0.5
B β	3.39	dddd	9.2, 7.0, 4.6, 3.6, 0.6
α	5.20	dquin	3.7, 0.6
B α	5.39	br d	3.6
B γ cis	4.30	ddd	9.4, 7.0, 0.5
B γ trans	4.02	ddt	9.4, 4.6, 0.5

Notes:

S. Quideau
 S. Quideau and J. Ralph. J. Chem. Soc. Perkin Trans. 1 1993 (6) 653-659.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β	49.99	84	50.38	93	48.62	69
β	53.31	89	53.71	86	52.32	72
A3 OMe	56.02	88	50.26	99	55.61	100
B3 OMe	56.08	92	50.34	93	55.71	98
B γ	72.70	90	73.44	96	72.15	66
α	83.38	75	84.43	90	82.91	77
B α	84.59	91	85.78	92	84.83	73
A2	107.77	100	110.35	96	110.30	78
B2	108.11	87	110.45	97	110.54	77
A5	114.42	88	115.64	73	115.16	68
B5	114.71	85	115.87	71	115.34	66
A6	118.02	95	119.30	100	118.50	85
B6	118.40	99	119.66	95	118.88	78
B1	131.11	41	132.47	47	130.58	61
A1	132.31	41	133.17	47	131.08	57
A4	145.34	44	147.12	22	146.19	37
B4	146.07	46	147.80	26	146.85	47
A3	146.73	40	148.35	28	147.55	61
B3	146.94	47	148.63	30	147.73	59
γ	176.92	54	177.72	39	177.14	67



4-cis-8-cis-bis (4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo
[3-3-0] octan-2-one diacetate

¹H (acetone)

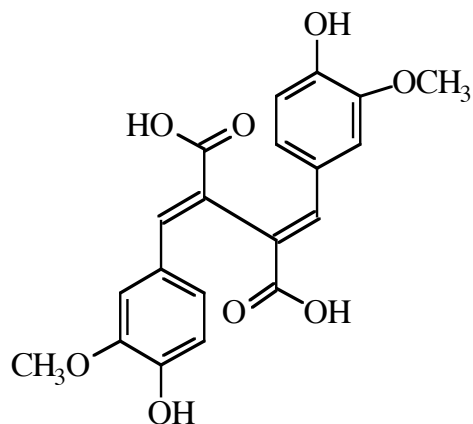
Atom	H Shifts	Mult	J
β	3.72	ddd	9.25, 3.8, 0.5
B β	3.45	dddd	9.15, 7.1, 4.8, 3.0, 0.6
B γ trans	4.12	ddt	9.5, 4.8, 0.5
B γ cis	4.39	ddd	9.5, 7.1, 0.5
B α	5.52	br d	3.6
α	5.29	dquin	3.8, 0.6

Notes:

S. Quideau
Ralph, Helm, Quideau. J. Chem. Soc. Perkin Trans. 1 1992 2971-2980

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.61	98	20.45	100	20.39	
Ac Me	20.63	98	20.45	100	20.39	
B β	49.89	84	50.33	76	48.62	
β	53.14	95	53.59	76	52.19	
A3 OMe	55.99	92	56.24	76	55.82	
B3 OMe	56.06	100	56.35	75	55.95	
B γ	72.80	90	73.72	81	72.51	
α	82.99	80	84.01	82	82.49	
B α	83.89	88	84.93	78	83.93	
A2	109.13	86	110.86	82	110.37	
B2	109.35	86	111.05	77	110.69	
A6	117.14	90	118.40	81	117.87	
B6	117.22	86	118.53	83	118.00	
A5	122.98	95	123.65	79	122.80	
B5	123.38	97	123.96	82	123.07	
B1	138.04	53	139.95	39	138.71	
A4	139.26	41	140.40	27	138.80	
A1	139.32	40	140.68	43	139.21	
B4	139.96	36	140.96	23	139.30	
A3	151.35	48	152.38	30	150.88	
B3	151.66	54	152.62	28	151.05	
Ac C=O	169.04	48	168.98	28	168.57	
Ac C=O	168.90	50	168.94	28	168.53	
γ	176.66	54	177.49	36	176.98	

Compound Number 2031



4,4'-dihydroxy-3,3'-dimethoxy- β,β' -bicycinnamic acid

^1H (acetone)

Atom	H Shifts	Mult	J
OMe	3.74	s	
5	6.78	d	8.2
6	7.11	dd	8.2, 2.0
2	7.31	d	2.0
α	7.83	s	

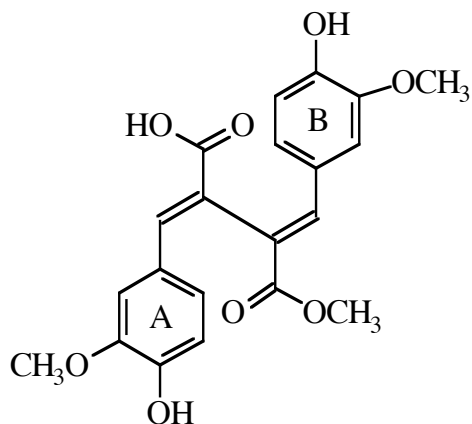
Notes:

S. Quideau
 JCS Perkin 1, 3485-98 (1994)
 Cmpd 18
 As this compound has a plane of symmetry only
 one set of shifts are reported.

^{13}C

Atom	CDCl_3		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.05	100	55.28	100
2			113.51	91	113.23	60
5			115.93	57	115.47	59
6			125.60	95	124.11	67
β			126.15	24	125.12	15
1			127.94	57	126.13	62
α			142.26	59	140.40	18
3			148.19	31	147.29	77
4			149.25	24	148.37	61
γ			168.46	28	168.06	40

Compound Number 2032

¹³C γ -methoxy-4,4'-dihydroxy-3,3'-dimethoxy- β,β' -bicinamic acid¹H (acetone)

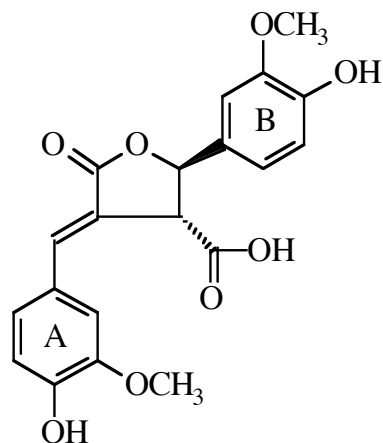
Atom	H Shifts	Mult	J
B γ OMe	3.66	s	
A3 OMe	3.72	s	
B3 OMe	3.73	s	
A,B 5	6.78	d	8.2
B6	7.11	dd	8.3, 2.0
A6	7.09	dd	8.3, 2.0
A2	7.25	d	2.0
B2	7.30	d	2.0
B α	7.81	s	
α	7.84	s	

Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe			52.28	54		
B3 OMe			56.04	100		
A3 OMe			56.04	100		
A2			113.40	56		
B2			113.54	59		
A5			115.95	58		
B5			115.97	59		
A6			125.60	56		
β			125.67	56		
B β			125.67	56		
B6			125.73	66		
A1			127.78	36		
B1			127.81	36		
B α			142.36	51		
α			142.47	44		
B3			148.19	33		
A3			148.20	33		
A4			149.32	27		
B4			149.37	21		
B γ			168.22	27		
γ			168.53	19		

Compound Number 2033

¹³C

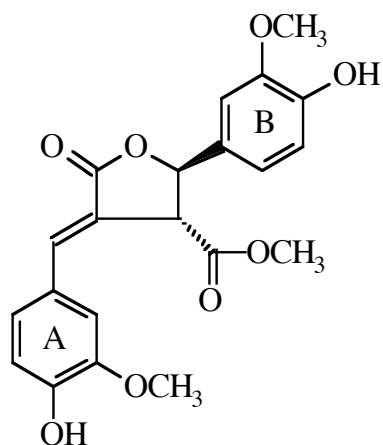
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β			54.03	56	52.64	49
A3 OMe			56.27	100	55.54	90
B3 OMe			56.27	100	55.67	100
B α			81.24	66	80.17	48
B2			110.17	72	110.31	63
A2			113.95	67	113.67	53
B5			116.04	58	115.61	58
A5			116.20	57	115.70	58
B6			119.17	66	118.21	65
β			120.45	37	119.08	68
A1			126.54	68	124.72	57
A6			126.58	68	125.56	50
B1			132.37	42	130.42	62
α			140.46	59	139.48	42
B4			147.97	30	147.07	59
A3			148.54	29	147.72	67
B3			148.63	30	147.76	67
A4			150.20	34	149.54	51
γ			171.66	23	171.02	55
B γ			172.12	34	171.72	76

¹H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.81	s	
A3 OMe	3.87	s	
B β	4.30	t	2.5
B α	5.75	d	2.8
B 5,6	6.82	m	
A5	6.89	d	8.2
B2	6.98	br s	
A6	7.21	dd	8.2, 2.0
A2	7.37	d	2.0
α	7.61	d	2.1

Notes:

S. Quideau
 JCS Perkin 1, 3485-98 (1994)
 Cmpd 12b (R=H)



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe	52.98	51	53.16	82	51.98	56
B β	53.49	50	53.78	89	52.75	74
B3 OMe	55.97	100	56.23	100	55.46	88
A3 OMe	55.97	100	56.26	100	55.62	100
B α	80.22	52	80.97	87	79.74	54
B2	107.65	56	110.12	89	110.26	63
A2	112.04	50	113.78	88	113.48	52
B5	114.78	62	116.04	89	115.53	47
A5	114.92	51	116.24	89	115.68	42
B6	118.22	54	119.23	93	118.26	67
β	118.38	38	120.03	52	118.34	41
A1	125.66	38	126.38	63	124.48	45
A6	125.59	51	126.42	93	125.44	50
B1	131.08	35	132.08	52	130.02	47
α	141.06	45	140.75	81	139.93	48
B4	146.12	37	147.99	56	147.11	33
A3	146.77	32	148.52	48	147.69	49
B3	146.89	33	148.61	48	147.71	50
A4	148.39	41	150.24	58	149.62	41
γ	170.77	38	171.45	33	170.53	68
B γ	171.23	26	171.56	52	170.70	48

¹H (acetone)

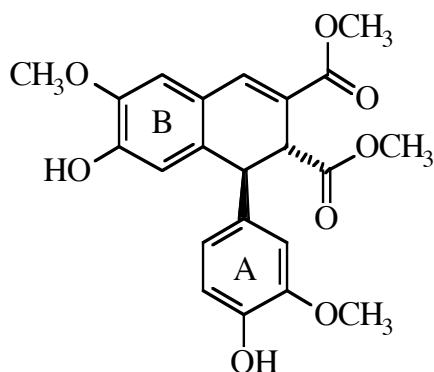
Atom	H Shifts	Mult	J
B γ OMe	3.73	s	
B3 OMe	3.81	s	
A3 OMe	3.88	s	
B β	4.39	t	2.6
B α	5.72	d	3.0
B 5,6	6.79 - 6.85	m	
A5	6.9	d	8.2
B2	6.97	br d	1.5
A6	7.17	dd	8.2, 2.0
A2	7.28	d	2.0
α	7.62	d	2.1

Notes:

S. Quideau

Compound Number 2035

¹³C



Dimethyl 7-hydroxy-6-methoxy-1-(4-hydroxy-3-methoxyphenyl)-trans-1,2-dihydronaphthalene-2,3-dicarboxylate

¹H (acetone)

Atom	H Shifts	Mult	J
A γ OMe	3.56	s	
B γ OMe	3.68	s	
A3 OMe	3.75	s	
B3 OMe	3.88	s	
β	3.94	d	3.0
α	4.53	d	3.0
A6	6.39	dd	8.2, 2.0
A5	6.65	d	8.2
B5	6.66	s	
A2	6.76	d	2.0
B2	7.10	s	
B α	7.65	s	

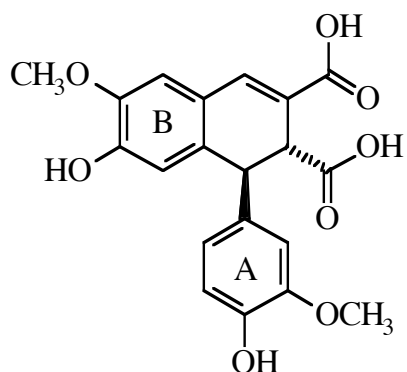
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α	45.60	82	46.33	92	44.69	53
β	47.20	81	48.09	92	46.74	48
B γ OMe	51.87	96	51.87	94	51.67	77
A γ OMe	52.40	93	52.34	88	52.11	84
A3 OMe	55.83	100	56.21	99	55.62	100
B3 OMe	56.03	96	56.38	96	55.74	92
A2	110.12	91	112.03	100	111.65	66
B2	111.21	82	113.27	91	113.25	53
A5	114.17	90	115.59	98	115.24	64
B5	115.58	86	116.85	93	116.06	47
A6	120.35	89	120.83	98	119.48	61
B β	122.37	57	122.96	53	120.89	55
B1	123.85	58	124.37	58	122.47	48
B6	131.19	60	132.09	54	130.74	50
A1	134.28	61	135.31	59	133.56	54
B α	137.74	77	138.45	87	137.92	50
A4	144.42	69	146.29	58	145.31	66
B3	145.78	59	147.63	53	146.72	55
A3	146.40	60	148.20	53	147.39	64
B4	147.69	72	149.68	65	148.88	66
B γ	167.10	47	167.49	44	166.52	59
γ	172.93	60	173.17	58	172.31	69

Compound Number 2036

¹³C



β - β -coupled dehydrodiferulic acid

7-hydroxy-6-methoxy-1-(4-hydroxy-3-methoxyphenyl)-trans-1,2-dihydronaphthalene-2,3-dicarboxylic acid

¹H (acetone)

Atom	H Shifts	Mult	J
A3 OMe	3.74	s	
B3 OMe	3.86	s	
β	3.88	d	1.8
α	4.61	br d	1.8
A6	6.42	dd	8.2, 2.0
A5	6.64	d	8.2
B5	6.71	s	
A2	6.79	d	2.0
B2	7.04	s	
B α	7.60	s	

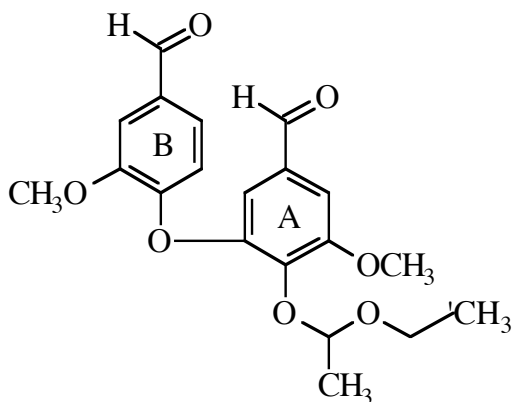
Notes:

S. Quideau
JCS Perkin 1, 3485-98 (1994)
Cmpd 19

Not very soluble in CDCl₃

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			46.00	72	44.25	35
β			48.08	43	47.80	13
A3 OMe			56.19	100	55.59	100
B3 OMe			56.39	99	55.76	87
A2			111.98	88	111.57	63
B2			113.06	75	112.63	37
A5			115.48	73	115.13	60
B5			116.92	65	116.23	45
A6			120.67	90	119.30	61
B β			124.34	19	123.07	43
B1			124.64	53	124.67	5
B6			132.35	48	130.85	42
A1			136.12	39	134.50	5
B α			137.58	44	135.09	18
A4			146.06	33	145.04	47
B3			147.48	46	146.46	42
A3			148.10	44	147.28	51
B4			149.29	38	147.99	29
B γ			169.32	14	169.23	9
γ			173.62	31	173.27	51

Compound Number 2037



¹³C

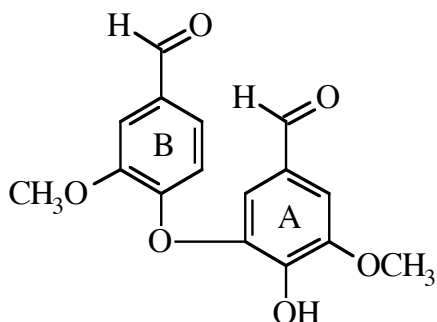
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
'CH3			15.45	91		
CH3			21.28	90		
B OMe			56.43	100		
A OMe			56.66	95		
CH2			63.26	83		
CH			104.47	91		
A2			108.94	81		
B2			112.46	83		
A6			114.45	80		
B5			119.32	89		
B6			125.46	84		
B1			133.26	46		
A1			134.22	44		
A4			143.42	26		
A3			150.68	31		
B3			151.42	33		
B4			151.95	33		
A5			155.59	36		
α			191.23	94		
B α			191.48	96		

¹H (acetone)

Atom	H Shifts	Mult	J
'CH3	1.08	t	7.05
CH3	1.38	d	5.1
CH2	3.56-3.89	m	
OMe	3.95	s	
OMe	3.99	s	
CH	5.53	q	5.1
B5	7.04	d	8.1
A6	7.11	d	1.8
A2	7.42	d	1.8
B6	7.53	dd	8.1
B2	7.62	d	1.9
α	9.85	s	
B α	9.95	s	

Notes:

S. Quideau



4-0-5-coupled dehydrodivanillin

3-{3-[4-(2-carboxyvinyl)-2-methoxy-phenoxy]-4-hydroxy-5-methoxy-phenyl} acrylic acid

¹H (acetone)

Atom	H Shifts	Mult	J
B OMe	3.95	s	
A OMe	3.98	s	
B5	6.94	d	8.2
A6	7.22	d	1.8
A2	7.40	d	1.8
B6	7.48	dd	8.2, 2.0
B2	7.58	d	2.0
α	9.80	s	
B α	9.92	s	

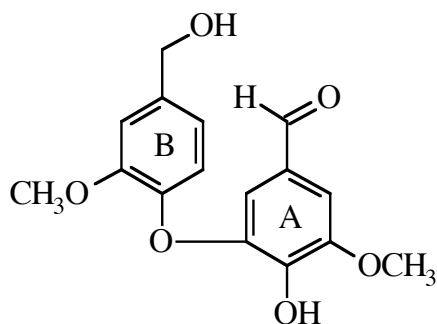
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	56.07	100	56.41	100	55.85	100
A3 OMe	56.56	100	56.80	97	56.24	100
A2	106.80	68	108.48	66	108.09	51
B2	110.85	85	112.26	85	111.60	63
A6	116.92	67	116.99	61	116.27	86
B5	117.31	90	117.63	93	116.31	85
B6	125.55	90	125.55	88	124.80	68
A1	128.69	57	129.54	47	127.64	70
B1	132.76	54	133.56	47	131.84	69
A5	142.55	37	143.79	30	142.52	72
A4	143.30	44	145.22	36	144.52	56
A3	148.60	46	150.37	39	149.47	67
B3	150.61	45	151.49	36	149.82	78
B4	151.08	39	152.48	32	151.24	64
α	190.05	96	190.75	9	190.84	39
B α	190.84	100	191.43	97	191.57	27

Compound Number 2039

¹³C



4-0-5 coupled dehydrovanillin / vanillyl alcohol

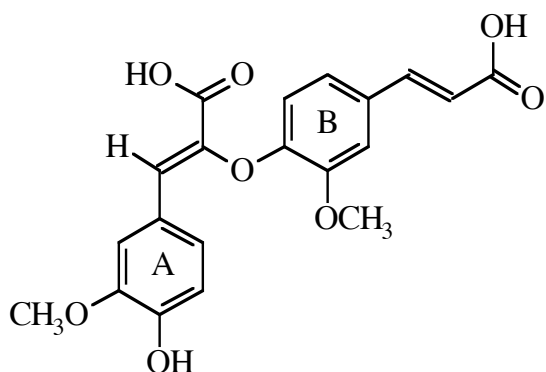
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	55.94	58	56.19	94	55.61	100
A3 OMe	56.47	97	56.73	99	56.15	97
B α	64.91	88	64.34	35	62.59	90
A2	106.40	62	107.98	55	107.74	52
B2	111.55	97	112.52	98	111.09	34
A6	114.09	60	112.62	54	111.54	75
B6	119.49	100	119.78	100	118.81	81
B5	120.46	99	121.17	94	119.98	60
A1	128.30	59	129.00	48	127.04	46
B1	138.45	60	140.84	41	139.77	57
A4	142.58	48	143.92	31	142.63	42
B4	143.95	44	144.30	32	143.03	30
A5	145.16	42	146.98	31	145.90	43
A3	148.45	43	149.86	31	148.93	42
B3	150.87	48	152.00	34	150.45	71
α	190.44	83	190.91	92	190.97	67

¹H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.79	s	
A3 OMe	3.95	s	
B α	4.63	s	
A6	6.91	d	1.8
B 5,6	6.94 - 6.97	m	
B2	7.16	br d	
A2	7.27	d	1.8
α	9.71	s	

Notes:

S. Quideau



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe B3 OMe			55.92 56.47	100 91	55.09 55.86	100 85
B2			112.39	80	111.55	38
A2			113.77	83	112.98	41
B5			114.39	79	113.30	45
A5			115.96	70	115.53	36
B β			117.50	77	117.52	57
B6			122.92	82	122.02	42
A1			125.31	54	123.44	44
A6			126.06	80	124.62	39
α			128.49	63	127.09	34
B1			130.10	56	128.74	52
β			138.28	27	137.01	44
B α			145.25	77	143.71	46
A3			148.30	46	147.24	50
B4			148.90	40	147.42	47
A4			149.46	37	148.59	89
B3			150.23	52	148.59	88
γ			164.51	13	164.11	56
B γ			167.91	22	167.70	72

¹H (acetone)

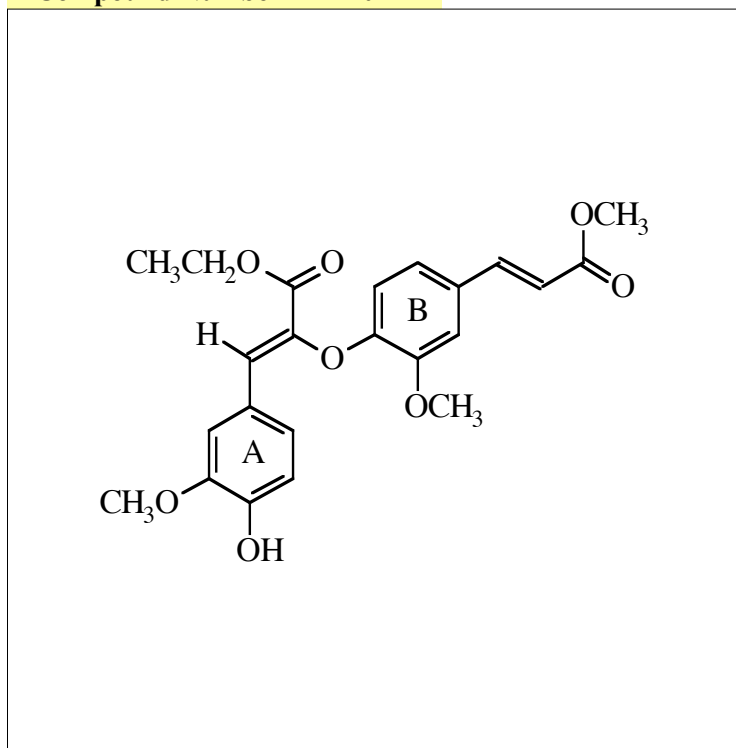
Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.73 4.00	s s	
B β	6.43	d	15.9
A5	6.82	d	8.2
B5	6.83	d	8.3
B6	7.13	dd	8.3, 2.0
A6	7.23	dd	8.2, 2.0
α	7.42	s	
B2	7.44	d	2.0
A2	7.52	d	2.0
B α	7.59	d	15.9

Notes:

S. Quideau
 JCS Perkin 1, 3485-98 (1994)
 Cmpd 15

Compound Number 2041

¹³C



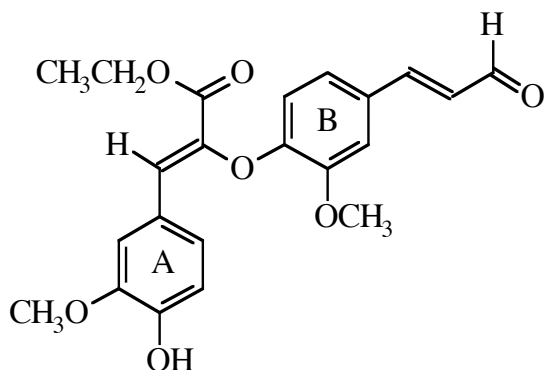
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.14	95	14.47	100	14.05	100
B γ OMe	51.65	83	51.58	78	51.32	62
A3 OMe	55.59	100	55.92	93	55.11	75
B3 OMe	56.21	97	56.49	90	55.93	59
CH2	61.42	92	61.72	74	60.96	61
B2	111.24	83	112.45	70	111.79	41
A2	112.03	97	113.78	70	113.17	34
B5	114.14	89	114.53	71	113.46	35
A5	114.47	87	115.99	70	115.57	26
B β	116.32	82	117.10	71	116.29	42
B6	122.12	80	122.92	78	122.27	46
A1	124.74	55	125.19	9	123.18	32
A6	125.54	84	126.03	71	124.79	35
α	127.80	71	128.05	10	127.43	49
B1	129.31	60	130.09	45	128.78	39
β	137.73	51	138.39	42	136.44	41
B α	144.42	90	145.02	72	144.23	42
A3	146.43	53	148.29	40	147.27	33
B4	147.44	67	148.89	35	147.43	26
A4	147.80	47	149.48	40	148.67	46
B3	149.16	59	150.24	43	148.67	46
γ	163.41	43	163.75	32	162.67	33
B γ	167.50	62	167.63	47	166.80	48

¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
B γ OMe	3.71	s	
A3 OMe	3.73	s	
B3 OMe	3.99	s	
CH2	4.17	q	7.1
B β	6.45	d	16.0
B5	6.79	d	8.3
A5	6.81	d	8.3,
B6	7.12	dd	8.3, 2.0
A6	7.22	dd	8.3, 2.0
α	7.37	s	
B2	7.44	d	2.0
A2	7.49	d	2.0
B α	7.59	d	16.0
Ar OH	8.12	br s	

Notes:

S. Quideau
Toward β-O-4 dehydro diferulic acid
(steryl ether, Z isomer)



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.06	98	14.48	12	14.05	100
B3 OMe	56.15	100	56.55	13	55.97	10
A3 OMe	55.47	94	55.94	16	55.11	73
CH2	61.37	91	61.76	92	60.99	74
B2	111.31	78	112.58	93	111.82	49
A2	112.06	80	113.81	91	113.35	53
B5	114.11	78	114.66	93	113.44	53
A5	114.57	79	116.03	82	115.59	40
B6	122.87	82	123.76	99	123.13	9
A1	124.41	62	125.16	54	123.13	83
A6	125.42	77	126.08	53	124.85	52
B β	127.19	85	128.29	100	128.89	65
α	127.90	75	128.16	100	127.35	55
B1	128.83	62	130.13	54	127.53	39
β	137.35	57	138.31	43	136.34	45
A3	146.51	57	148.31	43	147.45	41
A4	147.59	61	149.53	51	147.90	48
B4	148.54	52	149.58	46	148.78	59
B3	149.21	61	150.38	50	148.86	60
B α	152.33	80	153.18	96	152.98	57
γ	163.19	48	163.70	38	162.62	49
B γ	193.42	91	193.89	99	194.19	72

¹H (acetone)

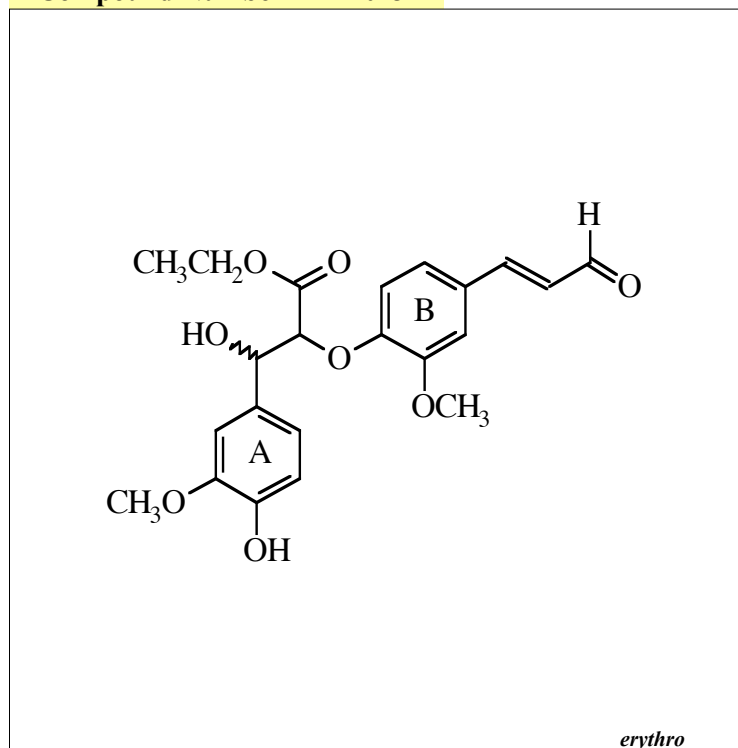
Atom	H Shifts	Mult	J
CH3	1.21	t	7.1
A3 OMe	3.73	s	
B3 OMe	4.00	s	
CH2	4.21	q	7.1
B β	6.70	dd	15.9, 7.7
A5	6.81	d	8.3
B5	6.83	d	8.3
B6	7.18	dd	8.3, 2.0
A6	7.23	ddd	8.3, 2.0, 0.4
α	7.38	s	
A2	7.49	d	2.0
B2	7.50	d	2.0
B α	7.58	d	15.9
B γ	9.65	d	7.7
Ar OH	8.14	s	

Notes:

S. Quideau
Toward β-O-4 dehydro diferulic acid(steryl ether, Z isomer)

Compound Number 2043

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	13.86	97				
OMe	55.72	100				
OMe	55.78	98				
CH2	61.33	84				
α	73.70	69				
β	82.29	71				
A2	109.63	73				
B2	111.09	72				
A5	113.93	71				
B5	115.99	71				
A6	119.80	73				
B6	122.72	82				
B β	127.15	81				
B1	128.79	80				
A1	130.89	64				
A3	145.48	70				
A4	146.36	58				
B3	149.72	54				
B4	150.11	59				
B α	152.38	74				
γ	168.80	64				
B γ	193.53	90				

¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.16	t	7.2
OMe	3.85	s	
OMe	3.86	s	
CH2	4.15	q	7.1
β	4.81	d	5.4
a	5.16	d	5.4
B β	6.58	dd	15.8, 7.7
B α	7.37	d	15.8
B γ	9.61	d	7.7
Ar OH	6.07		

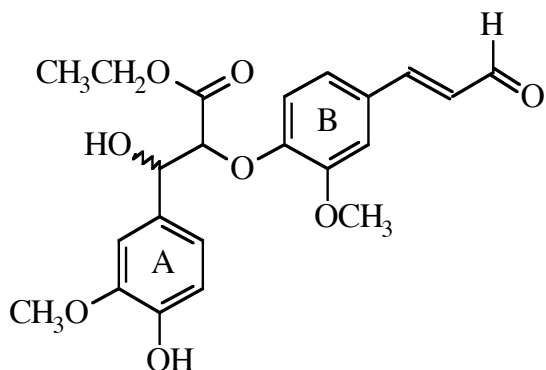
Notes:

S. Quideau

Compounds 2043 and 2044 were run as a mixture and the different isomers were assigned. Relative intensities reflect the spectrum of the mixture.

e isomer

for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2044
¹³C

threo

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	13.73	100				
OMe	55.67	33				
OMe	55.82	34				
CH3	61.28	28				
α	74.49	14				
β	83.43	15				
A2	109.51	16				
B2	110.98	16				
A5	114.02	17				
B5	115.56	15				
A6	119.91	16				
B6	122.72	82				
B β	127.19	29				
B1	128.79	80				
A1	129.94	13				
A3	145.73	15				
A4	146.55	13				
B3	149.74	18				
B4	149.92	13				
B α	152.32	17				
γ	168.73	27				
B γ	193.53	90				

¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.08	t	7.2
OMe	3.85	s	
OMe	3.87	s	
CH2	4.04-4.11	m	
β	4.67	d	6.2
α	5.10	d	6.2
B β	6.59	dd	15.8, 7.7
B α	7.38	d	15.8
B γ	9.62	d	7.7
Ar OH	6.10		

Notes:

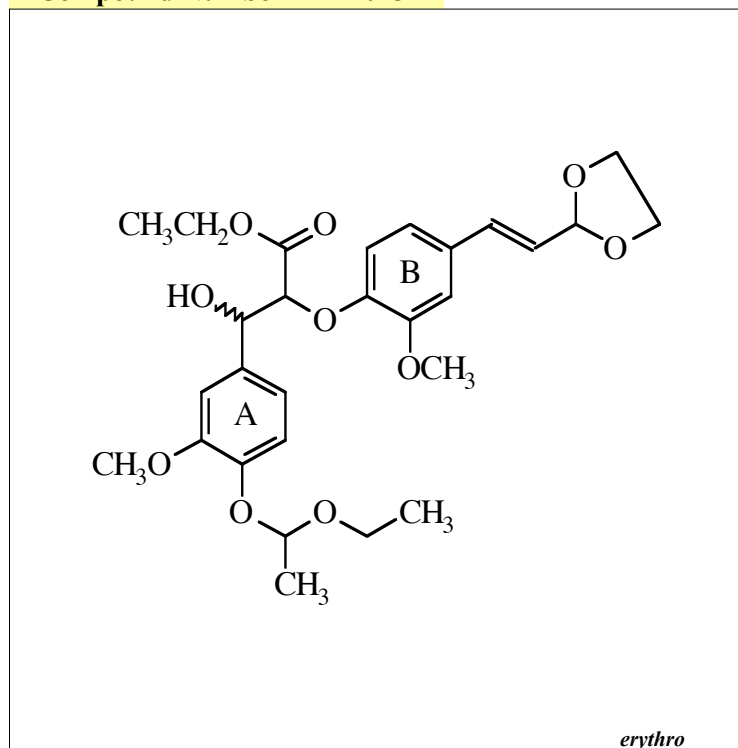
S.Quideau

Compounds 2043 and 2044 were run as a mixture and the different isomers were assigned. Relative intensities reflect the spectrum of the mixture.

t isomer

for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2045



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A γ CH3	13.82	47				
CH3	14.93	57				
CH3	20.10	36				
OMe	55.54	54				
OMe	55.63	37				
4 CH2	61.01	50				
A CH2	61.84	32				
B CH2	64.82	100				
B CH2	64.82	100				
α	73.57	33				
β	83.09	25				
	100.92	35				
	103.59	57				
	110.04	40				
	110.76	27				
	117.40	27				
	118.63	31				
	119.09	34				
	120.07	43				
	124.08	43				
	131.25	30				
	133.82	18				
	133.84	18				
	134.08	44				
	145.39	16				
	147.22	21				
	150.12	9				
	150.40	31				
γ	169.03	35				

¹H (chloroform)

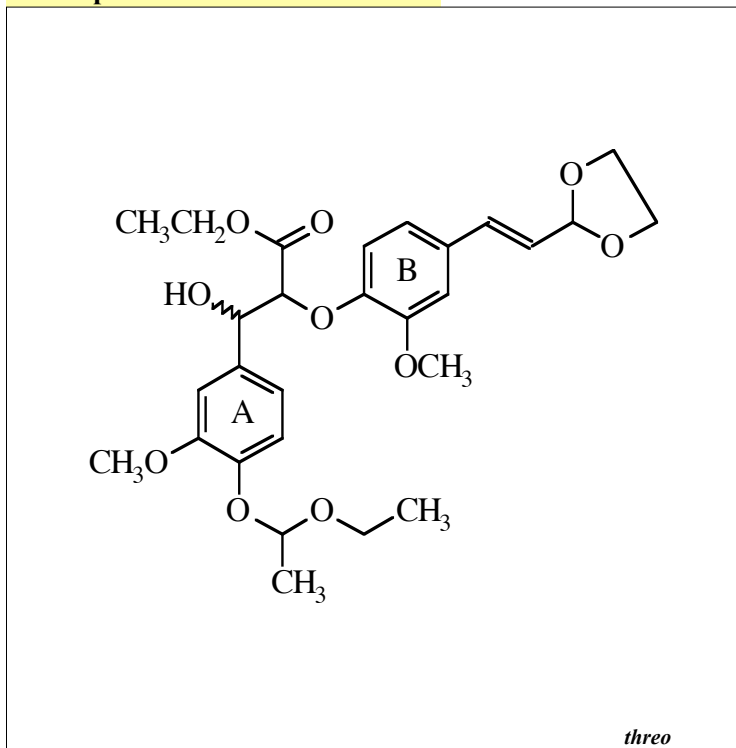
Atom	H Shifts	Mult	J
CH3	1.47	d	5.1
β t	4.56	d	6.6
β e	4.72	d	5.4
α t	5.06	br d	6.3
α e	5.13	br s	
A 4 CH	5.32	q	5.2
B γ	5.36	d	6.0
B β	6.03	dd	15.9, 6.0
B α	6.66	d	16.0

Notes:

S. Quideau
intermediate toward β--O-4 dehydro
diferulic acid

Compound Number 2046

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	-					
CH3	-					
CH3	-					
OMe	55.59	100				
OMe	55.59	100				
CH2	61.86	55				
CH2						
CH2	74.51	22				
α	84.39	21				
β	100.94	61				
	109.98	12				
	110.69	48				
	116.92	14				
	118.70	55				
	124.14	74				
	132.73	12				
	134.06	62				
	145.67	17				
	147.26	24				
	149.92	16				
	150.00	56				

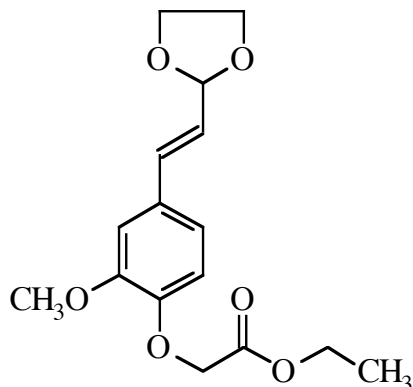
¹H (chloroform)

Atom	H Shifts	Mult	J
β	4.56	d	6.6
α	5.06	br d	6.3

Notes:

S. Quideau
intermediate toward b--O-4 dehydro diferulic acid

Compound Number 2047



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.09	100				
OMe	55.84	72				
CH2	61.27	63				
CH2	65.01	94				
CH2	65.01	94				
CH2	66.42	60				
γ	103.90	71				
2	109.88	67				
5	113.88	67				
6	120.14	66				
β	123.75	68				
α	130.39	39				
1	134.47	66				
3	147.58	31				
4	149.56	34				
C=O	168.78	30				

¹H (chloroform)

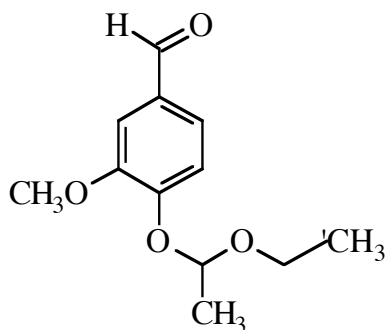
Atom	H Shifts	Mult	J
CH3	1.26	t	7.1
OMe	3.87	s	
CH2	3.90-4.05	m	
CH2	4.24	q	7.1
CH2	4.67	s	
γ	5.39	d	6.1
β	6.05	dd	15.9, 6.1
α	6.69	d	15.9
5	6.76	d	8.3
6	6.90	dd	8.3, 2.0
2	6.99	d	2.0

Notes:

S. Quideau
For synthesis of b--O-4 dehydro diferulic acid

Compound Number 2048

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
'CH3	15.03	85				
CH3	19.95	98				
OMe	55.90	94				
CH2	61.72	85				
CH	100.61	92				
2	109.81	79				
5	116.59	100				
6	126.06	81				
1	130.97	47				
3	150.78	37				
4	151.64	37				
α	190.89	91				

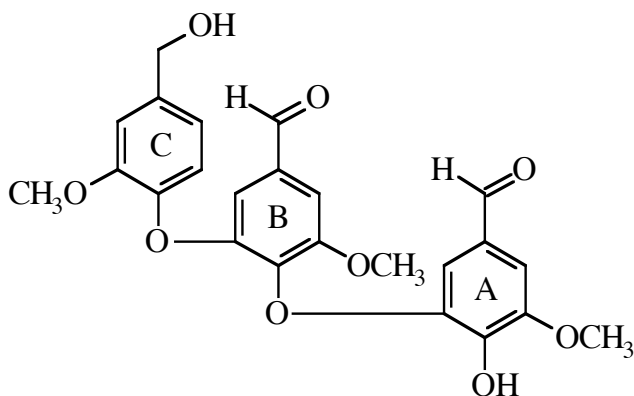
¹H (chloroform)

Atom	H Shifts	Mult	J
'CH3	1.21	t	7.1
CH3	1.58	d	5.3
CH2	3.50-3.85	m	
OMe	3.92	s	
CH	5.54	q	5.3
Aromatics	7.21-7.43		
α	9.87	s	

Notes:

S. Quideau
Intermediate for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2049



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C3 OMe			56.07	100		
A3 OMe			56.75	97		
B3 OMe			56.89	90		
C α			64.25	33		
B2			108.03	70		
A2			108.40	50		
B6			109.92	67		
A6			110.17	50		
C2			112.36	40		
C6			119.76	93		
C5			122.66	87		
A1			128.73	37		
B1			134.75	53		
B4			138.25	20		
C1			142.09	47		
C4			142.49	37		
A4			143.04	33		
A5			147.16	27		
A3			149.70	30		
C3			152.34	37		
B5			153.71	33		
B3			155.04	47		
α			191.02	55		
B α			191.69	55		

¹H (acetone)

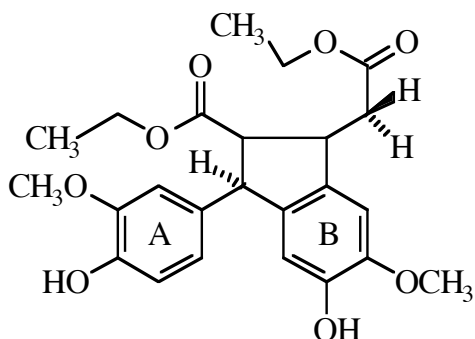
Atom	H Shifts	Mult	J
C3 OMe	3.72	s	
B3 OMe	3.90	s	
A3 OMe	3.94	s	
C α	4.62	s	
B6	6.88	d	1.7
C6	6.94	dd	8.1, 1.7
C5	7.00	d	8.1
A6	7.01	d	1.7
C2	7.14	d	1.7
A2	7.26	d	1.7
B2	7.40	d	1.7
α	9.74	s	
B α	9.86	s	

Notes:

S. Quideau
5-O-4 trimer

Compound Number 2050

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A CH3	14.19	93	14.52	91	13.97	100
B CH3	14.22	88	14.47	89	14.07	100
B β	36.90	57	37.50	80	36.41	44
B α	42.15	75	43.06	85	41.74	54
α	51.31	66	52.35	80	50.93	46
A3 OMe	55.93	100	56.23	99	55.56	74
B3 OMe	56.10	99	56.39	100	55.64	97
β	58.66	67	59.09	87	56.96	53
B CH2	60.47	80	60.79	84	59.94	88
A CH2	60.63	78	60.95	84	60.07	76
B2	106.61	68	108.23	75	107.86	45
B5	110.87	80	112.04	82	111.25	42
A2	110.99	77	112.60	93	112.08	41
A5	114.29	91	115.76	92	115.32	45
A6	121.39	75	121.75	96	120.35	48
A1	134.34	58	135.02	55	133.25	53
B1	135.12	43	135.58	50	133.61	46
B6	137.10	49	137.90	47	136.47	49
A4	144.54	63	146.45	56	145.36	53
B4	145.61	60	147.43	57	146.34	58
B3	146.04	52	147.92	46	147.08	52
A3	146.50	59	148.37	48	147.51	55
B γ	172.30	54	172.45	58	171.45	77
γ	172.43	55	173.00	61	172.10	61

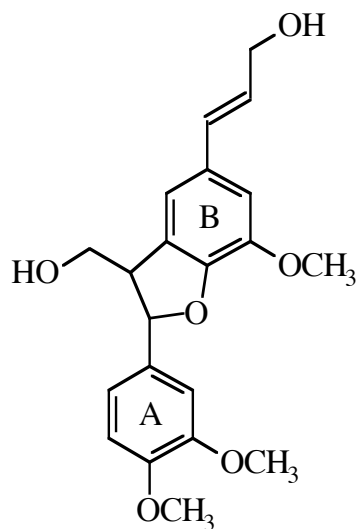
¹H (acetone)

Atom	H Shifts	Mult	J
B β1	2.43	dd	16.0, 8.0
B β2	2.61	dd	16.0, 7.0
β	3.43	dd	9.85, 8.20
B α	3.90	brq	8.0
α	4.56	d	10.1

Notes:

S. Quideau
Stereochemistry determined from NOESY
experiments
αβ-/α6 model

Compound Number 2051



4-[3-Hydroxymethyl-5-(3-hydroxypropenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-1,2-dimethoxyphenyl

¹H (acetone)

Atom	H Shifts	Mult	J
β	3.52	br q	
A3 OMe	3.77	s	
A4 OMe	3.78	s	
B3 OMe	3.86	s	
γ's	3.80-3.92	m	
Bγ OH	4.14	t	5.50
Bγ	4.19	td	5.7, 1.7
α	5.58	d	6.4
Bβ	6.23	dt	15.8, 5.5
Bα	6.52	dt	15.8, 1.7
A5	6.91	d	8.1
A,B6 + B2	6.94-9.67	m	
A2	7.03	d	1.8

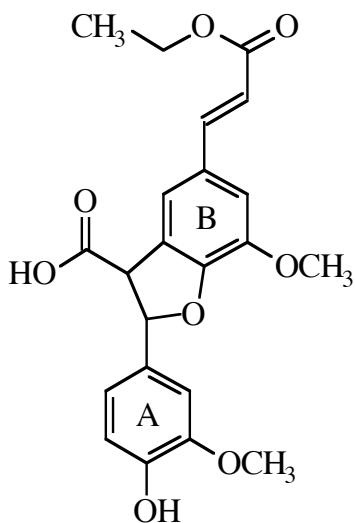
Notes:

S. Quideau
veratryl phenylcoumaran

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			54.81	63		
A3 OMe			56.12	100		
A4 OMe			56.12	95		
B3 OMe			56.39	84		
Bγ			63.38	71		
γ			64.65	61		
α			88.34	71		
A2			110.84	79		
B2			111.74	72		
A5			112.67	84		
B6			116.08	73		
A6			119.02	83		
Bβ			128.42	69		
B5			130.30	41		
Bα			130.49	74		
B1			132.00	54		
A1			135.59	45		
B3			145.18	38		
B4			148.93	26		
A4			150.15	30		
A3			150.45	31		

Compound Number 2052

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.63	85		
β			55.43	46		
A3 OMe			56.30	97		
B3 OMe			56.47	100		
CH2			60.51	79		
α			88.70	59		
A2			110.70	79		
B2			113.20	68		
A5			115.72	91		
B β			116.46	76		
B6			119.08	69		
A6			120.05	86		
B5			128.35	32		
B1			129.20	54		
A1			132.64	52		
B α			145.36	76		
B3			145.70	53		
A4			147.70	38		
A3			148.47	44		
B4			151.03	34		
B γ			167.31	60		
γ			172.24	20		

¹H (acetone)

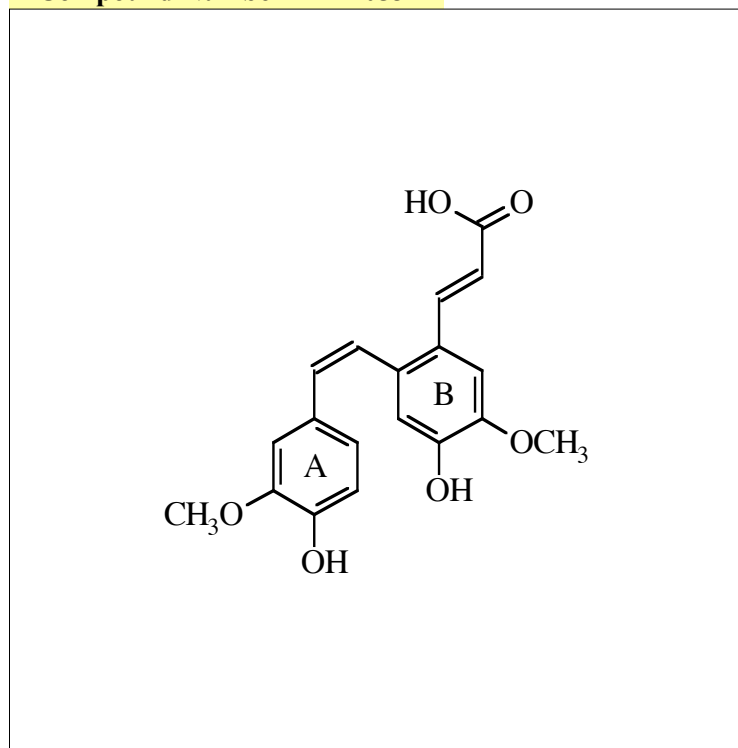
Atom	H Shifts	Mult	J
β	4.37	br d	7.8
α	6.06	d	7.9
B β	6.38	d	15.9
B α	7.60	d	15.9

Notes:

S. Quideau

Compound Number 2053

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe B3 OMe			56.25 56.56	100 80		
B2			109.15	74		
A2			110.16	83		
A5			115.99	83		
B β			116.50	76		
β			120.61	78		
B6			120.84	74		
A6			121.14	88		
B5			125.47	48		
B1			126.98	56		
α			130.68	81		
A1			130.90	58		
B α			146.00	69		
B4			146.96	50		
A4			147.61	55		
A3			148.61	46		
B3			148.83	54		
B γ			168.22	47		

¹H (acetone)

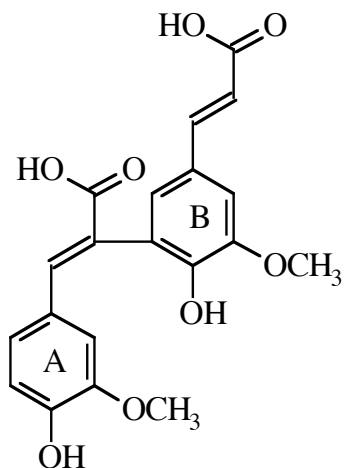
Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.91 3.95	s s	
B β	6.44	d	15.9
A5	6.83	d	8.1
A6	7.05	dd	8.1, 2.0
A2	7.22	d	2.0
B2	7.23	d	1.9
α	7.31	dd	16.5, 7.38
β	7.33	dd	16.5, 7.38
B6	7.54	d	1.9
B α	7.63	d	15.9

Notes:

S. Quideau

Compound Number 2054

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe B3 OMe			55.48 56.55	100 95	54.62 56.06	100 90
B2			110.27	67	109.76	36
A2			113.26	78	112.79	47
A5			115.63	74	115.63	47
B β			116.23	67	115.92	48
B5			125.14	40	124.57	42
B6			125.60	71	124.38	42
β			126.34	57	125.90	67
A6			126.36	80	124.95	48
B1			127.26	62	125.66	49
A1			127.58	62	125.88	67
α			141.81	62	139.75	34
B α			145.80	66	144.28	43
A3			147.86	54	145.82	32
B4			148.01	43	147.00	64
A4			148.98	50	148.05	65
B3			149.10	53	148.12	46
B γ			168.56	41	167.86	80
γ			169.15	36	168.38	68

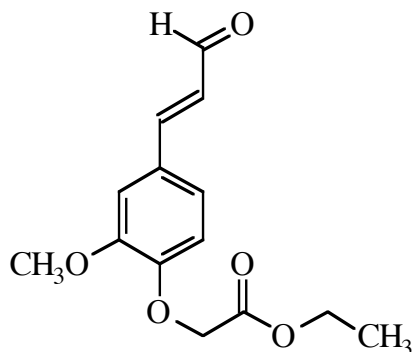
¹H (acetone)

Atom	H Shifts	Mult	J
A3 OMe B3 OMe	3.45 3.95	s s	
B β	6.38	d	15.4
A5	6.71	d	8.2
A2	6.73	d	1.9
A6	6.85	dd	8.2, 2.0
B6	7.03	d	1.9
B2	7.37	d	1.9
B α	7.60	d	15.9
α	7.81	s	

Notes:

S. Quideau
 JCS Perkin 1, 3485-98 (1994)
 Cmpd 14
 Not soluble in CDCl₃

Compound Number 2055



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.06	91				
OMe	55.95	97				
CH2	61.44	86				
CH2	65.99	88				
2	110.77	93				
5	113.40	94				
6	122.75	97				
α	127.17	99				
1	128.31	54				
3	149.74	46				
4	149.96	40				
β	152.36	84				
C=O	168.25	44				
γ	193.41	100				

¹H (acetone)

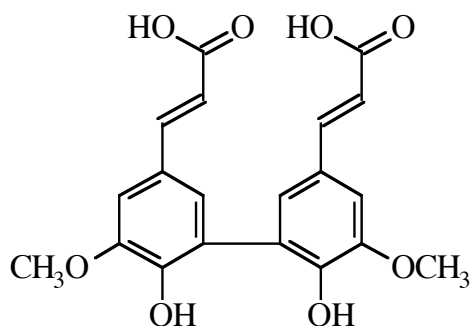
Atom	H Shifts	Mult	J
CH3	1.25	t	7.1
OMe	3.89	s	
CH2	4.23	q	7.1
CH2	4.69	s	
β	6.57	dd	15.8, 7.7
5	6.78	d	7.9
2,6	7.06-7.08	m	
α	7.36	d	15.8
γ	9.62	d	7.7

Notes:

S. Quideau

intermediate for synthesis of β-O-4 dehydro diferulic acid

Compound Number 2056

¹³C

5-5, Dehydrodiferulic Acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.52	100	56.04	55
2			109.97	89	109.44	56
β			116.28	94	115.82	64
5			125.62	54	125.20	60
6			126.07	96	125.05	60
1			126.60	64	124.83	74
α			145.89	100	144.56	55
4			147.38	40	146.43	71
3			148.92	58	147.90	99
γ			168.36	59	167.94	100

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.97	s	
β	6.42	d	15.4
6	7.21	d	2.0
2	7.35	d	2.0
α	7.64	d	15.9

Notes:

S. Quideau

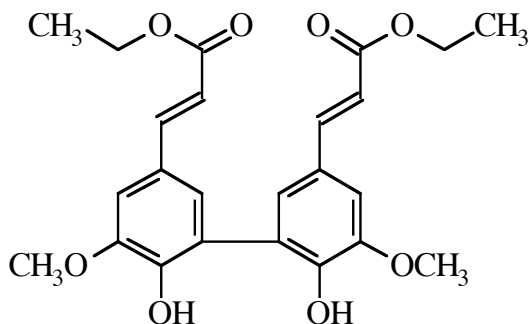
JCS Perkin 1, 3485-98 (1994)

Cmpd 16

Note chemical shift differences of 5,6,1 between solvents. Shifts were verified in both solvents

As this compound has a plane of symmetry the shifts for the other half are identical.

Compound Number 2057



5-5 Dehydrodiferulate diethyl ester

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3	14.31	100	14.64		14.22	
OMe	56.17	84	56.56		56.03	
CH2	60.34	79	60.46		59.63	
2	108.78	61	109.95		109.47	
β	116.21	71	116.23		114.70	
5	123.59	34	125.59		125.20	
6	124.81	68	126.22		125.35	
1	126.73	51	126.64		124.58	
α	144.46	70	145.58		144.98	
4	145.10	37	147.47		146.84	
3	147.27	46	148.93		147.94	
γ	167.14	47	167.39		166.59	

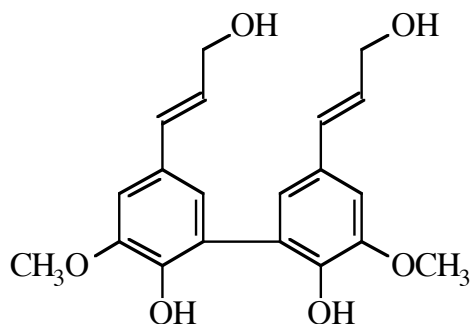
¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.26	t	7.1
CH2	4.18	q	7.1
OMe	3.97	s	
β	6.43	d	15.9
6	7.20	d	2.0
2	7.36	d	2.0
α	7.62	d	15.9

Notes:

S. Quideau
As this compound has a plane of symmetry
the shifts for the other half are identical.

Compound Number 2058

¹³C

5,5' Dehydrodiconiferyl Alcohol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.52	100		
β			63.49	68		
2			108.97	69		
6			123.16	79		
5			126.15	21		
b			128.53	71		
1			129.69	45		
α			130.57	80		
4			144.53	26		
3			148.87	27		

¹H (acetone)

Atom	H Shifts	Mult	J
A3 OMe	3.89	s	
γ	4.21	br d	5.4
β	6.26	dt	15.8, 5.5
α	6.54	dt	15.8, 1.6
A6	6.92	d	2.0
A2	7.06	d	2.0
ArOH	7.42	s	

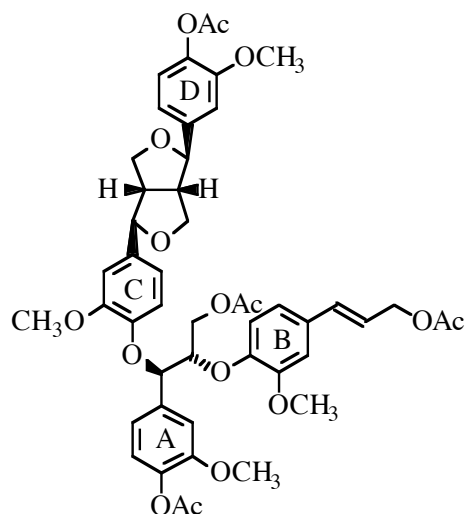
Notes:

S. Quideau

Run only in acetone, no HMBC run.

Assignment of quaternary carbons based on shift assignments of diacid/diester parents.

Poor solubility on CDCL₃...sample degraded, no DMSO data. As this compound has a plane of symmetry the shifts for the other half are identical.

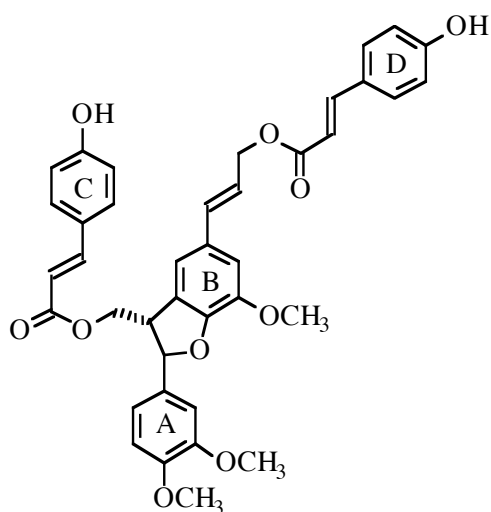
Guaiacylglycerol- α -pinoresinol- β -coniferyl-bis-ether (Ac'd)¹H (acetone)

Atom	H Shifts	Mult	J
α	5.60	d	5.6
β	4.86	m	
γ 1	4.45	dd	11.9, 3.8
γ 2	4.53	dd	11.9, 5.9
C α	4.66	s	
C α	3.06	m	
C γ 1	3.83	m	
C γ 2	4.17	m	
D α	4.74	d	4.5
D γ	4.23	m	

Notes:

S.Quideau
not substantiated in CDCl₃ & d₆ DMSO
Peracetate/diastereomeric mixture

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.59	99	20.45	99	20.35	99
Ac Me	20.59	99	20.45	99	20.35	99
Ac Me	20.70	70	20.62	50	20.43	49
Ac Me	20.93	70	20.78	70	20.70	49
C β	53.91	66	55.11	64	53.49	61
B β	54.39	74	55.36	60	53.74	63
A3 OMe	55.82	70	56.19	100	55.59	74
B3 OMe	55.95	100	56.23	100	55.65	74
D3 OMe	55.95	100	56.23	100	55.71	100
C3 OMe	56.11	56	56.40	100	55.79	100
A γ	63.45	36	63.62	40	62.44	36
B γ	65.05	69	65.38	59	64.40	61
C γ	71.88	70	72.37	48	71.07	52
D γ	71.88	70	72.48	48	71.18	52
A α	80.34	43	80.88	30	78.69	33
A β	81.87	43	81.73	43	79.56	32
D α	85.53	51	86.20	51	84.67	47
C α	85.64	45	86.27	51	84.75	47
D2	110.01	89	111.07	74	110.38	44
B2	110.35	59	111.31	74	110.20	82
C2	110.39	59	111.47	54	110.71	82
A2	111.55	35	112.77	28	111.89	34
C5	116.58	30	117.29	29	115.64	37
D6	117.93	79	118.62	71	116.96	41
C6	118.19	31	118.90	29	118.18	76
B5	118.87	39	119.11	51	117.83	76
A6	119.65	59	120.51	75	119.43	52
B6	119.65	59	120.51	75	119.43	52
B β	122.08	57	123.14	55	122.17	43
A5	122.45	49	123.25	79	122.37	86
D5	122.73	76	123.43	79	122.55	86
B1	131.55	40	132.27	34	130.46	33
B α	133.93	59	134.23	57	133.01	51
C1	135.13	35	136.85	25	135.21	29
A1	136.93	35	137.72	39	136.37	31
D4	139.19	29	140.08	31	138.42	17
A4	139.62	37	140.62	31	138.86	30
D1	140.23	44	141.84	44	140.50	33
C4	146.94	22	147.42	23	145.70	19
B4	147.63	30	148.67	30	147.00	21
C3	150.46	29	151.27	19	149.61	17
B3	150.93	39	151.86	36	150.06	24
A3	151.12	39	152.10	31	150.43	24
D3	151.27	39	152.24	34	150.72	22
A4 AcC=O	168.71	30	168.90	35	168.36	27
D4 AcC=O	168.98	40	169.05	35	168.54	25
B γ AcC=O	170.68	36	170.78	40	170.08	25
A γ AcC=O	170.76	36	170.81	40	170.12	25

Compound Number 2060
¹³C


Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β	50.40	30	51.33	39	49.47	15
A3 OMe	55.90	100	56.09	56	55.48	57
A4 OMe	55.90	100	56.13	32	55.76	22
B3 OMe	56.03	33	56.41	55	55.82	55
B γ	65.19	31	65.42	40	64.46	21
γ	65.38	25	65.92	33	64.80	12
α	88.86	34	89.15	42	87.87	20
A2	109.31	41	110.93	47	110.01	29
B2	110.67	26	112.25	33	111.03	11
A5	111.06	42	112.65	50	111.67	28
D β	114.53	39	115.08	51	113.68	21
C β	115.14	43	115.49	51	114.05	32
B6	115.39	32	116.36	40	115.31	16
D3	115.93	96	116.68	100	115.77	100
D5	115.83	96	116.68	100	115.77	100
C3	115.96	96	116.70	100	115.77	100
C5	115.96	96	116.70	100	115.77	100
A6	118.91	43	119.44	52	118.66	28
B β	121.37	36	122.40	41	121.56	18
D1	126.75	29	126.85	33	124.94	24
C1	126.98	29	126.97	37	125.08	29
B5	127.79	35	129.21	36	128.08	22
C2	130.00	34	130.94	100	130.34	100
C6	130.00	34	130.94	100	130.34	100
D2	130.06	97	131.02	100	130.34	100
D6	130.06	97	131.02	100	130.34	100
B1	130.62	34	131.51	27	130.06	24
A1	132.86	33	134.52	34	133.61	18
B α	134.27	36	134.78	44	132.79	29
B3	144.40	33	145.42	36	143.91	22
C α	144.94	40	145.50	50	144.89	29
D α	145.40	37	145.91	45	145.13	23
B4	148.27	26	149.42	25	147.65	23
A3	149.14	38	150.43	25	148.72	36
A4	149.17	38	150.51	28	148.81	21
D4	158.05	31	160.61	25	159.87	34
C4	158.23	31	160.71	25	159.94	27
C γ	167.20	34	167.23	38	166.38	5
D γ	167.37	29	167.23	38	166.38	14

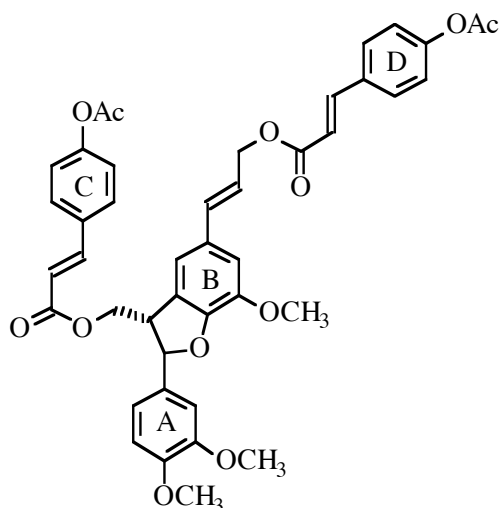
¹H (acetone)

Atom	H Shifts	Mult	J
A3,4 OMe	3.77	s	
β	3.85	m	
B3 OMe	3.88	s	
γ1	4.45	dd	11.1, 7.6
γ2	4.58	dd	11.1, 5.4
B γ	4.78	dd	6.5, 1.2
a	5.61	d	7.1
B β	6.31	dt	15.8, 6.5
D β	6.33	d	15.9
C β	6.37	d	15.9
B α	6.70	dt	15.8, 1.2
C,D 3,5	6.88	m	
A5	6.93	d	8.3
A6	7.00	d	8.3, 2.0
A,B 2	7.07	br d	2.0
B6	7.11	br s	
D 2,6	7.51	m	
C 2,6	7.54	m	
C α	7.63	d	15.9
D α	7.53	d	15.9

Notes:

S. Quideau
 C3,4,5 and D3,4,5 Can be interchanged
 not substantiated in CDCl₃ & DMSO

Compound Number 2061



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C4 AcMe	21.08	85	20.94	91	20.76	100
D4 AcMe	21.08	85	20.94	91	20.76	100
β	50.45	30	51.21	31	49.36	32
A3 OMe	55.97	52	56.08	46	55.50	95
A4 OMe	56.00	47	56.14	31	55.50	95
B3 OMe	56.13	47	56.41	42	55.76	85
Bγ	65.31	30	65.71	32	64.66	31
γ	65.56	23	66.15	23	64.98	26
α	88.94	35	89.17	34	87.72	31
A2	109.53	32	110.97	38	110.11	48
B2	110.96	25	112.28	26	111.18	30
A5	111.26	40	112.63	39	111.77	48
B6	115.41	30	116.35	30	115.30	32
Dβ	117.59	37	118.61	41	117.65	49
Cβ	118.21	41	119.01	41	118.01	57
A6	118.94	42	119.53	38	118.65	49
Bβ	121.34	34	122.17	31	121.32	33
D3	122.14	100	123.23	100	122.24	96
D5	122.14	100	123.23	100	122.24	96
C3	122.19	100	123.23	100	122.28	96
C5	122.19	100	123.23	100	122.28	96
B5	127.79	27	129.17	27	128.02	47
C2	129.21	57	130.16	96	129.49	44
C6	129.21	57	130.16	96	129.49	44
D2	129.42	24	130.21	93	129.53	96
D6	129.42	24	130.21	93	129.53	96
B1	130.66	26	131.47	26	130.01	41
D1	131.92	23	132.77	25	131.47	47
C1	132.16	23	132.91	25	131.62	46
A1	132.96	28	134.41	28	132.74	41
Bα	134.47	31	134.99	31	133.72	41
Cα	143.91	40	144.43	39	143.59	24
Dα	144.39	37	144.79	37	143.81	55
B3	144.53	24	145.42	26	143.87	47
B4	148.45	18	149.44	19	147.67	32
A3	149.36	30	150.45	25	148.81	45
C4	152.21	17	153.46	21	151.99	47
D4	152.36	17	153.53	21	152.03	47
Cγ	166.47	30	166.80	48	165.84	45
Dγ	166.61	23	166.80	48	165.87	45
C4 C=O	168.97	30	169.45	34	168.87	52
D4 C=O	169.01	30	169.45	34	168.87	52

¹H (acetone)

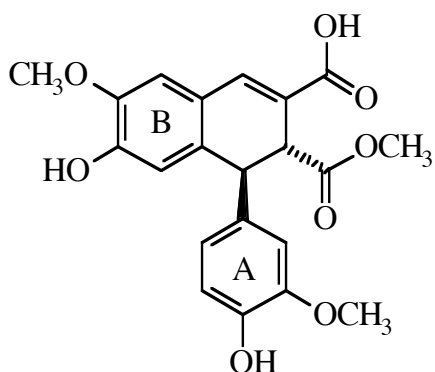
Atom	H Shifts	Mult	J
Ac Me	2.26	s	
A3,4 OMe	3.76	s	
B3 OMe	3.88	s	
β	~3.88	m	
γ1	4.48	dd	11.1, 7.5
γ2	4.61	dd	11.1, 5.4
Bγ	4.81	dd	6.5, 1.3
α	5.61	d	7.2
Bβ	6.32	dt	15.8, 6.5
A5	6.43	d	8.3
Dβ	6.50	d	16.0
Cβ	6.54	d	16.0
Bα	6.71	dt	15.8, 1.2
A6	7.00	dd	8.2, 2.0
A2	7.08	d	2.0
B2	7.08	br s	
B6	7.11	br s	
C,D 3,5	7.16-7.21	m	
D 2,6	7.68	m	
Cα	7.70	d	16.0
C 2,6	7.72	m	

Notes:

S. Quideau
 C4,D4 and Cg,Dg Can be interchanged
 Not substantiated in CDCl₃ & DMSO

Compound Number 2062

¹³C



Methyl 7-hydroxy-5-methoxy-1-(4-hydroxy-3-methoxyphenyl)- trans-1,1-dihydronaphthalene-3-carboxylic Acid 2-carboxylate

¹H (acetone)

Atom	H Shifts	Mult	J
A γ OMe	3.55	s	
A3 OMe	3.74	s	
B3 OMe	3.87	s	
β	3.96	d	3.1
α	4.51	d	3.1
A6	6.43	dd	8.3, 1.9
A5	6.657	d	8.3
B5	6.661	s	
A2	6.77	d	2.0
B2	7.06	s	
B α	7.66	s	

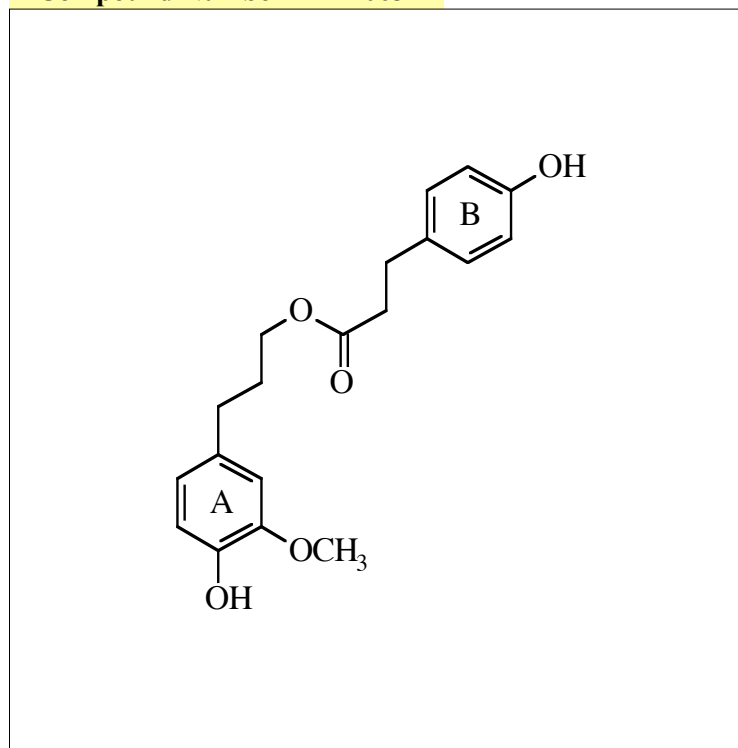
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			46.46	87		
β			48.06	64		
A γ OMe			52.25	96		
A3 OMe			56.18	95		
B3 OMe			56.36	95		
A2			112.01	95		
B2			113.11	87		
A5			115.52	72		
B5			116.75	64		
A6			120.82	100		
B β			123.97	24		
B1			124.58	64		
B6			132.08	64		
A1			135.45	73		
B α			138.07	56		
A4			146.14	35		
B3			147.51	48		
A3			148.11	48		
B4			149.34	35		
B γ			168.80	12		
A γ			173.44	63		

Compound Number 2063

¹³C



Dihydroconiferyl 4-hydroxydihydrocinnamate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	30.11	46	30.75	47	29.49	37
β	30.40	42	31.33	47	29.95	38
α	31.75	44	32.24	47	30.91	36
B β	36.17	45	36.69	49	35.47	39
OMe	55.87	47	56.16	45	55.48	47
γ	63.85	44	64.03	48	63.13	35
A2	110.96	48	112.73	49	112.43	40
A5	114.28	47	115.62	45	115.28	92
B3	115.31	99	116.00	89	115.03	39
B5	115.31	99	116.00	89	115.03	39
A6	120.93	51	121.55	51	120.30	43
B2	129.37	100	130.05	100	129.04	100
B6	129.37	100	130.05	100	129.04	100
B1	132.46	25	132.38	23	130.50	30
A1	133.09	28	133.55	25	131.83	33
A4	143.76	25	146.58	22	144.53	35
A3	146.40	23	148.16	17	147.38	31
B4	154.13	26	156.57	22	155.55	33
B γ	173.26	24	173.09	21	172.32	34

¹H (acetone)

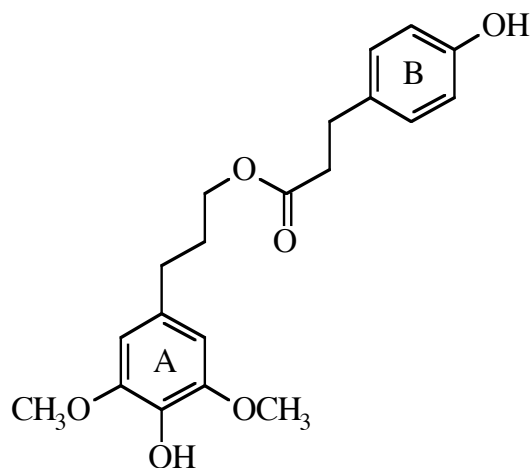
Atom	H Shifts	Mult	J
β	1.86	m	
α	2.55	t	7.4
B β	2.56	t	7.6
B α	2.82	t	7.6
OMe	3.80	s	
γ	4.03	t	6.5
A6	6.61	dd	8.0, 2.0
A5	6.73	d	7.9
B 3,5	6.75	m	
A2	6.79	d	2.0
B 2,6	7.06	m	
ArOH	7.86	s	
ArOH	8.10	s	

Notes:

S. Quideau

Compound Number 2064

¹³C



Dihydrosinapyl dihydro-p-coumarate

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B α	30.11	48	30.77	49	29.49	36
β	30.41	44	31.31	48	29.90	37
α	32.26	46	32.71	47	31.41	32
B β	36.17	46	36.71	49	35.46	36
OMe	56.27	96	56.57	92	55.87	100
OMe	56.27	96	56.57	92	55.87	100
γ	63.82	48	64.04	49	63.15	33
A2	105.03	94	106.69	90	105.63	69
A6	105.03	94	106.69	90	105.63	69
B3	115.32	95	116.01	92	115.02	81
B5	115.32	95	116.01	92	115.02	81
B2	129.34	100	130.07	100	129.03	91
B6	129.34	100	130.07	100	129.03	91
B1	132.28	31	132.40	26	130.50	25
A1	132.36	24	132.59	27	131.04	27
A4	132.93	26	135.07	23	133.55	25
A3	146.93	50	148.62	43	147.85	53
A5	146.93	50	148.62	43	147.85	53
B4	154.19	28	156.61	25	155.55	28
B γ	173.21	29	173.08	26	172.32	30

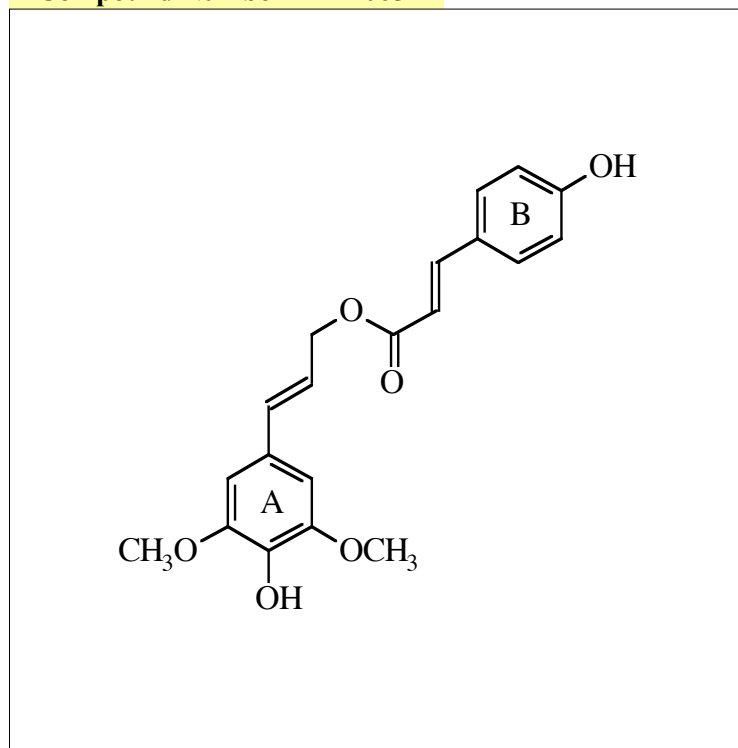
¹H (acetone)

Atom	H Shifts	Mult	J
β	1.87	m	
α	2.55	t	7.6
B β	2.56	t	7.5
B α	2.82	t	7.6
OMe	3.79	s	
γ	4.03	t	6.5
A 2,6	6.48	s	
B 3,5	6.74	m	
A4 OH	6.89	s	
B 2,6	7.06	m	
B4 OH	8.08	s	

Notes:

S. Quideau

Compound Number 2065



Sinapyl p-coumarate

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.84	s	
γ	4.78	dd	6.5, 1.3
β	6.28	dt	15.8, 6.5
B β	6.38	d	15.9
α	6.64	dt	15.8, 1.3
A 2,6	6.79	s	
B 3,5	6.89	m	
B 2,6	7.55	m	
B α	7.63	d	15.9

Notes:

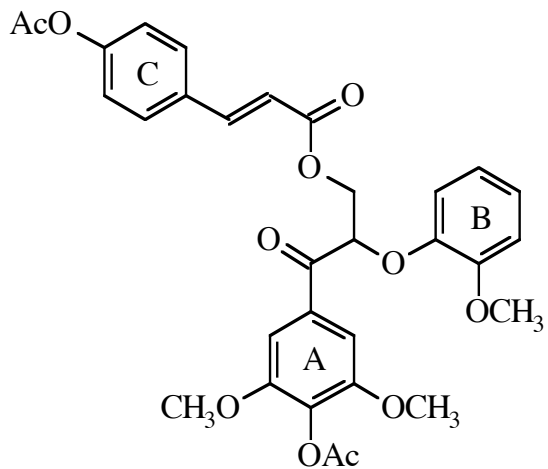
S. Quideau

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe	56.28	100	56.61	91	55.97	100
OMe	56.28	100	56.61	91	55.97	100
γ	65.15	43	65.42	43	64.50	23
A2	103.55	89	105.16	91	104.20	64
A6	103.55	89	105.16	91	104.20	64
B β	115.15	45	115.52	45	114.08	38
B3	115.92	93	116.70	100	115.78	64
B5	115.92	93	116.70	100	115.78	64
β	121.44	44	122.07	48	121.06	28
B1	126.98	28	126.99	24	125.08	25
A1	127.84	27	128.22	25	126.47	26
B2	129.98	94	130.95	99	130.34	73
B6	129.98	94	130.95	99	130.34	73
α	134.53	44	135.14	47	134.03	30
A4	135.03	28	137.27	22	135.80	26
B α	144.91	39	145.45	45	144.88	36
A3	147.10	59	148.84	49	148.04	64
A5	147.10	59	148.84	49	148.04	64
B4	158.06	32	160.62	27	159.87	25
B γ	167.32	26	167.22	23	166.40	24

Compound Number 2066

¹³C



2-(4-Acetoxy-3,5-dimethoxybenzoyl)-2-(2-methoxyphenoxy) ethyl 4-acetoxycinnamate

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.26	s	
Ac Me	2.26	s	
B3 OMe	3.75	s	
OMe	3.86	s	
γ1	4.60	dd	12.0, 6.8
γ2	4.86	dd	12.0, 3.6
β	5.96	dd	6.8, 3.6
C α	6.50	d	16.0
B6	6.83	ddd	7.9, 8.8, 2.5
B 1,2,5	6.98	m	
C 3,5	7.18	m	
A 2,6	7.56	s	
C β	7.62	d	16.0
C 2,6	7.69	m	

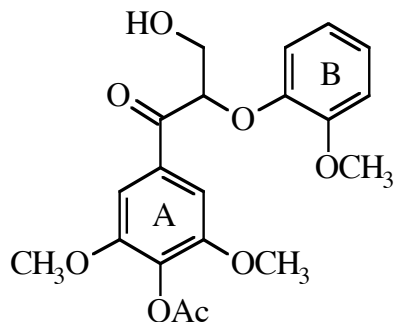
Notes:

S. Quideau
B5 and C β can be interchanged

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac	20.41	52	20.21	45	20.08	56
Ac	21.10	51	20.94	45	20.83	50
B3 OMe	55.71	52	56.12	49	55.55	63
OMe	56.34	93	56.68	89	56.21	100
OMe	56.34	93	56.68	89	56.21	100
γ	64.70	31	65.07	36	63.82	20
β	80.76	41	80.41	44	78.23	28
A2	105.93	76	106.52	84	105.47	52
A6	105.93	76	106.52	84	105.47	52
B2	112.59	49	113.82	47	112.95	34
B5	117.42	43	118.33	50	116.01	35
C β	118.35	48	118.38	51	117.39	41
B6	121.03	47	121.64	47	120.63	40
C3	122.18	100	123.24	100	122.38	90
C5	122.18	100	123.24	100	122.38	90
B1	123.60	45	123.34	8	122.55	32
C2	129.32	96	130.27	91	129.69	87
C6	129.32	96	130.27	91	129.69	87
C1	131.84	31	132.66	8	131.49	34
A1	132.66	30	133.94	26	132.49	34
A4	133.39	20	134.24	27	132.55	30
C α	144.59	42	145.13	13	144.28	36
B4	146.72	31	147.84	42	146.32	37
B3	150.37	29	151.34	24	149.51	39
A3	152.28	63	153.40	22	151.95	76
A5	152.28	63	153.40	22	151.95	76
C4	152.36	31	153.59	49	152.13	34
C γ	166.62	35	166.84	23	165.85	33
Ac C=O	168.05	29	168.13	26	167.63	37
Ac C=O	169.08	29	169.41	22	168.94	42
α	194.44	33	194.92	24	194.02	35

Compound Number 2067

¹³C



1-(4-acetoxy-3,5-dimethoxyphenyl)-3-hydroxy-2-(2-methoxyphenoxy)propanone

¹H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.77	s	
OMe	3.85	s	
γ	4.10	dd	6.2, 5.0
γ OH	4.28	t	6.2
β	5.56	t	5.0
A 2,6	7.49	s	
B6	6.80	m	
B 1,5	6.41	m	
B2	6.96	m	

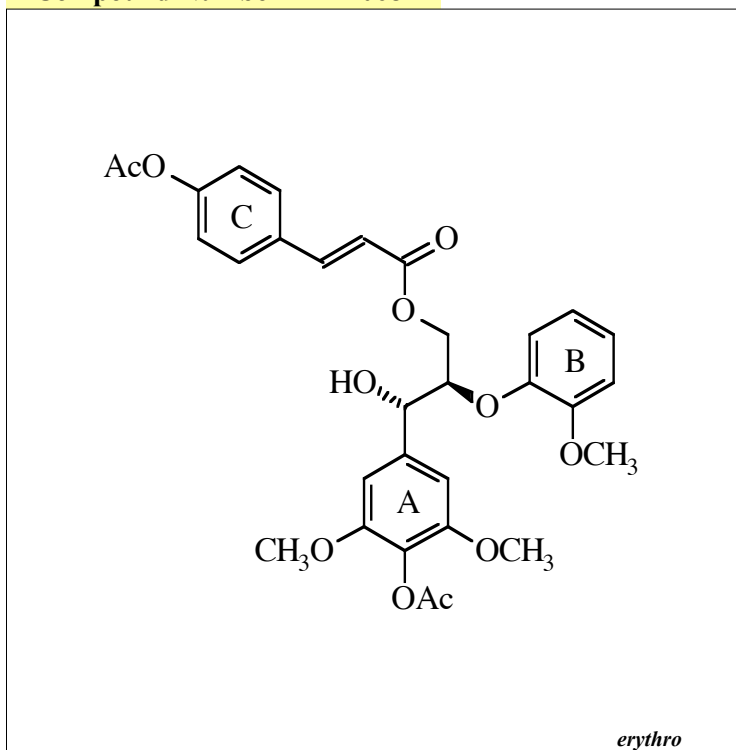
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.20	46		
B3 OMe			56.11	48		
OMe			56.62	94		
OMe			56.62	94		
γ			63.90	47		
β			84.04	50		
A2			106.56	100		
A6			106.56	100		
B2			113.67	50		
B5			117.03	46		
B6			121.61	53		
B1			123.24	53		
A4			133.99	13		
A1			134.39	25		
B4			148.26	21		
B3			151.03	21		
A3			153.25	48		
A5			153.25	48		
Ac C=O			168.15	24		
α			196.77	26		

Compound Number 2068

¹³C



¹H (acetone)

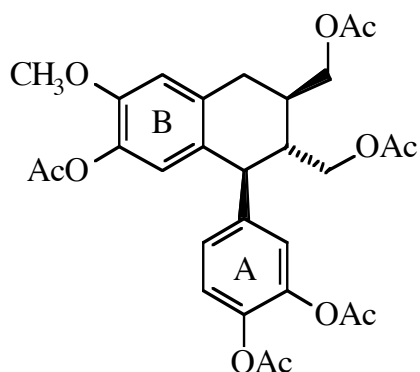
Atom	H Shifts	Mult	J
Ac	2.20	s	
Ac	2.26	s	
OMe	3.78	s	
B3 OMe	3.81	s	
γ1	4.47	dd	11.9, 3.9
γ2	4.52	dd	11.9, 6.1
β	4.73	m	
α OH	4.78	d	4.5
α	5.07	br t	4.8
C β	6.41	d	16.0
B6	6.84	ddd	7.9, 6.4, 2.7
A 2,6	6.88	s	
B 1,2	6.95	m	
B5	7.04	br dd	1.4
C 3,5	7.17	m	
C α	7.51	d	16.0
C 2,6	7.66	m	

Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac			20.25	50		
Ac			20.94	51		
B3 OMe			56.21	45		
OMe			56.39	94		
OMe			56.39	94		
γ			64.01	31		
α			73.49	40		
β			83.04	40		
A2			104.37	75		
A6			104.37	75		
B2			113.66	46		
C β			118.84	42		
B5			119.77	46		
B6			121.73	47		
C3			123.18	100		
C5			123.18	100		
B1			123.67	43		
A4			128.89	15		
C2			130.15	94		
C6			130.15	94		
C1			132.86	28		
A1			140.77	30		
C α			144.38	42		
B4			148.69	25		
B3			152.04	25		
A3			152.89	52		
A5			152.89	52		
C4			153.43	24		
C γ			166.80	28		
Ac C=O			168.58	21		
Ac C=O			169.43	30		

Compound Number 2069



Isotaxiresinol

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.00	s	
Ac Me	2.01	s	
Ac Me	2.10	s	
β	2.14	m	
Ac Me	2.22	s	
Ac Me	2.24	s	
B β	2.26	m	
B α	2.90	m	
A3 OMe	3.78	s	
γ1	3.90	dd	11.7, 3.5
α	4.06	br d	10.2
Bγ1	4.11	dd	11.2, 6.0
γ2	4.12	dd	11.7, 3.5
B γ2	4.22	dd	11.2, 4.4
B5	6.34	d	0.9
B2	6.88	br s	
A2	7.04	d	2.1
A6	7.10	dd	8.3, 4.1
A5	7.14	d	8.3

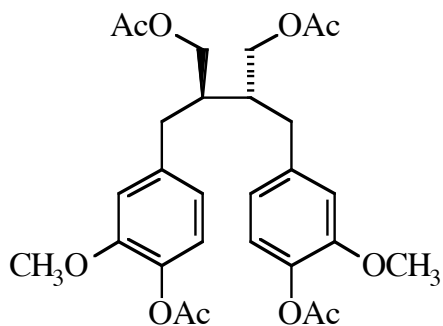
Notes:

S. Quideau
 Diaxial configuration on 6-membered ring --Trans 7,8
 Natural occurring isomer is (+), i.e. 7S.8R, 8R'

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 Ac Me			20.36	85		
A4 Ac Me			20.45	100		
B4 Ac Me			20.50	88		
Ac Me			20.60	83		
Ac Me			20.72	86		
B α			33.50	67		
B β			36.27	82		
β			44.34	80		
α			47.51	80		
OMe			56.18	96		
γ			63.57	65		
B γ			66.69	72		
B2			112.97	74		
B5			124.12	74		
A5			124.36	82		
A2			124.92	78		
A6			127.98	79		
B6			131.84	54		
B1			135.41	55		
B4			139.26	46		
A4			142.08	41		
A3			143.41	42		
A1			144.19	58		
B3			150.55	44		
A4 Ac C=O			168.52	46		
B4 Ac C=O			168.63	46		
A3 Ac C=O			168.92	45		
Ac C=O			171.04	58		
Ac C=O			171.05	55		

Compound Number 2070

¹³C

Seco-isolaricresinol

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
4 Ac Me			20.47	100		
γ AcMe			20.83	84		
α			35.51	64		
β			40.81	77		
γ			64.67	68		
2			114.00	79		
6			121.67	80		
5			123.32	80		
4			139.14	45		
1			140.00	1		
3			152.01	50		
4 Ac C=O			169.04	46		
γAc C=O			171.04	52		

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	2.00	s	
4 Ac Me	2.21	s	
β	2.22	m	
α1	2.70	dd	13.9, 7.9
α2	2.83	dd	13.8, 6.7
A3 OMe	3.74	s	
γ1	4.03	dd	11.4, 5.5
γ2	4.25	dd	11.4, 6.1
A6	6.70	dd	8.0, 1.95
A2	6.87	d	1.92
A5	6.92	d	8.0

Notes:

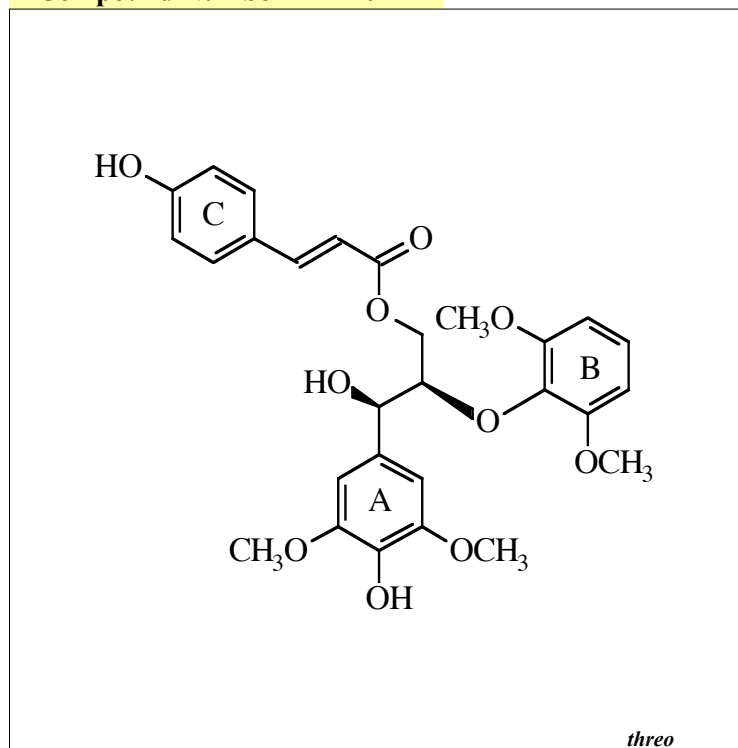
S. Quideau

natural occurring isomer (-), i.e. 8R, 8R'

As this compound has a plane of symmetry
the shifts for the other half are identical.

Compound Number 2071

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	56.01	54	56.44	81	55.78	26
B OMe	56.01	54	56.44	81	55.78	26
A OMe	56.25	56	56.59	49	55.93	100
A OMe	56.25	56	56.59	49	55.93	100
γ	63.92	23	64.78	28	64.09	8
α	74.66	35	74.81	35	72.17	17
β	87.07	29	86.87	38	83.84	17
A2	103.75	78	105.39	72	104.32	36
A6	103.75	78	105.39	72	104.32	36
B2	105.16	98	106.35	100	105.58	51
B6	105.16	98	106.35	100	105.58	51
C β	114.87	38	115.52	42	114.12	36
C3	115.97	96	116.68	95	115.82	74
C5	115.97	96	116.68	95	115.82	74
B1	124.30	44	124.72	40	123.62	22
C1	126.83	32	126.97	44	125.07	25
C2	129.98	100	130.92	91	130.21	54
C6	129.98	100	130.92	91	130.21	54
A1	130.58	41	132.00	30	131.16	26
A4	134.50	38	136.27	24	134.63	32
B4	136.62	33	137.85	20	136.12	28
C α	144.86	44	145.28	41	144.38	13
A3	146.99	79	148.38	53	147.49	40
A5	146.99	79	148.38	53	147.49	40
B3	152.93	71	154.03	51	152.97	63
B5	152.93	71	154.03	51	152.97	63
C4	158.23	37	160.58	32	159.80	24
C γ	167.12	23	167.12	27	166.25	32

¹H (acetone)

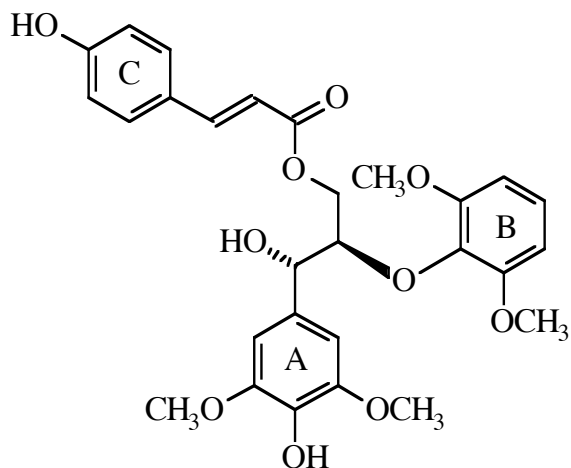
Atom	H Shifts	Mult	J
A 3,5 OMe	3.76	s	
B 3,5 OMe	3.83	s	
γ1	4.06	dd	11.9, 4.2
β	4.27	ddd	7.3, 4.2, 3.1
γ2	4.45	dd	12.0, 3.2
α	5.00	br d	7.1
α OH	4.60	d	3.2
C β	6.33	d	16.0
B 2,6	6.68	d	8.4
A 2,1	6.67	d	0.3
C 3,5	6.89	m	
B1	7.01	dd	8.7, 8.1
C α	7.48	d	16.0
C 2,6	7.53	m	

Notes:

S. Quideau

Compound Number 2072

¹³C



erythro

¹H (acetone)

Atom	H Shifts	Mult	J
A 3,5 OMe	3.79	s	
B 3,5 OMe	3.82	s	
γ1	4.23	dd	11.8, 3.4
γ2	4.45	dd	11.8, 7.3
β	4.58	m	
α OH	4.697	d	3.9
α	4.96	br m	
C β	6.15	d	16.0
B 2,6	6.68	d	8.4
A 2,6	6.71	d	0.7
C 3,5	6.84	m	
B1	7.01	dd	8.6, 8.2
C α	7.33	d	16.0
C 2,6	7.46	m	

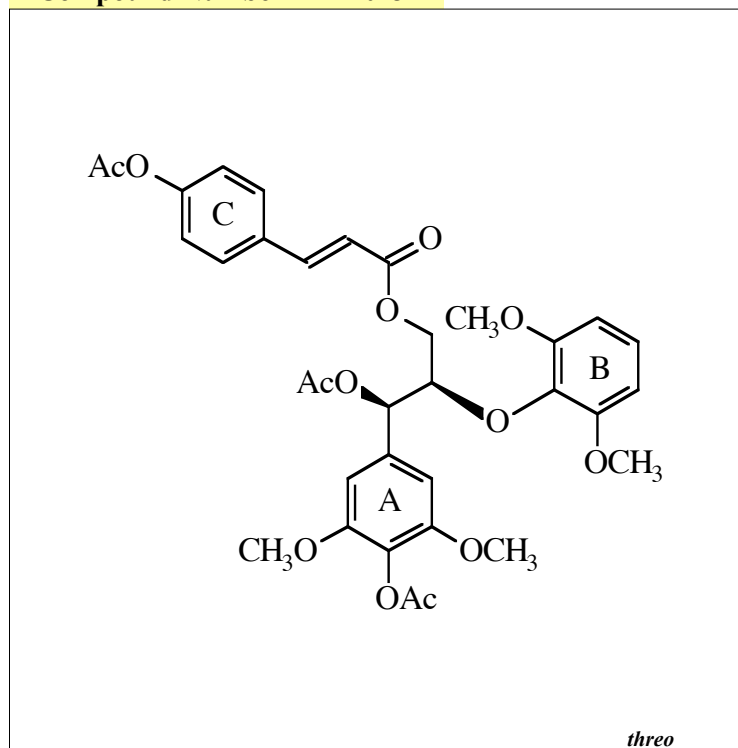
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B OMe	56.20	92	56.48	78	55.77	76
B OMe	56.20	92	56.48	78	55.77	76
A OMe	56.33	89	56.60	76	55.92	100
A OMe	56.33	89	56.60	76	55.92	100
γ	62.59	30	63.57	31	63.38	19
α	71.90	36	73.19	40	72.62	27
β	83.18	41	84.40	42	83.51	28
A2	102.78	85	104.59	88	103.77	62
A6	102.78	85	104.59	88	103.77	62
B2	105.36	92	106.34	96	105.32	69
B6	105.36	92	106.34	96	105.32	69
C β	115.19	46	115.73	46	114.12	42
C3	115.91	97	116.65	45	115.81	87
C5	115.91	97	116.65	45	115.81	87
B1	124.44	44	124.75	37	123.40	31
C1	126.85	36	127.03	32	125.03	37
C2	129.88	100	130.82	100	130.11	83
C6	129.88	100	130.82	100	130.11	83
A1	129.75	32	131.66	28	132.10	29
A4	133.91	29	135.91	24	134.45	32
B4	134.69	30	136.59	24	135.92	36
C α	144.58	44	144.99	47	144.16	37
A3	147.00	69	148.49	57	147.63	67
A5	147.00	69	148.49	57	147.63	67
B3	153.69	70	154.53	57	152.89	84
B5	153.69	70	154.53	57	152.89	84
C4	158.15	35	160.43	34	159.74	32
C γ	167.29	37	167.16	32	166.27	38

Compound Number 2073

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	49	20.23	47	20.15	54
Ac Me	21.02	83	20.95	73	20.75	47
α Ac Me	21.02	83	20.95	73	20.88	52
OMe	55.89	100	56.35	72	55.80	77
OMe	55.89	100	56.35	72	55.80	77
OMe	56.13	78	56.49	73	56.01	56
OMe	56.13	78	56.49	73	56.01	56
γ	64.01	22	64.66	25	63.72	10
α	75.63	30	76.79	34	75.97	16
β	80.86	29	81.83	32	80.62	18
A2	104.10	51	104.92	61	103.89	34
A6	104.10	51	104.92	61	103.89	34
B2	105.09	69	106.22	77	105.29	70
B6	105.09	69	106.22	77	105.29	70
C β	117.75	34	118.88	38	117.82	27
C3	122.09	79	123.20	100	122.43	100
C5	122.09	79	123.20	100	122.43	100
B1	123.74	31	124.47	37	123.68	22
A4	128.57	18	129.54	14	127.74	25
C2	129.19	96	130.22	88	129.68	67
C6	129.19	96	130.22	88	129.68	67
C1	131.92	26	132.90	24	131.66	31
B4	135.42	30	136.76	36	135.61	27
A1	136.56	24	137.85	20	136.15	31
C α	143.86	33	144.48	39	143.76	29
A3	151.94	55	153.07	53	151.55	74
A5	151.94	55	153.07	53	151.55	74
C4	152.10	24	153.46	24	152.09	30
B3	153.14	53	154.19	53	152.69	66
B5	153.14	53	154.19	53	152.69	66
C γ	166.24	27	166.62	26	165.86	32
Ac C=O	168.45	25	168.46	21	168.06	28
Ac C=O	169.05	41	169.45	29	169.06	38
Ac C=O	169.68	27	169.93	27	169.44	30

¹H (acetone)

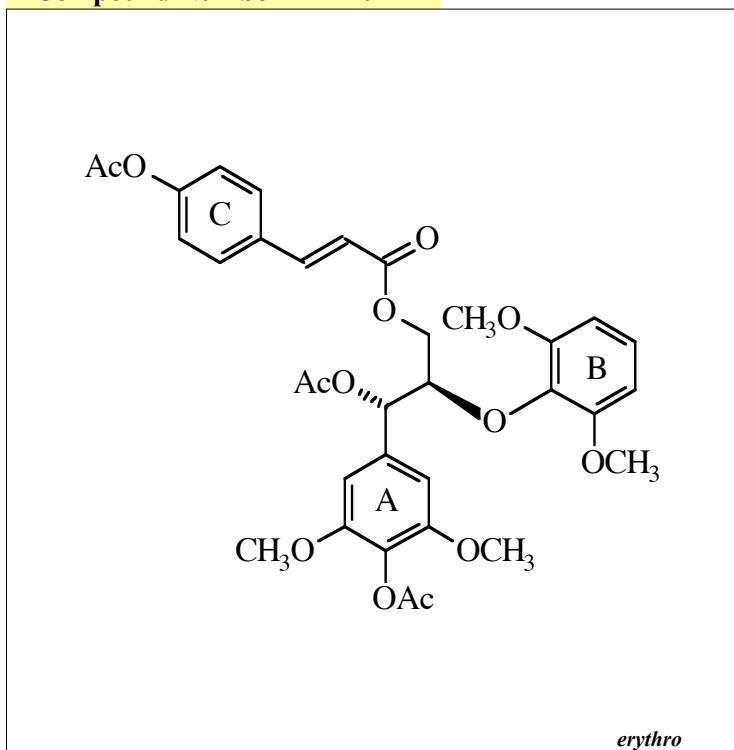
Atom	H Shifts	Mult	J
α Ac Me	1.97	s	
Ac Me	2.02	s	
Ac Me	2.27	s	
OMe	3.78	s	
OMe	3.79	s	
γ1	4.07	dd	11.9, 4.7
γ2	4.41	dd	11.9, 3.8
β	4.68	ddd	6.8, 4.7, 3.8
α	6.18	d	6.8
C β	6.56	d	16.0
B 2,6	6.66	d	8.4
A 2,6	6.86	br s	
B1	6.99	t	8.4
C 3,5	7.19	m	
C α	7.55	d	16.0
C 2,6	7.72	m	

Notes:

S. Quideau

Compound Number 2074

¹³C



¹H (acetone)

Atom	H Shifts	Mult	J
α Ac Me	2.15	s	
Ac Me	2.21	s	
Ac Me	2.26	s	
B 3,5 OMe	3.79	s	
A 3,5 OMe	3.81	s	
γ1	4.36	dd	11.9, 4.0
γ2	4.53	dd	11.9, 6.2
β	4.80	dt	6.2, 4.0
α	6.14	d	4.2
C β	6.35	d	16.0
B 2,6	6.65	d	8.4
A 2,6	6.83	br s	
B1	6.99	t(dd)	8.4
C 3,5	7.18	m	
C α	7.44	d	16.0
C 2,6	7.66	m	

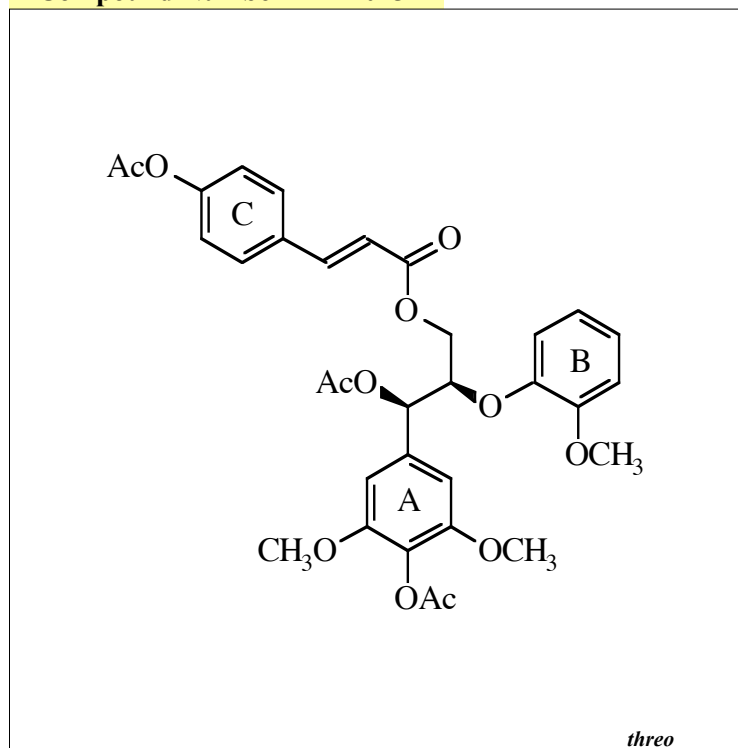
Notes:

S. Quideau
B3,5 OMe and A3,5 OMe can be interchanged

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.36	57	20.24	42	20.15	61
α Ac Me	21.02	86	20.95	71	20.76	54
Ac Me	21.02	86	20.95	71	20.87	53
B OMe	55.87	100	56.32	80	55.78	100
B OMe	55.87	100	56.32	80	55.78	100
A OMe	56.07	100	56.47	79	55.97	88
A OMe	56.07	100	56.47	79	55.97	88
γ	63.13	25	63.73	28	62.64	15
α	74.50	34	75.58	37	74.23	26
β	80.92	35	81.67	38	80.19	26
A2	103.93	65	104.60	84	103.45	55
A6	103.93	65	104.60	84	103.45	55
B2	105.05	75	106.12	83	105.27	69
B6	105.05	75	106.12	83	105.27	69
C β	117.84	41	118.80	42	117.70	36
C3	122.03	87	123.19	100	122.43	99
C5	122.03	87	123.19	100	122.43	99
B1	124.00	3	124.72	43	124.00	29
A4	128.37	21	129.35	15	127.59	31
C2	129.19	94	130.15	90	129.57	82
C6	129.19	94	130.15	90	129.57	82
C1	131.98	31	132.85	26	131.56	33
B4	135.39	27	136.69	34	134.77	39
A1	135.73	33	136.77	21	135.43	34
C α	143.73	39	144.29	41	143.54	36
A3	151.84	62	153.06	55	151.58	85
A5	151.84	62	153.06	55	151.58	85
C4	152.04	29	153.44	23	152.06	36
B3	153.32	66	154.34	56	152.85	94
B5	153.32	66	154.34	56	152.85	94
C γ	166.42	32	166.52	27	165.70	36
Ac C=O	168.49	30	168.51	25	168.10	40
Ac C=O	169.04	35	169.44	27	169.05	45
Ac C=O	169.43	30	170.00	26	169.49	39

Compound Number 2075

¹³C



γ -p-coumaroylated syringylglycerol- β 04-guaiacol ether (Ac'd)

¹H (acetone)

Atom	H Shifts	Mult	J
α Ac Me	2.04	s	
Ac Me	2.20	s	
Ac Me	2.27	s	
B OMe	3.79	s	
A 3,5 OMe	3.81	s	
γ 1	4.19	dd	12.0, 5.5
γ 2	4.39	dd	11.9, 3.9
β	4.88	ddd	6.6, 5.5
α	6.15	d	6.6
C β	6.54	d	16.0
B6	6.87	m	
A 2,6	6.88	br s	
B 1,2	6.93 - 7.00	m	
B5	7.08 - 7.10	m	
C 3,5	7.19	m	
C α	7.58	d	16.0
C 2,6	7.71	m	

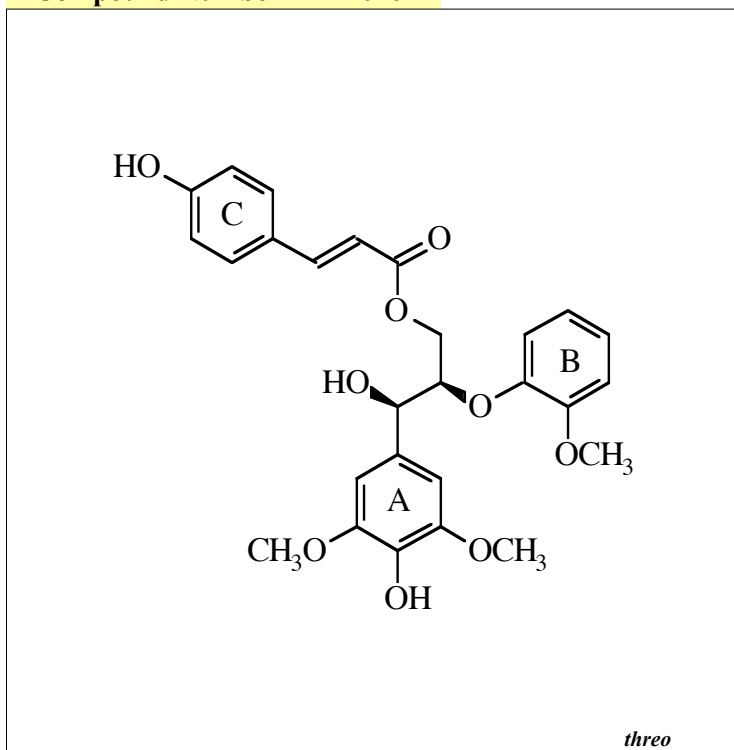
Notes:

S. Quideau
Not run in DMSO

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.42		20.23	25		
Ac Me	21.10		20.94	40		
α Ac Me	21.10		20.94	40		
B3 OMe	35.77		56.21	30		
OMe	56.20		56.51	51		
OMe	56.20		56.51	51		
γ	63.39		63.97	14		
α	74.88		75.92	20		
β	80.50		80.89	19		
A2	104.09		105.00	41		
A6	104.09		105.00	41		
B2	112.45		113.74	31		
C β	117.52		118.62	24		
B5	118.85		119.25	26		
B6	121.00		121.70	27		
C3	122.14		123.22	100		
C5	122.14		123.22	100		
B1	123.34		123.75	24		
A4	128.81		129.70	7		
C2	129.31		130.26	56		
C6	129.31		130.26	56		
C1	131.91		132.83	15		
A1	134.81		136.23	17		
C α	144.25		144.78	25		
B4	147.99		149.16	13		
B3	150.86		151.87	13		
A3	152.01		153.21	29		
A5	152.01		153.21	29		
C4	152.20		153.53	18		
C γ	166.32		166.64	19		
Ac C=O	168.47		168.43	14		
Ac C=O	169.09		169.43	22		
Ac C=O	169.71		170.03	14		

Compound Number 2076

¹³C



γ -p-coumaroylated syringylglycerol- β 04-guaiacyl ether

¹H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.79	s	
B3 OMe	3.84	s	
γ 1	4.11	dd	12.0, 6.2
γ 2	4.36	dd	12.0, 3.4
β	4.57	td	6.1, 3.4
α	4.96	(br)d	5.9
C β	6.31	d	16.0
A 2,6	6.82	d	0.4
B6	6.85-6.90	m	
C 3,5	6.88	m	
B 1,2	6.94-7.01	m	
B5	7.15	dd	7.9, 1.5
C α	7.48	d	16.0
C 2,6	7.51	m	

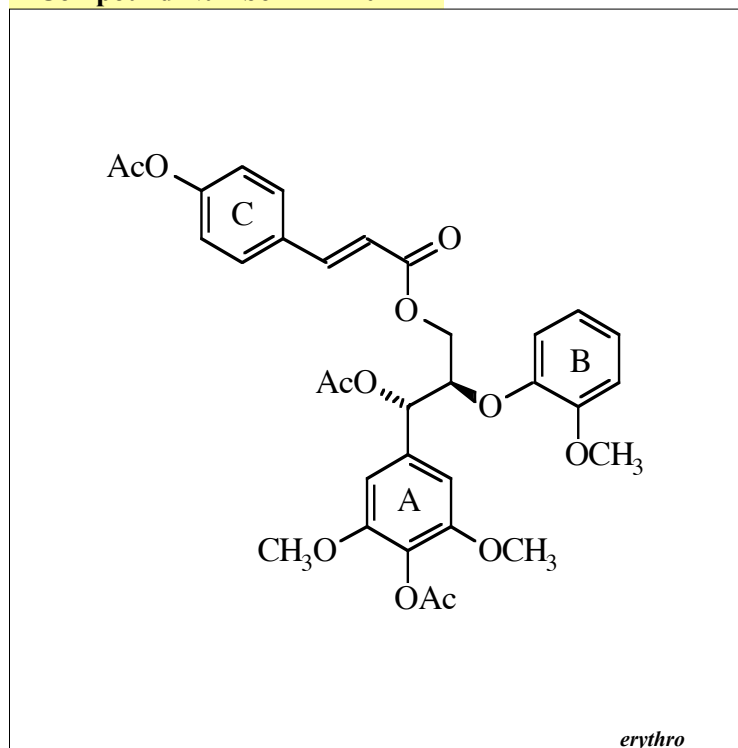
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	55.82	50	56.27	38	55.60	54
OMe	56.31	91	56.59	74	55.88	95
OMe	56.31	91	56.59	74	55.88	95
γ	63.19	29	64.23	31	63.47	15
α	74.70	39	74.11	32	71.53	31
β	86.09	36	84.42	41	81.02	29
A2	103.82	80	105.41	85	104.24	68
A6	103.82	80	105.41	85	104.24	68
B2	112.19	50	113.60	48	112.70	46
C β	114.66	44	115.30	46	113.86	43
C3	115.95	99	116.68	99	115.78	100
C5	115.95	99	116.68	99	116.25	100
B5	120.53	49	119.33	50	116.25	54
B6	121.45	50	121.82	51	120.71	47
B1	124.12	52	123.52	47	121.71	35
C1	126.89	33	126.96	30	125.00	48
C2	130.04	100	130.97	100	130.30	95
C6	130.04	100	130.97	100	131.30	95
A1	130.29	34	132.11	25	131.22	36
A4	134.73	36	136.36	18	134.67	53
C α	145.18	44	145.57	46	144.84	35
A3	147.11	68	148.47	45	147.58	99
A5	147.11	68	148.47	45	147.58	99
B4	147.91	32	149.37	24	147.86	46
B3	150.91	32	151.80	23	149.91	55
C4	158.08	36	160.60	30	159.87	41
C γ	166.86	36	167.15	29	166.38	52

Compound Number 2077

¹³C



γ -p-coumaroylated syringylglycerol- β 04-guaiacol ether (Ac'd)

¹H (acetone)

Atom	H Shifts	Mult	J
α Ac Me	2.09	s	
Ac Me	2.21	s	
Ac Me	2.26	s	
B3 OMe	3.81	s	
A OMe	3.81	s	
γ 1	4.43	dd	11.9, 4.3
γ 2	4.49	dd	11.9, 5.8
β	4.94	m	
α	6.12	d	5.1
C β	6.45	d	16.0
B6	6.85	m	
A 2,6	6.89	d	0.4
B 1,2	6.95-7.00	m	
B5	7.03-7.06	m	
C 3,5	7.19	m	
C α	7.57	d	16.0
C 2,6	7.69	m	

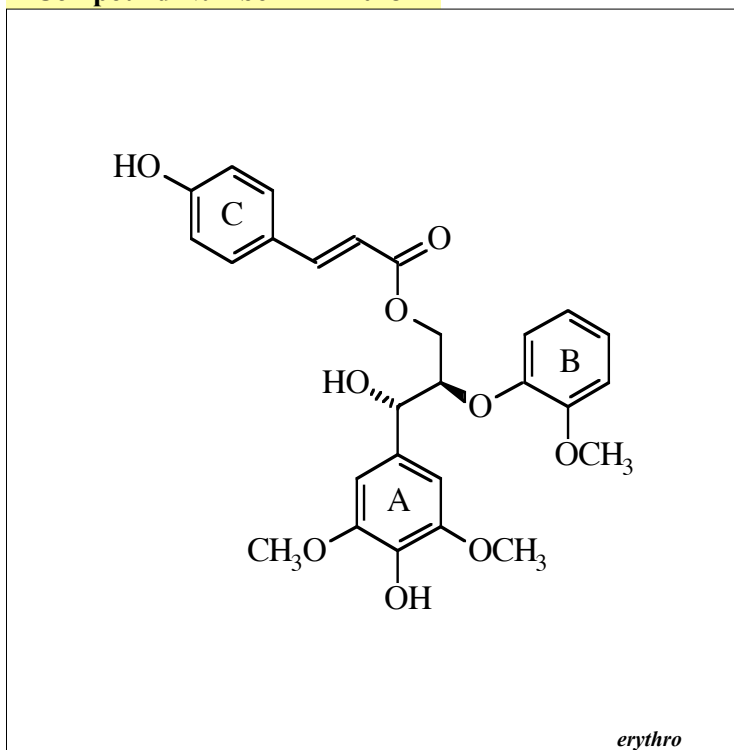
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	51	20.24	43	20.12	50
α Ac Me	21.01	47	20.90	37	20.70	51
Ac Me	21.06	58	20.94	47	20.84	54
B3 OMe	55.73	52	56.20	47	55.61	58
A OMe	56.14	93	56.50	82	55.97	99
A OMe	56.14	93	56.50	82	55.97	99
γ	62.98	27	63.41	27	62.35	18
α	74.17	35	74.99	35	73.53	29
β	80.31	36	80.38	34	78.34	24
A2	104.43	73	105.14	70	104.10	53
A6	104.43	73	105.14	70	104.10	53
B2	112.51	43	113.75	43	112.88	43
C β	117.59	43	118.57	40	117.53	40
B5	119.50	43	119.79	41	117.81	42
B6	120.95	45	121.65	42	120.69	45
C3	122.09	95	123.21	100	122.38	100
C5	122.09	95	123.21	100	122.38	100
B1	123.58	41	124.02	38	122.81	34
A4	128.67	20	129.57	13	127.73	27
C2	129.28	100	130.22	83	129.63	86
C6	129.28	100	130.22	83	129.63	86
C1	131.93	30	132.79	24	131.51	33
A1	134.92	31	136.25	26	134.99	32
C α	144.23	41	144.74	38	143.94	39
B4	147.24	31	148.36	22	146.75	36
B3	151.07	32	152.03	21	150.27	41
A3	151.98	61	153.07	45	151.48	70
A5	151.98	61	153.07	45	151.48	70
C4	152.16	29	153.51	21	152.08	36
C γ	166.44	30	166.63	26	165.76	33
Ac C=O	168.49	28	168.48	21	168.01	33
Ac C=O	169.06	33	169.43	25	168.97	37
α Ac C=O	169.48	27	169.95	21	169.34	30

Compound Number 2078

¹³C



γ-p-coumaroylated syringylglycerol-β04-guaiacyl ether

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.80	s	
B3 OMe	3.81	s	
γ1	4.41	dd	11.8, 3.8
γ2	4.47	dd	11.8, 6.4
β	4.68	ddd	6.4, 5.0, 3.8
α	4.98	br d	4.9
C β	6.25	d	16.0
A 2,6	6.81	brs	
B6	6.83	m	
C 3,5	6.87	m	
B 1,2	6.91-6.96	m	
B5	7.05	br dd	7.8, 1.5
C α	7.44	d	16.0
C 2,6	7.48	m	

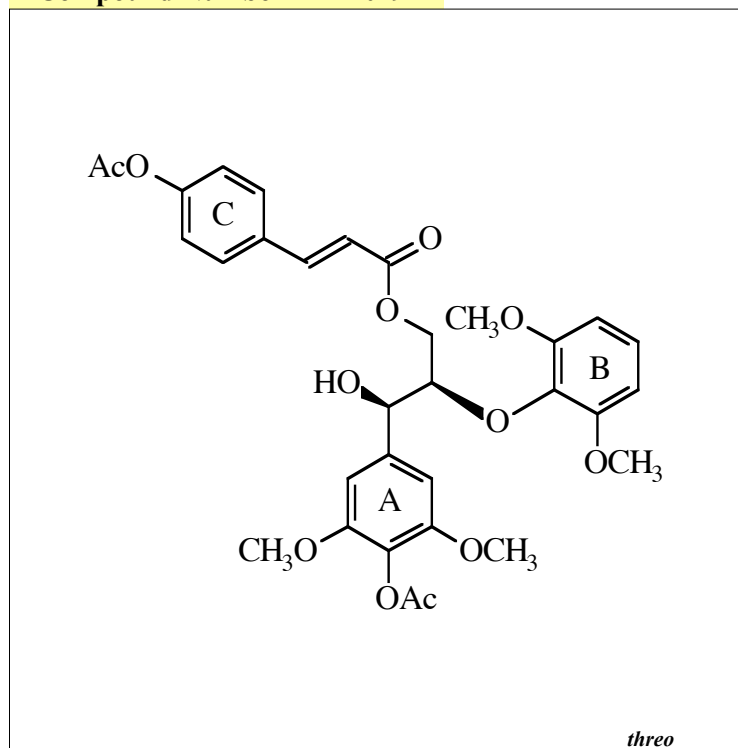
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe	55.83	53	56.23	48	55.54	
OMe	56.29	100	56.60	89	55.90	
OMe	56.29	100	56.60	89	55.90	
γ	62.70	30	64.04	33	63.29	
α	72.39	33	73.51	35	71.77	
β	84.23	40	83.41	42	80.92	
A2	103.13	84	105.23	84	104.38	
A6	103.13	84	105.23	84	104.38	
B2	112.22	49	113.63	47	112.74	
C β	114.40	46	115.37	45	113.93	
C3	115.95	99	116.67	100	115.75	
C5	115.95	99	116.67	100	115.75	
B5	120.53	49	119.55	48	116.89	
B6	121.46	54	121.72	48	120.62	
B1	124.03	46	123.46	45	121.83	
C1	126.44	36	126.92	28	124.99	
C2	129.98	99	130.90	94	130.24	
C6	129.98	99	130.90	94	130.24	
A1	130.16	37	132.59	31	132.05	
A4	134.15	37	136.12	26	134.61	
C α	145.25	44	145.42	43	144.71	
C3	147.00	60	148.42	51	147.52	
C5	147.00	60	148.42	51	147.52	
B4	147.02	39	148.91	24	147.52	
B3	151.42	35	152.00	22	150.03	
C4	158.68	38	160.58	31	159.82	
C γ	167.39	39	167.28	28	166.41	

Compound Number 2079

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.25	53		
Ac Me			21.06	53		
A OMe			56.36	83		
A OMe			56.36	83		
B OMe			56.45	81		
B OMe			56.45	81		
γ			64.93	30		
α			74.56	23		
β			85.88	37		
A2			104.48	69		
A6			104.48	69		
B2			106.35	88		
B6			106.35	88		
C β			118.98	40		
C3			123.19	100		
C5			123.19	100		
B1			124.80	43		
A4			128.98	14		
C2			130.17	91		
C6			130.17	91		
C1			132.93	39		
B4			137.65	21		
A1			140.28	21		
C α			144.26	40		
A3			152.82	53		
A5			152.82	53		
C4			153.43	24		
B3			154.07	54		
B5			154.07	54		
C γ			166.65	26		
Ac C=O			168.54	25		
Ac C=O			169.45	36		

¹H (acetone)

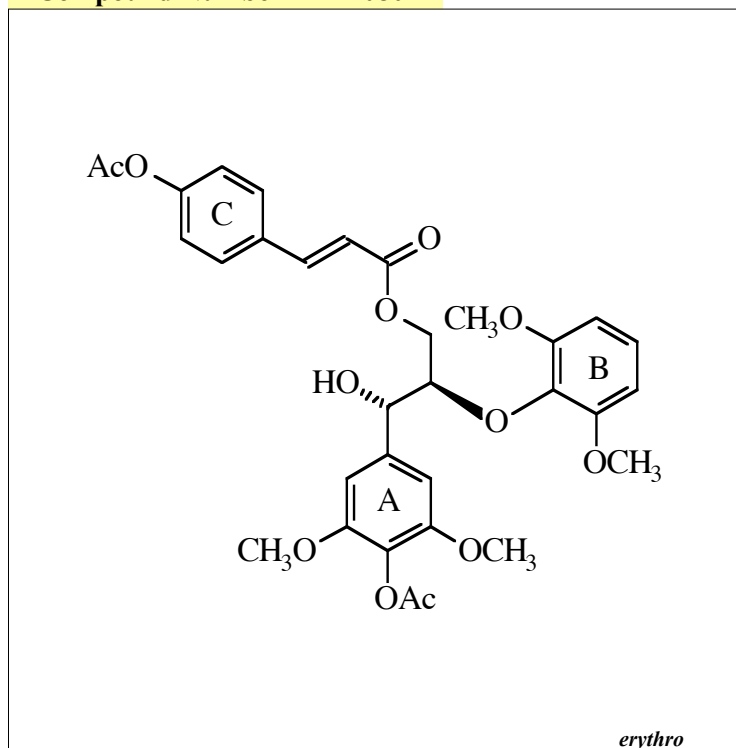
Atom	H Shifts	Mult	J
Ac Me	2.19	s	
Ac Me	2.27	s	
A OMe	3.75	s	
B OMe	3.82	s	
γ1	4.16	dd	11.9, 4.6
β	4.38	ddd	6.3, 4.5, 3.6
γ2	4.50	dd	11.9, 3.6
α	5.07	br d	6.4
C β	6.47	d	16.0
B 2,6	6.68	d	8.4
A 2,6	6.87	br s	
B1	7.01	t	8.4
C 3,5	7.19	m	
C α	7.63	d	16.0
C 2,6	7.70	m	

Notes:

S. Quideau

Compound Number 2080

¹³C



¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.19	s	
Ac Me	2.26	s	
A OMe	3.78	s	
B OMe	3.83	s	
γ1	4.30	dd	11.7, 3.8
γ2	4.51	dd	11.7, 6.9
β	4.62	m	
α	5.05	br t	3.7
C β	6.34	d	16.0
B 2,6	6.09	d	8.4
A 2,6	6.82	br s	
B1	7.03	t	8.4
C 3,5	7.17	m	
C α	7.44	d	16.0
C 2,6	7.66	m	

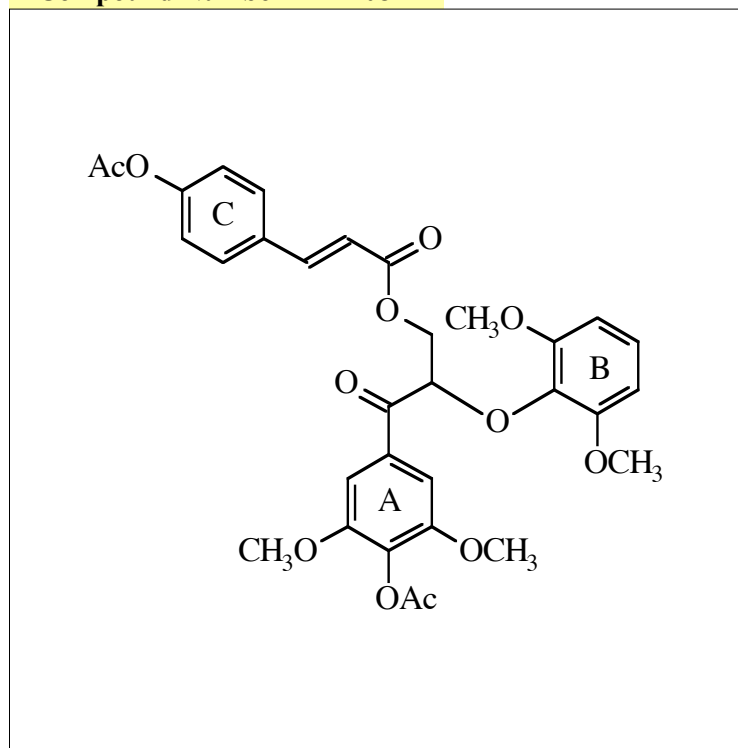
Notes:

S. Quideau

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.26	47		
Ac Me			20.94	54		
A OMe			56.38	86		
A OMe			56.38	86		
B OMe			56.48	97		
B OMe			56.48	97		
γ			63.67	31		
α			73.30	37		
β			84.07	39		
A2			103.76	82		
A6			103.76	82		
B2			106.31	88		
B6			106.31	88		
C β			119.10	44		
C3			123.16	100		
C5			123.16	100		
B1			124.83	43		
A4			128.69	14		
C2			130.11	89		
C6			130.11	89		
C1			132.93	29		
B4			136.57	21		
A1			140.05	25		
C α			144.00	42		
A3			152.94	48		
A5			152.94	48		
C4			153.36	21		
B3			154.51	52		
B5			154.51	52		
C γ			166.71	28		
Ac C=O			168.59	23		
Ac C=O			169.45	27		

Compound Number 2081

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.40	42	20.23		20.12	47
Ac Me	21.08	40	20.95		20.85	40
B OMe	55.88	85	56.31		55.80	100
B OMe	55.88	85	56.31		55.80	100
A OMe	56.28	82	56.67		56.20	92
A OMe	56.28	82	56.67		56.20	92
γ	64.49	27	64.90		63.77	17
β	81.85	38	81.50		79.82	26
B2	105.11	91	106.18		105.39	63
B6	105.11	91	106.18		105.39	63
A2	106.37	82	106.93		105.86	49
A6	106.37	82	106.93		105.86	49
C β	117.67	43	118.55		117.57	33
C3	122.15	100	123.25		122.45	76
C5	122.15	100	123.25		122.45	76
B1	124.23	46	124.99		124.07	28
C2	129.21	97	130.19		129.61	71
C6	129.21	97	130.19		129.61	71
C1	131.90	33	132.72		131.48	32
A4	133.05	19	133.96		132.28	26
A1	133.49	35	134.72		133.31	33
B4	135.68	24	136.63		135.12	32
C α	144.02	44	144.62		143.83	32
A3	152.08	69	153.20		151.80	69
A5	152.08	69	153.20		151.80	69
C4	152.16	28	153.52		152.11	31
B3	153.03	65	154.07		152.53	70
B5	153.03	65	154.07		152.53	70
C γ	166.34	33	166.55		165.73	32
Ac C=O	168.06	29	168.19		167.72	33
Ac C=O	169.08	29	169.43		169.02	32
α	194.81	33	195.26		184.38	31

¹H (acetone)

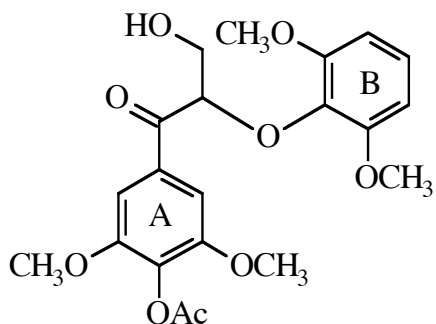
Atom	H Shifts	Mult	J
Ac Me	2.26	s	
Ac Me	2.28	s	
B OMe	3.72	s	
A OMe	3.85	s	
γ1	4.63	dd	11.7, 6.2
γ2	4.74	dd	11.7, 4.6
β	5.69	dd	6.2, 4.6
C β	6.39	d	16.0
B 2,6	6.64	d	8.4
B1	6.49	t	8.4
C 3,5	7.17	m	
C α	7.50	d	16.0
A 2,6	7.58	br s	
C 2,6	7.64	m	

Notes:

S. Quideau

Compound Number 2082

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.21	51		
B OMe			56.28	100		
B OMe			56.28	100		
A OMe			56.61	97		
A OMe			56.61	97		
γ			63.35	42		
β			86.41	48		
B2			106.22	97		
B6			106.22	97		
A2			106.51	91		
A6			106.51	91		
B1			124.92	47		
A4			133.59	14		
A1			135.01	29		
B4			137.01	20		
A3			153.06	51		
A5			153.06	51		
B3			153.77	50		
B5			153.77	50		
Ac C=O			168.18	22		
α			196.25	27		

¹H (acetone)

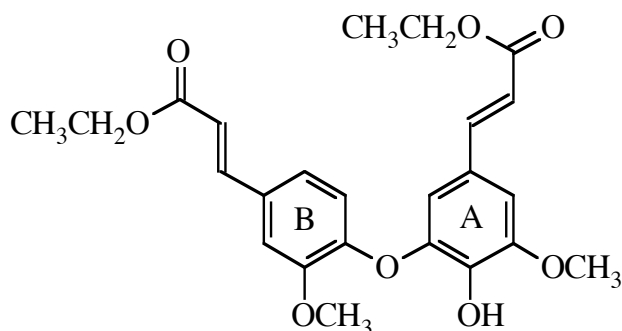
Atom	H Shifts	Mult	J
Ac Me	2.27	s	
B OMe	3.73	s	
A OMe	3.86	s	
γ + γ OH	3.90-3.98	m	
β	5.22	dd	5.7, 4.5
B 2,6	6.67	d	8.4
B1	7.02	dd t	8.6, 8.2, 8.4
A 2,6	7.48	s	

Notes:

S.Quideau

Compound Number 3001

¹³C



4-O-5 dehydrodiethylferulate

3-{3-[4-(2-ethoxycarbonyl-vinyl)-2-methoxy-phenoxy]-4-hydroxy-5-methoxy-phenyl}acrylic acid ethyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
A CH3	1.24	t	7.1
B CH3	1.27	t	7.1
B3 OMe	3.93	s	
A3 OMe	3.96	s	
A CH2	4.16	q	7.1
B CH2	4.19	q	7.1
A β	6.36	d	15.9
B β	6.48	d	15.95
B5	6.81	d	8.3
A6	6.89	d	1.9
B6	7.17	dd	8.7, 2.0
A2	7.22	d	1.9
B2	7.46	d	2.0
A α	7.53	d	15.9
B α	7.62	d	15.95

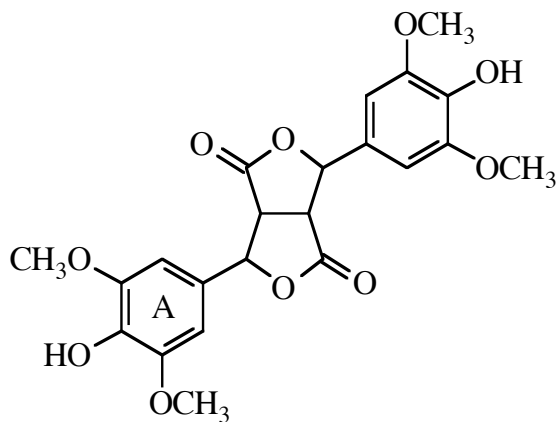
Notes:

jrf107.P1 /1 (H1), /2 (C13), /3 (Dept135)

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A CH3			14.60	100		
B CH3			14.60	92		
B3 OMe			56.41	89		
A3 OMe			56.77	82		
A CH2			60.53	71		
B CH2			60.64	72		
A2			107.99	69		
B2			112.66	78		
A6			114.45	73		
A β			116.99	76		
B β			117.93	80		
B5			118.36	69		
B6			122.84	78		
A1			126.67	56		
B1			131.04	53		
A4			141.41	19		
A5			144.45	40		
B α			144.81	75		
A α			144.94	73		
B4			149.35	39		
A3			150.12	34		
B3			151.41	43		
B γ			167.15	53		
A γ			167.16	56		

Compound Number 3002

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			49.06			
OMe			56.77			
OMe			56.77			
α			83.39			
2			104.31			
6			104.31			
4			129.87			
1			137.51			
3			149.04			
5			149.04			
g			176.05			

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.83	s	
β	4.11	s	
α	5.95	s	
2,6	6.73	s	
OH	7.42	s	

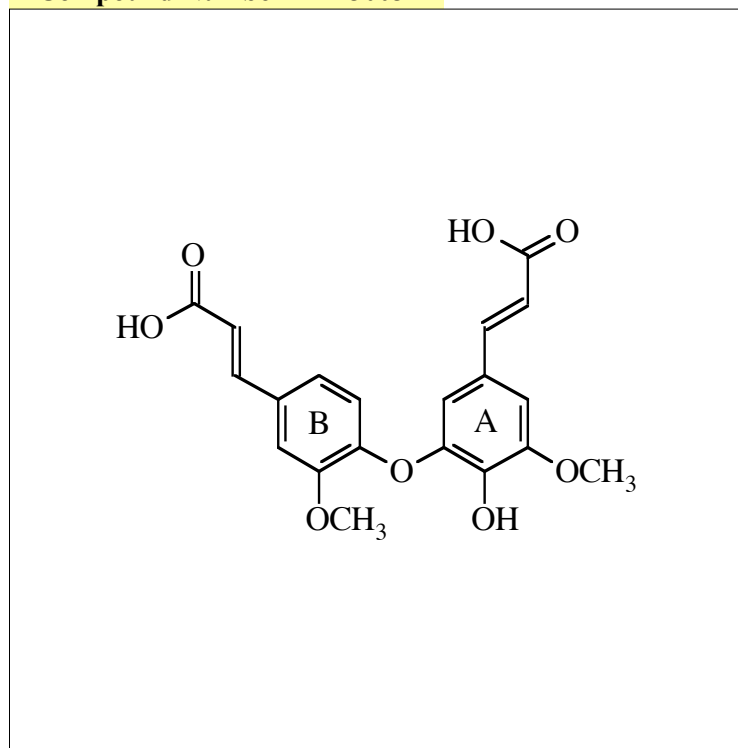
Notes:

FLJ144

As this dimer contains a plane of symmetry the CS's are reported for one unit.

Compound Number 3003

¹³C



4-O-5 dehydrodiferulic acid

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe			56.40	94	55.85	100
A3 OMe			56.76	100	56.24	93
A2			108.03	70	107.58	32
B2			112.7	75	111.86	39
A6			114.46	79	114.05	46
A β			117.00	75	116.96	25
B β			117.95	76	118.00	21
B5			118.33	79	116.34	43
B6			122.80	79	121.91	46
A1			126.71	63	125.22	61
B1			131.06	63	129.43	54
A4			141.38	46	140.35	64
A5			144.44	54	142.94	64
A α			145.23	76	143.81	36
B α			145.38	73	143.63	29
B4			149.34	56	148.05	64
A3			150.12	56	149.28	71
B3			151.38	58	149.56	79
B γ			168.02	62	167.82	61
A γ			168.05	66	167.82	61

¹H (acetone)

Atom	H Shifts	Mult	J
B3 OMe	3.58	s	
A3 OMe	3.88	s	
A β	6.36	d	15.9
B β	6.47	d	15.95
B5	6.82	d	8.3
A6	6.90	d	1.9
B6	7.22	dd	8.3, 2.0
A2	7.22	d	1.9
B2	7.45	d	2.0
A α	7.54	d	15.9
B α	7.63	d	15.95

Notes:

Acetone: jrf117 /2 (C13) and /1 (H1)

DMSO: jrf127.c7/2

¹H NMR (DMSO-d₆) δ: 3.85 (B3-OMe), 3.86 (A3-OMe), 6.35 (A8), 6.47 (B8), 6.59 (B5), 6.85 (A6), 7.12 (B6), 7.20 (A2), 7.43 (B2), 7.42 (A7), 7.51 (B7) - J's same as in acetone.

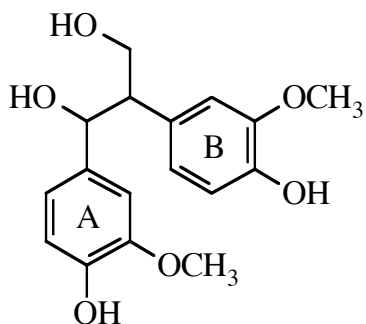
Not soluble in chloroform

JCS Perkin 1, 3485-98 (1994)

Cmpd 17

Compound Number 3004

¹³C



erythro

1,2-diguaiacylpropane-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
β	2.93	m	
γ1	3.72	m	
γ2	3.87	m	
α	5.02	bd	
B6	6.60	bd	
B5	6.66	dd	
A5	6.68	d	8.1
A6	6.68	m	
A2	6.71	m	
B2	6.74	d	1.9

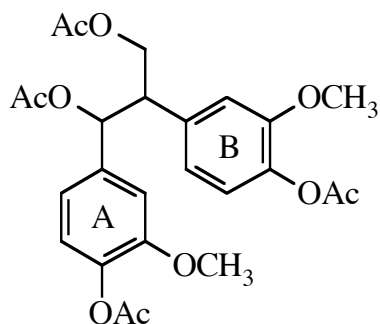
Notes:

jrlz 15
Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			55.85	100		
OMe			55.95	100		
β			56.31	45		
γ			64.21	38		
α			74.66	57		
A2			111.01	99		
B2			114.00	99		
A5			114.81	35		
B5			115.00	36		
A6			119.95	95		
B6			123.05	95		
B1			132.24	64		
A1			136.67	38		
B4			145.96	16		
A4			146.17	16		
B3			147.56	18		
A3			147.63	16		

Compound Number 3005

¹³C



threo

Acetic acid 3-acetoxy-2,3-bis-(4-acetoxy-3-methoxyphenyl)propyl ester

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.41	96		
Ac Me			20.44	93		
Ac Me			20.72	81		
Ac Me			21.01	92		
β			50.71	78		
OMe			56.18	91		
OMe			56.21	100		
γ			64.71	68		
α			76.50	75		
A2			112.51	80		
B2			114.33	76		
A6			119.77	80		
B6			121.85	84		
A5			123.14	82		
B5			123.22	84		
B1			137.82	60		
A1			138.39	54		
B4			139.96	36		
A4			140.35	38		
B3			151.76	41		
A3			151.85	45		
Ac C=O			168.84	45		
Ac C=O			168.88	40		
α Ac C=O			170.01	47		
γ Ac C=O			170.81	43		

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.93	s	
α Ac Me	2.09	s	
Ac Me	2.18	s	
Ac Me	2.19	s	
β	3.56	m	
OMe	3.67	s	
OMe	3.71	s	
γ1	4.38	dd	11.2, 5.2
γ2	4.54	dd	11.2, 7.2
α	6.02	d	8.2
B6	6.77	ddd	8.1, 2.0, 0.3
A2	6.79	bd	1.9
A6	6.82	ddd	8.1, 1.9, 0.5
B2	6.85	bd	1.9
B5	6.90	d	8.1
A5	6.91	d	8.1

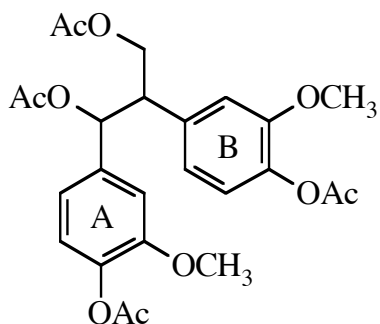
Notes:

jr1z9.1

Liming Zhang, isolate from mild acidolysis

Compound Number 3006

¹³C



erythro

Acetic acid 3-acetoxy-2,3-bis-(4-acetoxy-3-methoxyphenyl)propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.92	s	
α Ac Me	1.97	s	
Ac Me	2.20	s	
Ac Me	2.21	s	
β	3.50	m	6.7
OMe	3.69	s	
OMe	3.73	s	
γ1	4.20	dd	11.2, 6.7
γ2	4.37	dd	11.2, 6.8
α	6.16	d	6.6
B6	6.84	ddd	8.1, 1.9, 0.3
A2	6.84	bd	1.8
A6	6.87	ddd	8.1, 1.8, 0.5
B2	6.92	bd	1.9
B5	6.96	d	8.1
A5	6.98	d	8.1

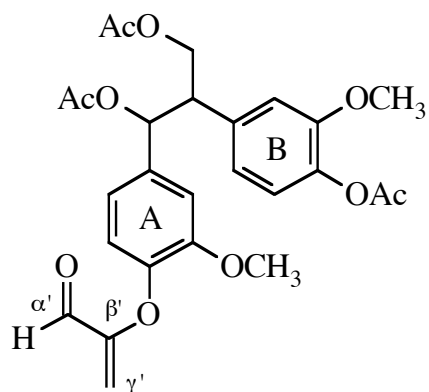
Notes:

jrlz11.1
Liming Zhang, isolate from mild acidolysis

¹H data at 600 MHz

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.43	98		
Ac Me			20.46	100		
Ac Me			20.65	83		
Ac Me			20.83	85		
β			50.98	76		
OMe			56.20	97		
OMe			56.22	92		
γ			64.86	65		
α			75.56	75		
A2			112.09	74		
B2			114.52	75		
A6			119.73	76		
B6			121.93	75		
B5			123.13	78		
A5			123.30	84		
B1			137.43	50		
A1			138.72	50		
B4			140.05	40		
A4			140.51	39		
B3			151.80	46		
A3			152.00	49		
Ac C=O			168.89	41		
Ac C=O			168.95	38		
α Ac C=O			169.94	46		
γ Ac C=O			170.74	46		

Compound Number 3007



erythro

Acetic acid 3-acetoxy-2,3-bis-(4-acetoxy-3-methoxyphenyl)propyl ester

¹H (acetone)

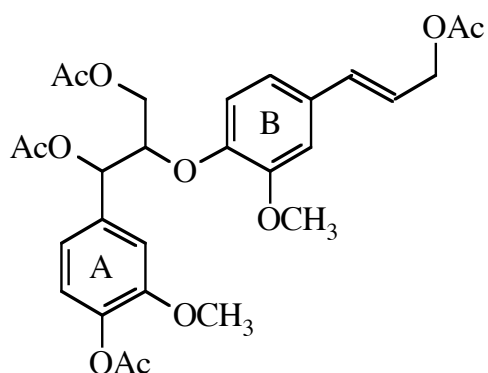
Atom	H Shifts	Mult	J
γ Ac Me	1.94	s	
α Ac Me	2.00	s	
Ar Ac Me	2.07	s	
β	3.50	m	
OMe	3.69	s	
OMe	3.76	s	
γ1	4.22	dd	11.2, 6.8
γ2	4.38	dd	11.2, 6.8
γ1'	5.00	d	2.8
γ2'	5.38	d	2.8
α	6.19	d	6.4
B6	6.81	dd	8.1, 1.6
A2	6.88	bd	
A6	6.89	dd	7.3, 1.5
B5	6.94	d	8.1
A5	6.97		
A2	6.99		

Notes:

jrlz 13
Liming Zhang, isolate from mild acidolysis

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.60	114	20.43	58		
Ac Me	20.79	80	20.66	51		
Ac Me	20.96	67	20.83	54		
β	50.13	61	51.07	41		
OMe	55.85	120	56.12	66		
OMe	55.85	120	56.22	66		
γ	63.96	49	64.82	42		
α	74.76	68	75.38	40		
γ'	107.76	51	108.01	34		
A2	111.65	73	122.68	40		
B2	113.15	58	114.44	41		
A6	119.35	65	120.17	43		
B6	121.12	65	122.12	48		
A5	121.61	68	122.14	31		
B5	122.45	79	123.16	52		
B1	135.71	51	137.41	27		
A1	136.32	58	138.17	29		
B4	139.10	43	140.07	19		
A4	142.55	43	143.24	18		
B3	150.75	68	151.76	25		
A3	150.75	68	151.81	27		
β'	157.84	60	159.33	25		
B4 Ac C=O	168.79	29	168.91	21		
α Ac C=O	169.70	52	169.94	23		
γAc C=O	170.69	65	170.71	24		
α'	186.74	93	187.55	45		

Compound Number 3008
¹³C

threo
Acetic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-[4-(3-acetoxypropenyl)-2-methoxyphenoxy]propyl ester
¹H (acetone)

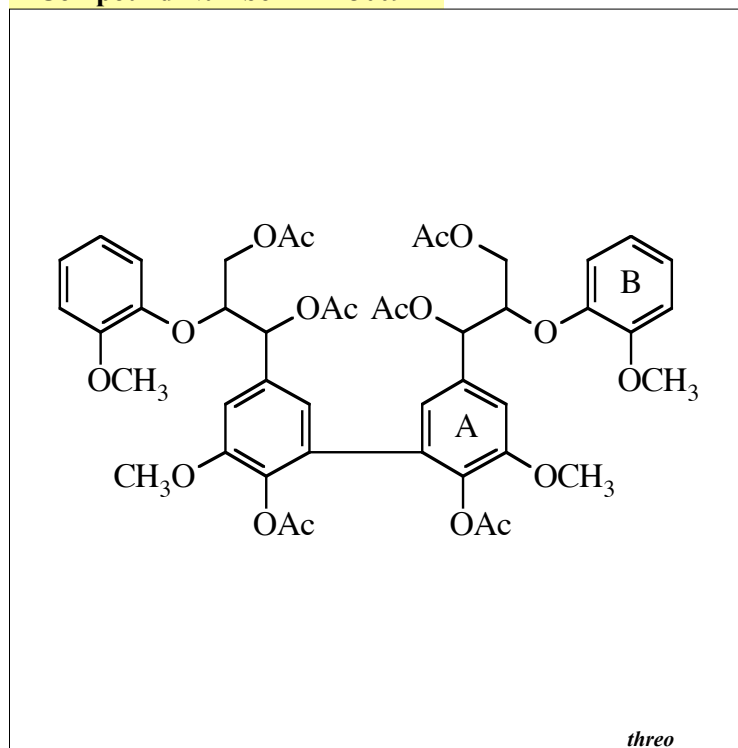
Atom	H Shifts	Mult	J
γ Ac Me	1.95	s	
B γ Ac Me	2.01	s	
α Ac Me	2.02	s	
A4 Ac Me	2.21	s	
OMe	3.82	s	
OMe	3.85	s	
γ1	4.02	dd	11.9, 5.7
γ2	4.25	dd	11.9, 4.1
B γ	4.66	dd	6.4, 1.3
β	4.81	m	
α	6.10	d	6.4
B β	6.26	dt	15.9, 6.4
B α	6.63	bdt	15.9
B6	6.95	dd	8.3, 2.0
B5	7.00	d	8.3
A5	7.03	d	8.2
A6	7.09	dd	8.2, 1.7
B2	7.14	d	1.9
A2	7.22	d	1.6

Notes:

 jrlz 35
 Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.41	56		
Ac Me			20.55	58		
Ac Me			20.75	45		
Ac Me			20.89	50		
OMe			56.23	56		
OMe			56.27	56		
γ			63.54	44		
B γ			65.33	57		
α			75.29	56		
β			80.62	57		
B2			111.30	58		
A2			112.63	47		
B5			118.73	57		
A6			120.28	44		
B6			120.52	44		
B β			123.25	57		
A5			123.54	51		
B1			132.34	32		
B α			134.14	54		
A1			136.59	31		
A4			140.90	22		
B4			149.08	26		
B3			151.74	23		
A3			152.21	22		
A4 Ac C=O			168.85	26		
α Ac C=O			169.95	30		
γ Ac C=O			170.64	23		
B γ Ac C=O			170.64	23		

Compound Number 3009



¹³C

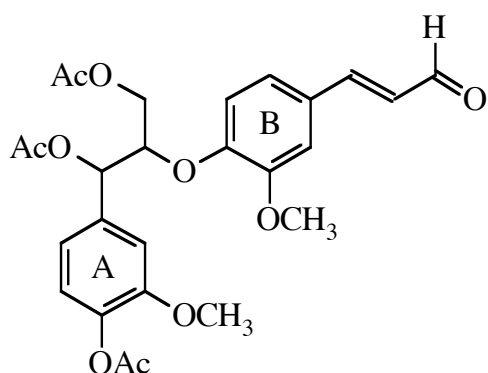
Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.26	69		
Ac Me			20.61	112		
Ac Me			20.93	77		
OMe			56.17	86		
OMe			56.52	78		
γ			63.51	56		
α			75.31	34		
β			80.70	52		
A2			111.90	41		
B2			113.72	65		
B5			119.41	42		
A6			121.64	101		
B6			121.68	101		
B1			123.87	55		
A5			131.91	25		
A1			135.93	45		
A4			138.48	18		
B4			148.99	46		
B3			151.87	35		
A3			152.58	32		
4 Ac C=O			168.88	11		
α Ac C=O			170.09	39		
γ Ac C=O			170.71	36		

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.77	s	
OMe	3.85	s	
γ1	4.09	m	
γ2	4.29	m	
β	4.78	m	
α	6.08	d	
A6,B6	6.80-6.90	m	
B1	6.96	m	
B2	6.99	m	
B5	7.02	m	
A2	7.26	m	

Notes:

J.Ralph jrf79.5
 As this dimer contains a plane of symmetry the CS's are reported for one unit.
 erythro shifts in acetone:
 γ (62.95)α (74.59), β (80.44), B5 (120.09), B1 (124.19), A5 (131.70),
 A4 (138.36), B4 (148.19), B3 (152.11).

Compound Number 3010
¹³C

threo
Acetic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-2-[2-methoxy-4-(3-oxopropenyl)phenoxy]propyl ester
¹H (acetone)

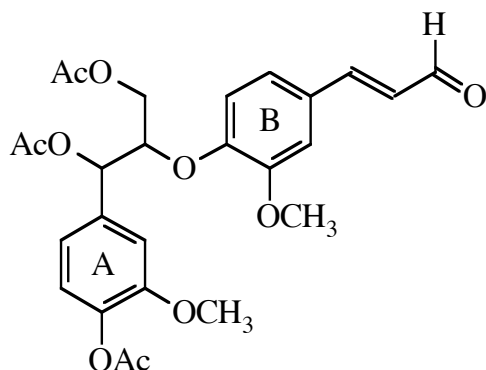
Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.08	s	
Ac Me	2.21	s	
OMe	3.82	s	
OMe	3.91	s	
γ 1	4.07	dd	12.0, 5.8
γ 2	4.28	dd	12.0, 4.1
β	4.96	m	
α	6.11	d	6.4
Bβ	6.70	dd	15.9, 7.7
A5	7.03	d	8.1
A6	7.08	dd	8.5, 1.4
B5	7.15	d	8.4
A2	7.24	bd	
B6	7.25	dd	8.8, 1.7
B2	7.40	d	1.8
B α	7.59	d	16.0
B γ	9.66	d	7.6

Notes:

jrlz 29 1mg
Liming Zhang, isolate from mild acidolysis
see 3011 some shifts taken from isomer mix

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
g Ac Me	20.60	80	20.43	39		
a Ac Me	20.68	45	20.57	24		
A4 Ac Me	20.94	60	20.88	20		
OMe	55.90	71	56.30	39		
OMe	55.98	85	56.41	25		
γ	62.81	25	63.45	25		
α	74.14	28	75.19	25		
β	79.67	30	80.26	24		
B2	111.28	31	112.56	27		
A2	111.58	35	112.66	31		
B5	117.36	31	117.85	32		
A6	119.48	38	120.34	28		
A5	122.71	32	123.61	24		
B6	122.89	32	123.76	31		
B β	127.40	34	128.23	27		
B1	128.88	22	129.89	14		
A1	134.87	24	136.40	18		
A4	140.01	19	140.99	15		
B4	150.72	24	151.73	22		
B3	150.68	24	151.73	22		
A3	151.16	23	152.26	16		
B α	152.26	45	153.29	26		
A4 Ac C=O	168.72	23	168.87	17		
α Ac C=O	169.41	24	169.85	15		
γ Ac C=O	170.48	24	170.66	15		
B γ	193.43	58	193.61	32		

Compound Number 3011



erythro

Acetic acid 3-acetoxy-3-(4-acetoxy-3-methoxyphenyl)-
2-[2-methoxy-4-(3-oxopropenyl)phenoxy]propyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me			
Ac Me			
Ac Me			
OMe	3.82	s	
OMe	3.90	s	
γ 1	4.27	m	
γ 2	4.37	m	
β	4.99	m	
α	6.07	d	5.2
B β	6.79	dd	15.9, 7.7
A5	7.02	d	8.1
A6	7.07	m	
B5	7.11	d	8.3
A2	7.23	m	
B6	7.27	d	1.8
B2	7.38	d	2.0
B α	7.58	d	15.9
B γ	9.65	d	7.7

Notes:

jrlz41

Liming Zhang, isolate from mild acidolysis

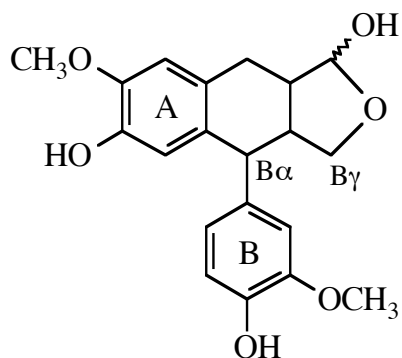
CS's taken from isomer mix spectrum

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me	20.60	80	20.65	73		
α Ac Me	20.68	45	20.79	45		
A4 Ac Me	20.94	60	21.10	38		
OMe	55.87	71	56.51	53		
OMe	55.90	85	56.65	39		
γ	62.44	25	63.19	30		
α	73.55	28	74.57	27		
β	79.56	27	80.02	31		
B2	111.38	32	112.85	32		
A2	112.00	28	113.08	33		
B5	117.93	29	118.49	32		
A6	119.76	29	120.75	33		
A5	122.61	29	123.50	37		
B6	122.81	29	123.91	36		
B β	127.47	34	128.53	33		
B1	129.10	22	130.22	19		
A1	134.80	22	136.48	21		
A4	139.90	17	141.11	15		
B4	150.02	18	151.22	16		
B3	150.95	22	152.12	20		
A3	151.00	22	152.35	16		
B α	152.26	45	153.45	32		
A4 Ac C=O	168.74	23	169.09	23		
α Ac C=O	169.57	22	170.07	20		
γ Ac C=O	170.65	22	170.88	20		
B γ	193.43	58	194.10	66		

Compound Number 3014

¹³C



4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-1,3,3a,4,9,9a-hexahydronaphtho[2,3-c]furan-1,6-diol

¹H (acetone)

Atom	H Shifts	Mult	J
A β	1.98	m	
B β	2.54	m	
A α1	2.84	m	
A α2	3.00	m	
B γ1	3.47	dd	10.0, 8.0
B α	3.64	d	12.2
B γ2	3.77	m	
OMe	3.77	s	
OMe	3.80	s	
A γ OH	4.99	d	4.3
A γ	5.40	d	4.3
A5	6.22	d	0.9
B6	6.63	dd	8.0, 2.0
A2	6.72	s	
B2	6.74	d	2.0
B5	6.77	d	8.0
A4 OH	7.17	s	
B4 OH	7.39	s	

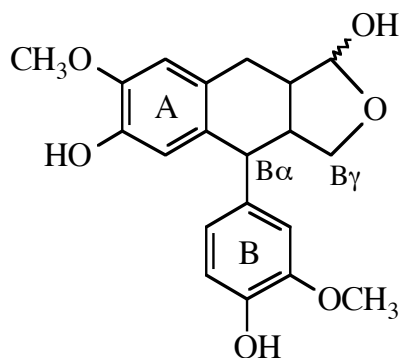
Notes:

jrlz5, mixture of 2 isomers in ca. 2:1 ratio.
 Data for major isomer
 Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			29.84	55		
B β			46.24	56		
β			47.00	30		
B α			51.09	62		
OMe			55.96	79		
OMe			56.05	86		
B γ			72.06	57		
γ			98.75	34		
B2			112.38	29		
A2			112.84	57		
B5			115.51	32		
A5			116.17	35		
B6			121.75	42		
A1			128.34	44		
A6			133.42	39		
B1			137.28	38		
A4			145.11	19		
B4			145.93	17		
A3			146.61	21		
B3			148.24	20		

Compound Number 3015

¹³C



4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-1,3,3a,4,9,9a-hexahydronaphtho[2,3-c]furan-1,6-diol

¹H (acetone)

Atom	H Shifts	Mult	J
A β	1.98	m	
B β	2.28	m	
A α1	2.80	m	
A α2	3.00	m	
B γ 1,2	3.64	m	
B α	3.72	bd	11.4
OMe	3.77	s	
OMe	3.80	s	
A γ	5.18	d	6.2
A γOH	5.28	d	
A5	6.55	d	
B6	6.62	dd	10.1, 2.0
A2	6.72	s	
B2	6.74	d	2.0
B5	6.77	d	8.0
A4 OH	7.17	s	
B4 OH	7.39	s	

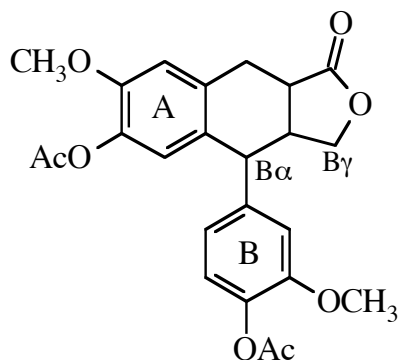
Notes:

jrlz5, mixture of 2 isomers in ca. 2:1 ratio.
 Data for minor isomer
 Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			31.98	22		
Bβ			49.88	48		
β			49.88	48		
B α			50.12	18		
OMe			55.96	79		
OMe			56.05	86		
Bγ			70.96	23		
γ			104.08	14		
B2			112.28	29		
A2			112.79	27		
B5			115.51	32		
A5			116.28	14		
B6			121.75	42		
A1			127.93	18		
A6			133.38	17		
B1			136.75	14		
A4			145.31	9		
B4			145.95	11		
A3			146.63	11		
B3			148.20	9		

Compound Number 3016

¹³C



Acetic acid 4-(4-acetoxy-3-methoxyphenyl)-7-methoxy-1-oxo-1,3,3a,4,9,9a-hexahydroanphtho[2,3-c]furan-6-yl ester

¹H (acetone)

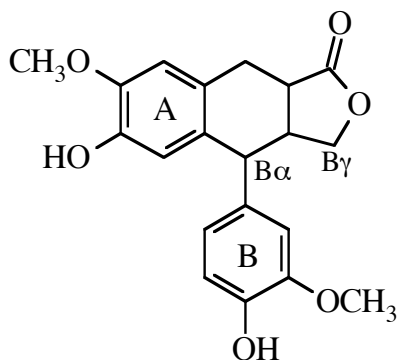
Atom	H Shifts	Mult	J
Ac Me	2.13	s	
Ac Me	2.23	s	
B β	2.75	m	
A β	2.78	m	
A α1	2.98	m	
A α2	3.18	dd	16.0, 5.0
OMe	3.75	s	
OMe	3.81	s	
B α	4.16	m	
B γ	4.16	m	
A5	6.44	s	
B6	6.83	dd	8.1, 1.9
B2	6.96	d	1.9
A2	6.98	s	
B5	7.03	d	8.1

Notes:

jrlz25
Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.53	82	20.36	48		
Ac Me	20.63	86	20.48	50		
α	29.57	49	30.12	23		
β	41.66	83	41.87	48		
B β	47.44	74	47.65	47		
B α	49.93	71	50.09	45		
OMe	55.87	92	56.20	84		
OMe	55.93	103	56.20	84		
B γ	71.60	63	71.85	44		
B2	111.77	22	113.40	17		
A2	112.98	80	114.00	42		
B6	120.61	36	121.45	19		
B5	123.20	50	123.86	45		
A5	123.70	78	124.12	50		
A6	130.39	57	132.09	27		
A1	133.59	48	134.97	27		
A4	138.36	45	139.27	23		
B4	139.08	30	140.00	21		
B1	140.74	56	142.52	35		
A3	149.92	54	150.80	25		
B3	151.59	34	152.59	19		
Ac C=O	168.90	53	168.75	21		
Ac C=O	169.03	36	168.75	21		
γ	176.43	60	176.77	26		

Compound Number 3017

¹³C

6-Hydroxy-4-(4-hydroxy-3-methoxyphenyl)-7-methoxy-3a,4,9,9a-tetrahydro-3H-naphtho[2,3-c]furan-1-one

¹H (acetone)

Atom	H Shifts	Mult	J
B β	2.67	m	
A β	2.67	m	
A α	3.07	dd	16.2, 4.5
OMe	3.78	s	
OMe	3.82	s	
B α	3.95	bd	9.5
B γ	4.10	m	
A5	6.26	d	0.9
B6	6.69	dd	8.0, 2.0
A2	6.79	s	
B2	6.80	d	2.0
B5	6.80	d	8.0

Notes:

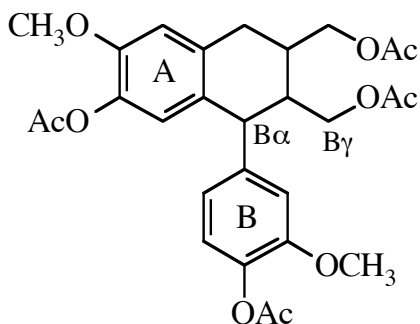
jrlz33

Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
α			29.73	66		
β			41.98	80		
B β			47.61	75		
B α			49.95	70		
OMe			55.99	80		
OMe			56.03	85		
B γ			71.78	66		
B2			112.25	18		
A2			112.93	67		
B5			115.61	23		
A5			116.23	26		
B6			121.92	30		
A1			126.77	51		
A6			132.87	42		
B1			135.09	45		
A4			145.61	14		
B4			146.29	12		
A3			146.89	19		
B3			148.42	17		
γ			177.15	42		

Compound Number 3018

¹³C



Acetic acid 8-(4-acetoxy-3-methoxyphenyl)-6,7-bis-acetoxy methyl-3-methoxy-5,6,7,8-tetrahydronaphthalen-2-yl ester

¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.01	s	
Ac Me	2.02	s	
Ac Me	2.11	s	
Ac Me	2.22	s	
Bβ	2.16	m	
β	2.29	m	
α	2.92	m	
OMe	3.74	s	
OMe	3.78	s	
B γ1	3.92	dd	11.7, 3.6
B α	4.02	d	10.5
B γ2	4.09	m	
A γ1	4.11	m	
A γ2	4.23	dd	11.1, 5.3
A5	6.34	bs	
B6	6.74	dd	8.1, 2.0
A2	6.87	s	
B2	6.92	d	2.0
B5	6.99	d	8.1

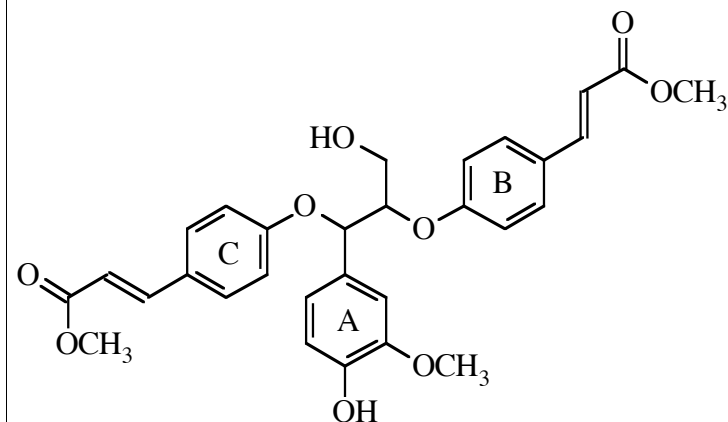
Notes:

jrlz27
Liming Zhang, isolate from mild acidolysis

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me	20.56	67	20.36	54		
Ac Me	20.65	67	20.47	51		
Ac Me	20.77	67	20.69	51		
Ac Me	20.82	93	20.72	51		
α	33.02	45	33.53	33		
β	35.13	58	36.29	44		
Bβ	43.44	56	44.25	43		
B α	47.22	50	47.98	39		
OMe	55.83	65	56.17	45		
OMe	55.91	77	56.19	45		
B γ	63.04	48	63.57	37		
γ	66.20	46	66.74	40		
A2	111.81	65	112.90	50		
B2	113.17	42	114.53	46		
B6	121.52	55	121.11	57		
B5	122.81	53	123.64	44		
A5	123.71	53	124.16	40		
A6	131.13	46	132.26	26		
A1	134.05	38	135.25	31		
A4	138.03	34	139.17	19		
B4	138.03	34	139.63	26		
B1	142.77	46	144.24	23		
A3	149.35	43	150.46	20		
B3	151.16	41	152.28	22		
Ac C=O	168.91	26	168.93	23		
Ac C=O	169.11	25	168.96	23		
Ac C=O	170.80	41	171.06	31		
Ac C=O	170.97	49	171.06	31		

Compound Number 3019

¹³C



erythro

3-(4-{3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2[4-(2-methoxy carbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.70	s	
C γ OMe	3.71	s	
A3 OMe	3.78	s	
γ 's	3.95	m	5.8
γ OH	4.16	t	5.8
β	4.88	m	
α	5.60	d	5.5
C β	6.34	d	16.0
B β	6.37	d	16.0
A5	6.79	d	8.1
A6	7.00	m	
C2,6	6.97	m	8.8
B2,6	7.02	m	8.8
A2	7.12	d	1.9
C3,5	7.50	m	8.6
B3,5	7.54	m	8.6
C α	7.55	d	16.0
B α	7.59	d	16.0

Notes:

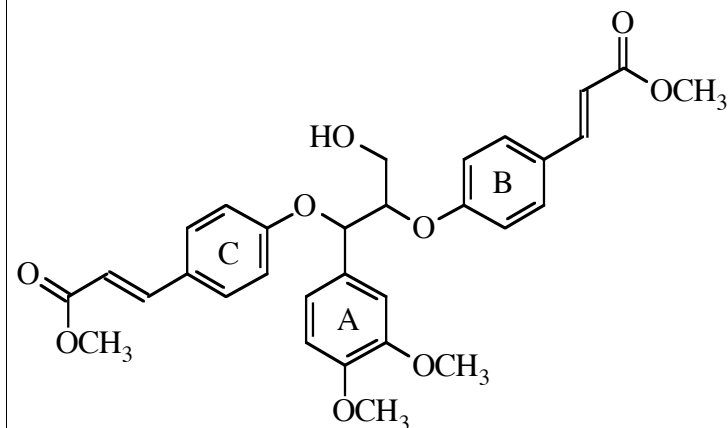
jrfl01.C9-12

Authenticated assignments in acetone.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C γ OMe	51.55	54	51.52	51	51.27	59
B γ OMe	51.59	50	51.53	51	55.63	66
A3 OMe	55.92	65	56.26	58	55.80	22
γ	61.43	27	61.42	24	59.79	15
α	78.70	35	79.32	34	77.75	18
β	81.89	35	82.67	32	81.24	18
A2	109.26	33	112.00	35	111.78	17
A5	114.48	35	115.55	24	115.29	27
B β	115.68	41	116.15	45	115.13	37
C β	115.86	45	116.25	42	115.13	37
C2	116.24	87	117.23	86	116.20	50
C6	116.24	87	117.23	86	116.20	50
B2	116.54	93	117.34	92	116.24	64
B6	116.54	93	117.34	92	116.24	64
A6	120.21	33	121.43	34	120.28	19
C1	127.73	38	128.19	42	126.74	44
B1	128.00	38	128.22	43	126.86	43
A1	128.67	45	129.37	38	127.73	40
B3	129.57	84	130.46	86	129.93	100
B5	129.57	84	130.46	86	129.93	100
C3	129.61	100	130.48	100	129.93	100
C5	129.61	100	130.48	100	129.93	100
C α	144.12	43	144.87	39	144.16	24
B α	144.23	38	144.94	43	144.26	29
A4	145.72	49	147.35	22	146.29	41
A3	146.78	45	148.23	25	147.31	52
C4	159.14	41	160.49	45	159.17	43
B4	159.81	42	161.67	44	160.5	53
C γ	167.62	44	167.67	40	166.86	55
B γ	167.63	48	167.72	39	166.92	56

Compound Number 3020

¹³C



erythro

3-(4-{1-(3,4-dimethoxyphenyl)-3-hydroxy-2[4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.693	s	
C γ OMe	3.711	s	
A4 OMe	3.732	s	
A3 OMe	3.752	s	
γ 's	3.954	m	5.9, *
γ OH	4.157	t	5.9
β	4.881	m	5.5, 4.9
α	5.603	d	5.5
C β	6.335	d	16.0
B β	6.363	d	16.0
A5	6.876	d	8.2
C2,6	6.973	m	8.8
B2,6	7.015	m	8.7
A6	7.047	dd	8.2, 1.9
A2	7.126	d	1.9
C3,5	7.515	m	8.8
B3,5	7.550	m	8.7
C α	7.543	d	16.0
B α	7.582	d	16.0

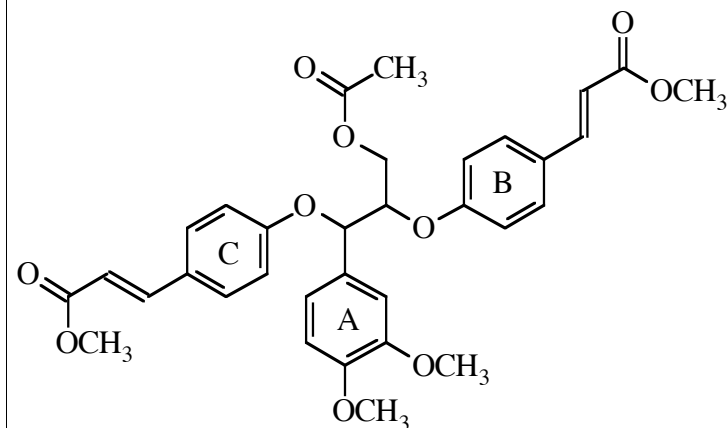
Notes:

jrf119.C2
assignments not authenticated - from #3019

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C γ OMe			51.52	38		
B γ OMe			51.52	38		
A4 OMe			55.97	40		
A3 OMe			56.12	40		
γ			61.38	20		
α			79.21	34		
β			82.64	34		
A2			112.38	32		
A5			112.47	28		
B β			116.21	40		
C β			116.33	34		
C2			117.26	86		
C6			117.26	86		
B2			117.38	98		
B6			117.38	98		
A6			121.02	38		
C1			128.26	30		
B1			128.32	32		
B3			130.51	100		
B5			130.51	100		
C3			130.52	94		
C5			130.52	94		
A1			130.56	32		
C α			144.87	38		
B α			144.96	40		
A4			150.25	32		
A3			150.26	28		
C4			160.50	30		
B4			161.69	32		
C γ			167.66	30		
B γ			167.72	28		

Compound Number 3021

¹³C



erythro

3-(4-{3-carboxyoxy-1-(3,4-dimethoxyphenyl)-2-[4-(2-methoxy carbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.920	s	
B γ OMe	3.694	s	
C γ OMe	3.712	s	
A4 OMe	3.736	s	
A3 OMe	3.759	s	
γ 1	4.460	dd	11.9, 6.2
γ 2	4.507	dd	11.9, 3.8
β	5.084	m	6.2, 5.8, 3.8
α	5.629	d	5.8
C β	6.343	d	16.0
B β	6.378	d	16.0
A5	6.888	d	8.3
C2,6	6.992	m	8.7
B2,6	7.018	m	8.7
A6	7.073	dd	8.3, 2.0
A2	7.161	d	2.0
C3,5	7.527	m	8.7
B3,5	7.570	m	8.7
Cα	7.548	d	16.0
Bα	7.584	d	16.0

Notes:

jrf137

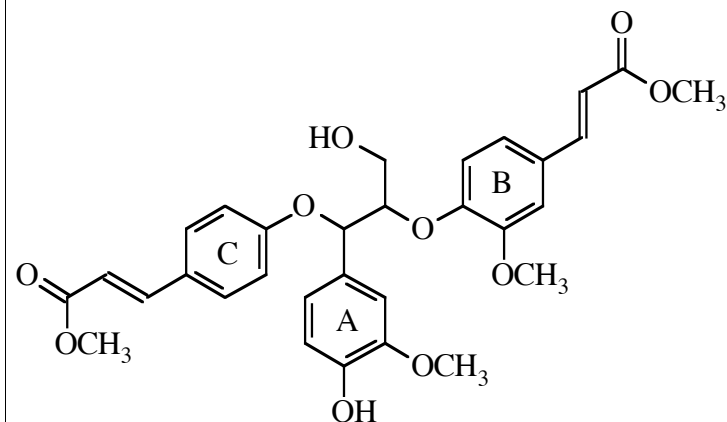
assignments not authenticated - from #3019/3020

check A4 vs A3 OMe!

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me			20.58	53		
C γ OMe			51.54	53		
B γ OMe			51.57	47		
A4 OMe			55.97	53		
A3 OMe			56.14	55		
γ			63.49	34		
α			79.32	39		
β			79.81	39		
A2			112.17	42		
A5			112.47	42		
B β			116.49	45		
C β			116.55	47		
C2			117.27	95		
C6			117.27	95		
B2			117.41	97		
B6			117.41	97		
A6			120.88	39		
C1			128.55	24		
B1			128.74	24		
A1			130.09	34		
B3			130.53	100		
B5			130.53	100		
C3			130.61	97		
C5			130.61	97		
C α			144.81	82		
B α			144.81	82		
A4			150.38	26		
A3			150.43	24		
C4			160.24	26		
B4			161.18	26		
C γ			167.66	29		
B γ			167.69	26		
γ Ac C=O			170.79	24		

Compound Number 3022

¹³C



erythro

3-(4-{3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-2-[2-methoxy-4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.696	s	
C γ OMe	3.720	s	
A3 OMe	3.804	s	
B3 OMe	3.853	s	
γ 's	3.95	m	
β	4.791	m	
α	5.621	d	5.3
C β	6.330	d	16.0
B β	6.417	d	16.0
A5	6.798	d	8.2
C2,6	6.978	m	8.8
A6	7.013	dd	8.2, 1.9
B5	7.065	d	8.3
B6	7.123	dd	8.3, 1.9
A2	7.205	d	1.9
B2	7.283	d	1.9
C3,5	7.493	d	8.8
C α	7.554	d	16.0
B α	7.584	d	16.0

Notes:

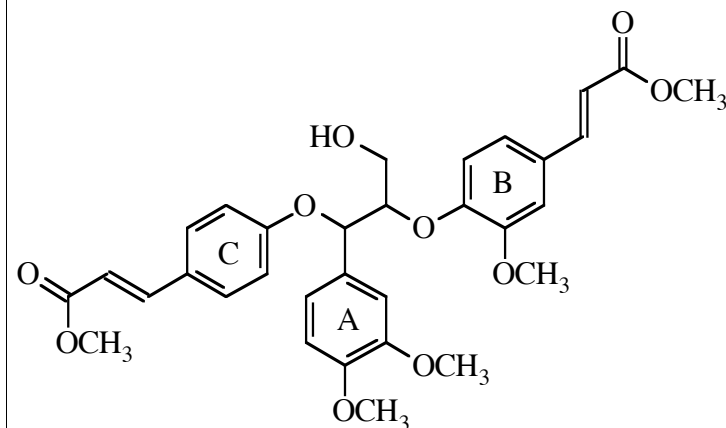
jrf103.C12-25

fully authenticated in acetone

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe	51.55	57	51.52	59	51.27	89
C γ OMe	51.66	56	51.56	56	51.28	82
A3 OMe	55.83	69	56.22	69	55.48	99
B3 OMe	55.96	69	56.32	66	55.79	100
γ	61.29	31	61.31	30	59.66	28
α	78.46	42	79.44	41	77.95	34
β	86.25	42	84.21	42	81.84	34
B2	110.87	46	112.14	49	111.43	40
A2	109.37	42	112.21	41	112.01	34
A5	114.49	44	115.38	38	114.89	36
C β	115.62	47	116.16	52	115.16	44
B β	116.77	48	116.59	51	115.24	49
C2	116.28	100	117.23	98	116.22	92
C6	116.28	100	117.23	98	116.22	92
B5	120.21	43	117.54	48	115.45	47
A6	119.50	47	121.53	41	120.44	34
B6	122.14	48	123.04	49	122.48	44
C1	127.67	39	128.13	41	126.79	62
B1	129.92	39	129.21	44	127.27	65
A1	129.32	43	129.39	46	127.54	60
C3	129.57	97	130.42	100	129.91	90
C5	129.57	97	130.42	100	129.91	90
C α	144.21	46	144.89	48	144.18	46
B α	144.28	47	145.23	48	144.61	44
A4	145.68	46	147.29	37	146.27	65
A3	146.78	42	148.17	38	147.24	74
B4	149.40	42	151.24	43	149.76	79
B3	151.14	46	151.54	46	150.11	69
C4	159.30	43	160.57	43	159.25	63
C γ	167.39	45	167.68	44	166.86	76
B γ	167.64	44	167.71	46	166.95	71

Compound Number 3023

¹³C



erythro

3-(4-{1-(3,4-dimethoxyphenyl)-3-hydroxy-2-[2-methoxy-4-(2-methoxyacryloyl)vinyl]phenoxy}propoxy)phenylacrylic acid methyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
B γ OMe	3.693	s	
C γ OMe	3.715	s	
A3 OMe	3.741	s	
A4 OMe	3.773	s	
B3 OMe	3.865	s	
γ *	*	*	-
β	4.787	m	-
α	5.640	d	5.3
C β	6.337	d	16.0
B β	6.416	d	16.0
A5	6.871	d	8.3
C2,6	6.981	m	8.8
A6	7.067	dd	8.3, 1.9
B5	7.068	d	8.3
B6	7.134	dd	8.3, 1.9
A2	7.200	d	1.9
B2	7.302	d	1.9
C3,5	7.517	d	8.8
C α	7.537	d	16.0
B α	7.573	d	16.0

Notes:

jrf121.C5-7

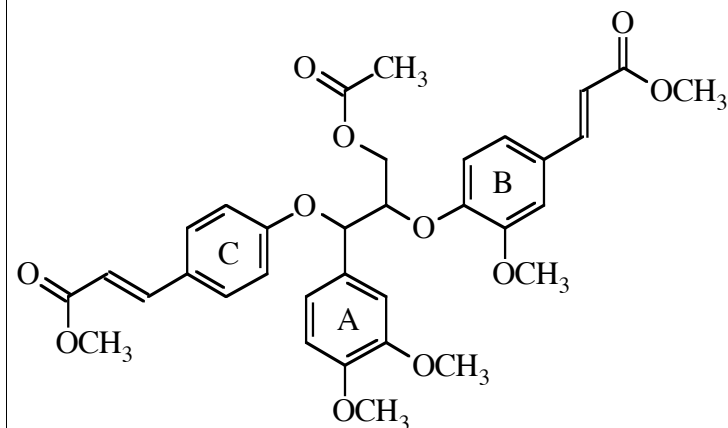
assignments not authenticated - from #3022 and 3020
check A4 vs A3 OMe!

*γ and γ-OH protons buried, C-H correlations not run.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ OMe			51.52	53		
C γ OMe			51.55	45		
A4 OMe			55.98	50		
A3 OMe			56.07	50		
B3 OMe			56.37	50		
γ			61.29	23		
α			79.37	37		
β			84.19	32		
B2			112.19	42		
B5			112.24	40		
A2			112.70	37		
C β			116.27	42		
B β			116.67	42		
C2			117.29	97		
C6			117.29	97		
B5			117.60	42		
A6			121.14	39		
B6			123.10	42		
C1			128.25	27		
B1			129.30	31		
C3			130.49	100		
C5			130.49	100		
A1			130.59	31		
C α			144.91	42		
B α			145.25	40		
A4			150.20	26		
A3			150.23	27		
B4			151.31	24		
B3			151.65	27		
C4			160.63	27		
C γ			167.68	27		
B γ			167.71	26		

Compound Number 3024

¹³C



erythro

3-(4-{3-carboxyoxy-1-(3,4-dimethoxyphenyl)-2-[2-methoxy-4-(2-methoxycarbonylvinyl)phenoxy]propoxy}phenyl)acrylic acid methyl ester

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.920	s	
B γ OMe	3.695	s	
C γ OMe	3.716	s	
A3 OMe	3.745	s	
A4 OMe	3.775	s	
B3 OMe	3.877	s	
γ1	4.428	dd	11.9, 3.8
γ2	4.487	dd	11.9, 6.2
β	4.988	m	6.2, 5.3, 3.8
α	5.659	d	5.3
C β	6.345	d	16.0
B β	6.431	d	16.0
A5	6.888	d	8.3
C2,6	6.995	m	8.8
B5	7.051	m	8.3
A6	7.066	dd	8.3, 2.0, 0.4
B6	7.143	dd	8.3, 2.0, 0.4
A2	7.190	d	2.0
B2	7.323	d	2.0
C3,5	7.527	m	8.8
C α	7.553	d	16.0
B α	7.576	d	16.0

Notes:

jrf139

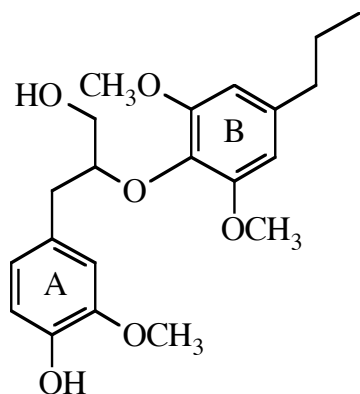
assignments not authenticated - from #3023 and 3021
check A4 vs A3 OMe!

Note γ's, J's switch from #3021!!

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
g Ac Me			20.61	46		
B γ OMe			51.54	54		
C γ OMe			51.58	46		
A4 OMe			55.99	50		
A3 OMe			56.09	52		
B3 OMe			56.35	50		
γ			63.49	30		
α			79.62	37		
β			81.21	35		
A2			112.24	33		
B5			112.38	76		
B2			112.38	76		
C β			116.42	37		
B β			116.98	39		
C2			117.28	91		
C6			117.28	91		
B5			118.21	39		
A6			120.82	35		
B6			122.93	39		
C1			128.46	30		
B1			129.89	26		
A1			130.14	30		
C3			130.52	100		
C5			130.52	100		
C α			144.85	41		
B α			145.14	41		
A4			150.33	28		
A3			150.37	28		
B4			150.72	26		
B3			151.80	30		
C4			160.44	28		
C γ			167.67	35		
B γ			167.67	35		
γ OAc C=O			170.79	30		

Compound Number 3026

¹³C



2-(2,6-dimethoxy-4-propylphenoxy)-3-(4-hydroxy-3-methoxyphenyl)propan-1-ol

¹H (acetone)

Atom	H Shifts	Mult	J
Bγ	0.917	t	7.3
Bβ	1.619	m	
Bα	2.523	dd	
α1	2.941	dd	13.6, 8.2
α2	3.077	dd	13.6, 5.4
γ1	3.392	m	12.0, 4.1
γ2	3.483	m	12.0, 3.4
γOH	3.5	m	
A OMe	3.809	s	
B OMe	3.817	s	
β	4.128	m	
B2,6	6.540	s	
A6	6.711	dd	8.0, 1.8
A5	6.740	dd	8.0, 0.4
A2	6.892	d	1.8
Ar OH	7.349	s	

Notes:

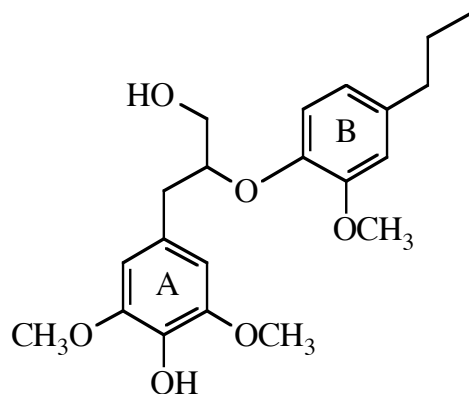
jrba61
 Proton Note: Hγ's are perfect dd's after adding D2O to acetone - otherwise complex multiplets; J's are from D2O exchanged spectra.
 All spectra ref'd to solvent
 Acetone 2.04, 29.8
 CDCl₃ 7.24, 77.0
 DMSO 2.49, 39.5

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bγ	13.76	64	14.06	44	13.73	55
Bβ	24.51	86	25.30	47	24.10	57
α	37.28	48	38.00	38	36.86	27
Bα	38.39	50	38.91	38	37.64	37
A OMe	55.81	35	56.17	19	55.51	50
B OMe	55.97	62	56.41	35	55.81	100
γ	62.17	45	62.77	28	61.65	29
β	84.36	48	85.24	32	83.39	28
B2	105.42	92	106.55	100	105.58	55
B6	105.42	92	106.55	100	105.58	55
A2	112.20	79	113.87	44	113.58	38
A5	114.15	68	115.50	47	115.06	36
A6	122.03	74	122.78	50	121.64	35
A1	130.19	49	130.81	35	129.36	42
B4	133.40	39	134.92	22	133.46	33
B1	138.77	55	139.25	33	137.62	41
A4	143.99	47	145.78	28	144.60	43
A3	146.31	40	148.03	24	147.11	38
B3	152.99	100	154.09	56	152.76	82
B5	152.99	100	154.09	56	152.76	82

	CDCl ₃	DMSO
Bγ	0.928	0.886
Bβ	1.614	1.573
Bα	2.513	2.753
α1	2.966	2.871
α2	3.192	~3.35?
γ1	3.418	~3.35?
γ2	3.54	~3.35?
γOH	3.56	~3.35?
A OMe	3.805	3.697
B OMe	3.831	3.708
β	4.150	4.068
B2,6	6.392	6.465
A6	6.745	6.583
A5	6.809	6.641
A2	6.796	6.763
Ar OH	5.698	8.634

Compound Number 3027

¹³C



3-(4-hydroxy-3,5-dimethoxyphenyl)-2-(2-methoxy-4-propylphenoxy)propan-1-ol

¹H (acetone)

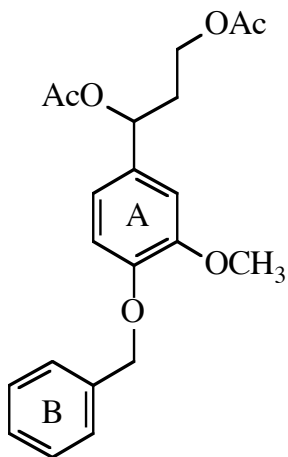
Atom	H Shifts	Mult	J
B γ	0.894	t	7.4
B β	1.585	m	
B α	2.491	m	
α1	2.85	dd	13.9, 6.2
α2	2.922	dd	13.9, 6.1
γ	3.602	m	
γ OH	3.734	t	
A OMe	3.770	s	
B OMe	3.806	s	
β	4.335	m	
A2,6	6.596	s	
B6	6.646	ddt	8.2, 2.1, 0.6
B2	6.817	d	2.1
B5	6.833	d	8.2
Ar OH	6.940		

Notes:

jrbha67

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B γ	13.77	63	14.01	45	13.67	66
B β	24.57	84	25.40	49	24.22	75
A α	37.76	53	38.21	41	36.90	59
B α	37.94	48	38.23	45	36.90	59
B OMe	55.77	31	56.19	19	55.47	62
A OMe	56.28	53	56.56	33	55.82	97
γ	63.47	53	63.46	22	61.84	28
β	85.35	48	83.47	31	80.56	38
A2	106.13	100	107.93	100	106.83	50
A6	106.13	100	107.93	100	106.83	50
B2	112.30	67	113.81	50	112.74	41
B5	120.04	70	118.54	45	115.44	47
B6	121.03	69	121.36	58	120.11	41
A1	128.98	60	129.59	27	128.24	47
A4	133.32	52	135.34	20	133.78	56
B1	138.31	52	137.38	28	135.09	44
B4	145.32	51	146.85	22	145.41	44
A3	146.97	95	148.48	35	147.64	100
A5	146.97	95	148.48	35	147.64	100
B3	150.89	52	151.57	22	149.53	47
¹ H	CDCl ₃				DMSO	
B γ	0.910				0.86	
B β	1.589				1.54	
B α	2.499				2.45	
α1	2.856				2.74	
α2	3.032				2.84	
γ1	3.578					
γ2	3.655					
γ OH					4.75	
A OMe	3.831				3.68	
B OMe	3.841				3.71	
β	4.160				4.30	
A2,6	6.478				6.49	
B6	6.628				6.62	
B2	6.697				6.76	
B5	6.651				6.83	
Ar OH	8.03				8.03	

Compound Number 3029



1-(4-benzyloxy-3-methoxyphenyl)propane-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.99	s	
α Ac Me	2.03	s	
β	2.18	m	
OMe	3.83	s	
γ	4.08	m	
B α	5.09	s	
α	5.85	dd	8.2, 5.7
A6	6.91	dd	8.3, 2.0
A5	6.99	d	8.3
A2	7.04	d	2.0
Bz H's	7.28-7.51	m	

Notes:

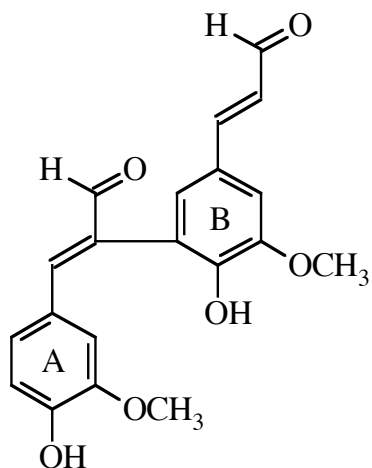
JRHKC25

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me			20.70			
α Ac Me			21.01			
β			35.78			
OMe			56.16			
γ			61.20			
B α			71.26			
α			73.17			
A2			111.49			
A5			114.64			
A6			119.58			
B3			128.28			
B5			128.28			
B2			129.09			
B6			129.09			
B4			128.45			
A1			134.19			
B1			138.33			
A4			149.02			
A3			150.68			
α Ac C=O			170.17			
γ Ac C=O			170.80			

Compound Number 3030

¹³C



beta-[5-(2-formylvinyl)-2-hydroxy-3-methoxyphenyl]
coniferyl aldehyde

¹H (acetone)

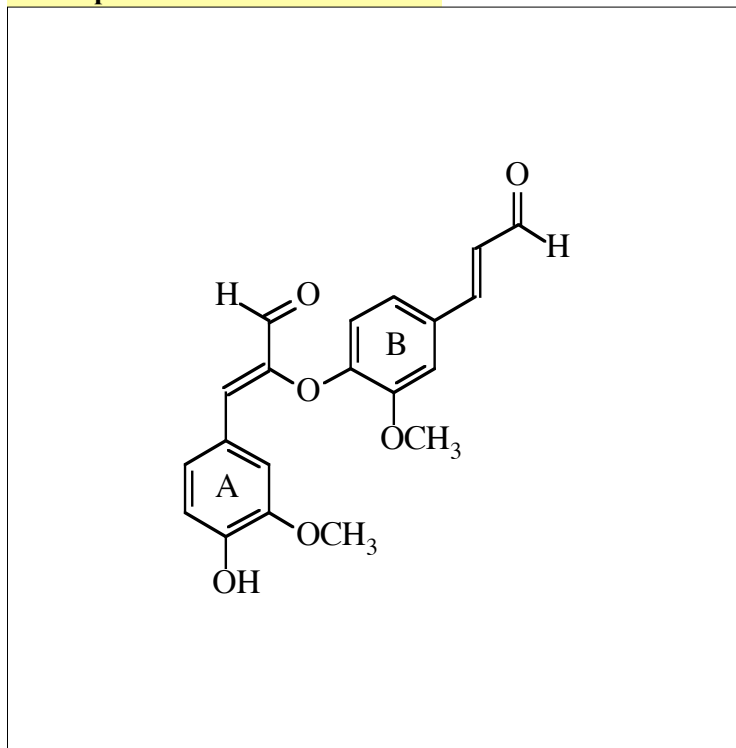
Atom	H Shifts	Mult	J
A3 OMe	3.47	s	
B3 OMe	3.96	s	
B β	6.66	dd	15.8, 7.8
A5	6.77	d	8.3
A2	6.87	d	2.0
A6	6.98	dd	8.3, 2.0
B6	7.01	d	2.0
B2	7.44	d	2.0
A α	7.57	s	
B α	7.57	d	15.8
OH	8.43	s	
B γ	9.61	d	7.8
A γ	9.69	s	

Notes:

JRHKB117 (Higuchi)
13mg

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			55.55			
B3 OMe			56.63			
B2			110.61			
A2			113.56			
A5			115.95			
A β			123.15			
B6			126.36			
A6			126.92			
B β			127.29			
A1			127.38			
B1			127.44			
B5			136.33			
A3			148.13			
B4			148.59			
A3			149.30			
B4			150.16			
A α			151.36			
B α			153.79			
A γ			193.43			
B γ			193.96			

Compound Number 3031



beta-[4-(2-formylvinyl)-2-methoxyphenoxy] coniferyl aldehyde

¹H (acetone)

Atom	H Shifts	Mult	J

Notes:

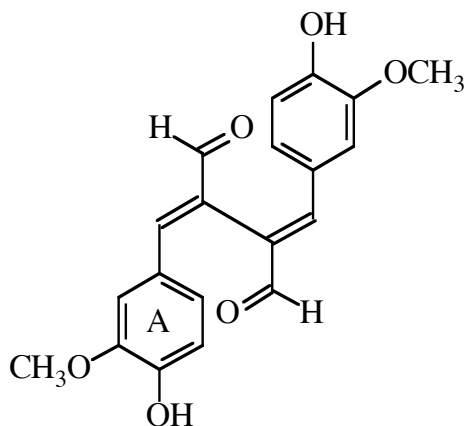
JRHKB119 (Higuchi)
4 mg

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe A3 OMe			56.01 56.52			
B2			112.55			
A2			113.98			
B5			115.25			
A5			116.25			
B6			123.63			
A1			125.31			
A6			126.80			
B β			128.32			
B1			130.20			
A α			138.21			
A β			147.70			
B3			148.48			
B4			148.90			
A3			150.37			
A4			150.56			
B α			153.15			
A γ			197.48			
B γ			193.85			

Compound Number 3032

¹³C



2,3-diformyl-1,4-bis(4-hydroxy-3-methoxyphenyl)
buta-1,3-diene

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.70	s	
5	6.82	d	8.31
6	7.21	dd	8.31, 2.15
2	7.28	d	2.15
α	7.78	s	
OH	8.29	s	
γ	9.66	s	

Notes:

JRHKb121 11mg

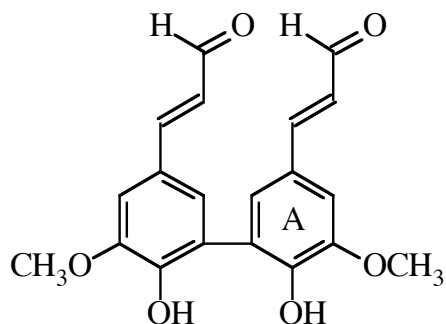
Higuchi

As this dimer contains a plane of symmetry the CSs are reported for one unit.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.11			
2			113.71			
5			116.24			
6			126.25			
1			127.47			
β			134.42			
3			148.41			
4			150.51			
α			152.83			
γ			192.74			

Compound Number 3033

¹³C



5,5'-bis-confiferyl aldehyde

¹H (acetone)

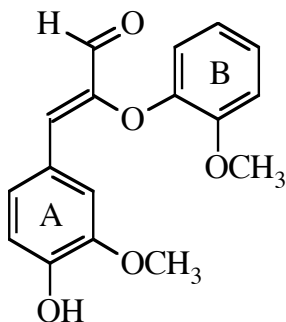
Atom	H Shifts	Mult	J
OMe	3.95	s	
β	6.68	dd	15.84, 7.84
6	7.27	s	2.0
2	7.36	s	2.0
α	7.59	s	15.84
γ	9.65	s	7.84

Notes:

JRHKb123 37mg
Higuchi
As this dimer contains a plane of symmetry the CSs are reported for one unit.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.52			
2			110.00			
1			126.05			
4			126.13			
β			126.81			
6			127.10			
3			149.42			
5			149.63			
α			154.40			
γ			193.92			

Compound Number 3034

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe B3 OMe			55.84 56.17			
B2 A2			113.51 113.82			
B5 A5			114.85 116.07			
B6			121.34			
B1			123.35			
A1			125.49			
A6			126.57			
α			137.82			
B4			146.22			
β			148.09			
A3 B3			148.30 149.89			
A4			150.20			
γ			187.90			

¹H (acetone)

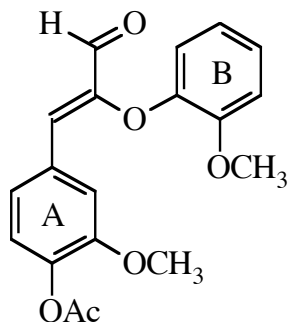
Atom	H Shifts	Mult	J
A4 OMe B3 OMe	3.73 3.88	s s	
B5	6.72	dd	8.0, 2.0
B6	6.76	ddd	8.2, 7.1, 2.0
A5	6.87	d	8.3
B1	6.95	ddd	8.2, 7.1, 2.0
B2	7.05	dd	8.2, 2.0
α	7.26	s	
A6	7.33	dd	8.3, 2.0
A2	7.59	d	2.0
γ	9.50	s	

Notes:

HKc63.4

Compound Number 3035

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.41			
A3 OMe B3 OMe			55.97			
B2			56.20			
A2			113.62			
B5			114.66			
B6			115.56			
B1			121.39			
B1			123.83			
A5			124.06			
A6			124.53			
A1			132.33			
α			135.40			
A4			142.47			
B4			146.01			
β			149.94			
B3			150.01			
A3			152.27			
Ac C=O			168.73			
γ			188.21			

¹H (acetone)

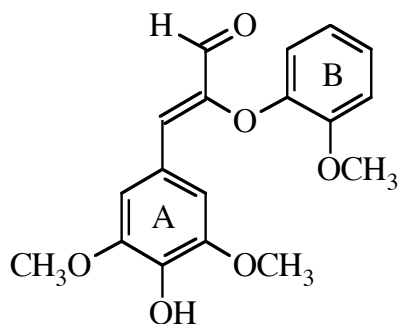
Atom	H Shifts	Mult	J
Ac Me	2.23	s	
A3 OMe B3 OMe	3.73 3.87	s s	
B5	6.79	m	
B6	6.79	m	
B1	6.97	m	
B2	7.06	bd	7.8
A5	7.11	d	8.3
α	7.30	s	
A6	7.45	dd	8.3, 2.0
A2	7.68	d	2.0
γ	9.55	s	

Notes:

HKc 63.4Ac

Compound Number 3036

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe			56.11			
A3 OMe			56.31			
A5 OMe			56.31			
A2			109.27			
A6			109.27			
B2			113.39			
B5			114.53			
B6			121.32			
B1			123.27			
A1			124.05			
α			138.23			
A4			139.74			
B4			146.16			
β			148.15			
A3			148.57			
A5			148.57			
B3			149.76			
γ			187.91			

¹H (acetone)

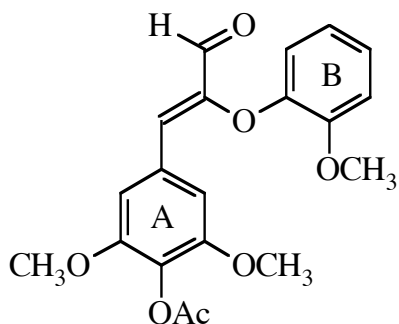
Atom	H Shifts	Mult	J
A3,5 OMe	3.74	s	
B3 OMe	3.88	s	
B5	6.70	dd	8.2, 1.7
B6	6.76	ddd	8.2, 7.2, 1.5
B1	6.94	ddd	8.2, 7.2, 1.7
B2	7.05	dd	8.2, 1.5
A2,6	7.24	s	
α	7.26	s	
γ	9.51	s	

Notes:

HKd 59.1

Compound Number 3037

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.17			
B3 OMe			56.14			
A3 OMe			56.29			
A5 OMe			56.29			
A2			108.10			
A6			108.10			
B2			113.48			
B5			115.07			
B6			121.37			
B1			123.68			
A1			131.35			
A4			131.53			
α			136.12			
B4			145.97			
b			149.81			
B3			149.84			
A3			153.20			
A5			153.20			
Ac C=O			168.30			
γ			188.26			

¹H (acetone)

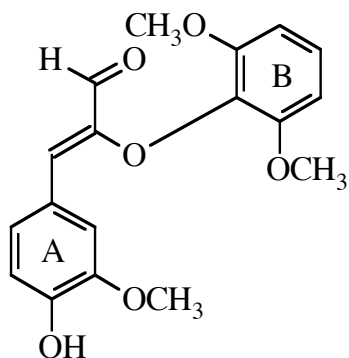
Atom	H Shifts	Mult	J
Ac Me	2.21	s	
A3,5 OMe	3.73	s	
B3 OMe	3.88	s	
B5	6.76	dd	8.2, 2.4
B6	6.77	ddd	8.2, 6.5, 1.4
B1	6.97	ddd	8.2, 6.5, 2.4
B2	7.06	dd	8.2, 1.4
A2,6	7.29	s	
α	7.31	s	
γ	9.57	s	

Notes:

HKd 59.1 Ac

Compound Number 3038

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			56.07			
B3 OMe			56.53			
B5 OMe			56.53			
B2			106.40			
B6			106.40			
A2			114.55			
A5			115.95			
B1			124.17			
A6			125.77			
A1			126.72			
α			129.06			
B4			135.22			
A3			148.04			
A4			149.05			
β			150.82			
B3			152.47			
B5			152.47			
γ			186.64			

¹H (acetone)

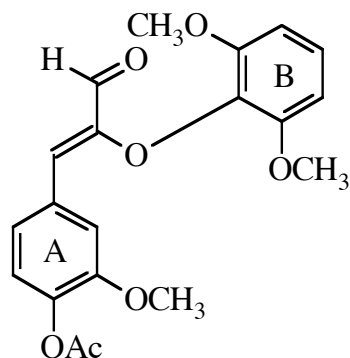
Atom	H Shifts	Mult	J
B3,5 OMe	3.74	s	
A3 OMe	3.81	s	
α	6.64	s	
B2,6	6.65	d	8.2
A5	6.88	d	8.3
B1	6.99	dd	8.2, 7.6
A6	7.45	dd	8.3, 2.0
A2	7.60	d	2.0
γ	9.25	s	

Notes:

HKd 23.3

Compound Number 3039

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.45			
A3 OMe			56.09			
B3 OMe			56.52			
B5 OMe			56.52			
B2			106.29			
B6			106.29			
A2			115.15			
A5			123.78			
A6			124.04			
B1			124.53			
α			126.73			
A1			133.43			
B4			134.81			
A4			141.52			
A3			152.04			
β			152.11			
B3			152.41			
B5			152.41			
Ac C=O			168.85			
γ			187.00			

¹H (acetone)

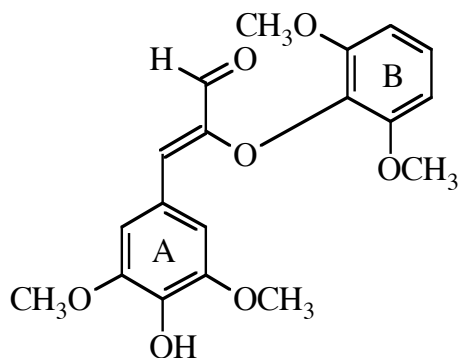
Atom	H Shifts	Mult	J
Ac Me	2.24	s	
B3,5 OMe	3.75	s	
A3 OMe	3.80	s	
B2,6	6.67	d	8.3
α	6.71	s	
B1	7.01	dd	8.3, 7.9
A5	7.11	d	8.2
A6	7.54	dd	8.2, 1.9
A2	7.68	d	1.9
γ	9.32	s	

Notes:

HKd 23.3 Ac

Compound Number 3040

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3 OMe			56.51			
A5 OMe			56.51			
B3 OMe			56.59			
B5 OMe			56.59			
B2			106.50			
B6			106.50			
A2			109.41			
A6			109.41			
B1			124.18			
A1			125.37			
α			129.08			
B4			135.21			
A4			138.72			
A3			148.44			
A5			148.44			
β			150.91			
B3			152.46			
B5			152.46			
γ			186.60			

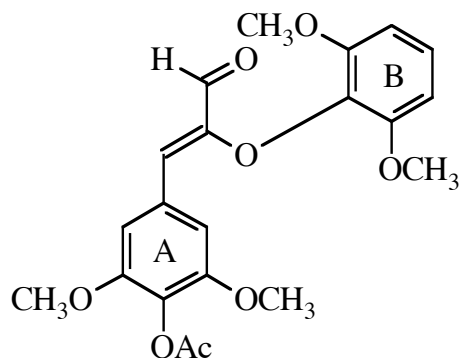
¹H (acetone)

Atom	H Shifts	Mult	J
B3,5 OMe	3.75	s	
A3,5 OMe	3.80	s	
α	6.63	s	
B2,6	6.66	d	8.3
B1	6.99	t	8.3
A2,6	7.31	s	
γ	9.25	s	

Notes:

HKd 63.1

Compound Number 3041



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.22			
B3 OMe			56.35			
B5 OMe			56.35			
A3 OMe			56.56			
A5 OMe			56.56			
B2			106.37			
B6			106.37			
A2			108.07			
A6			108.07			
B1			124.51			
α			126.81			
A4			130.47			
A1			132.69			
B4			134.76			
β			152.09			
B3			152.35			
B5			152.35			
A3			153.01			
A5			153.01			
Ac C=O			168.43			
γ			186.95			

¹H (acetone)

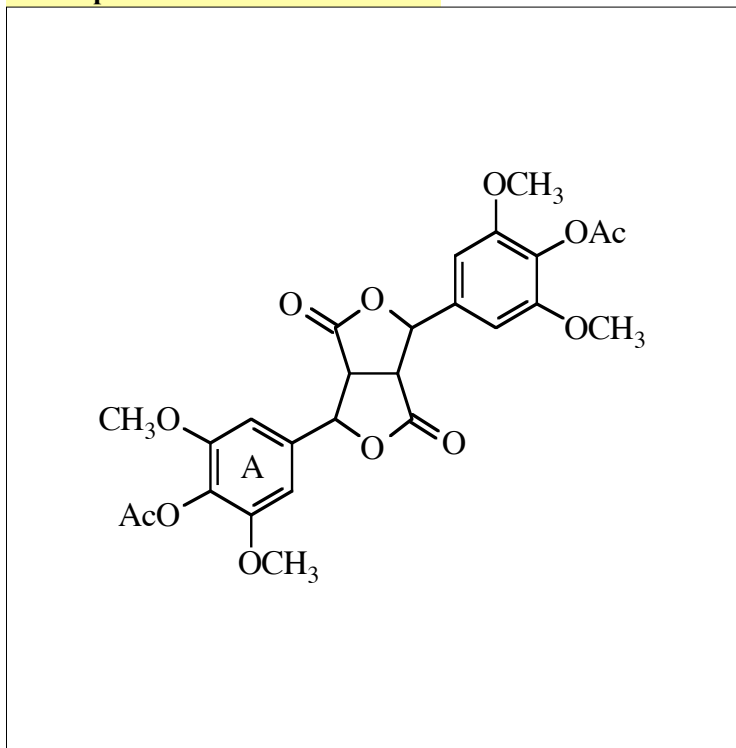
Atom	H Shifts	Mult	J
Ac Me	2.23	s	
A3,5 OMe	3.77	s	
B3,5 OMe	3.78	s	
B2,6	6.67	d	8.3
α	6.69	s	
B1	7.01	dd	8.6, 8.2
A2,6	7.34	s	
γ	9.32	s	

Notes:

HKd 63.1 Ac

Compound Number 3042

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Ac Me			20.18			
β			48.76			
3 OMe			55.56			
5 OMe			55.56			
α			82.61			
2			103.05			
6			103.05			
4			129.76			
1			137.84			
3			153.54			
5			153.54			
Ac C=O			168.50			
γ			175.77			

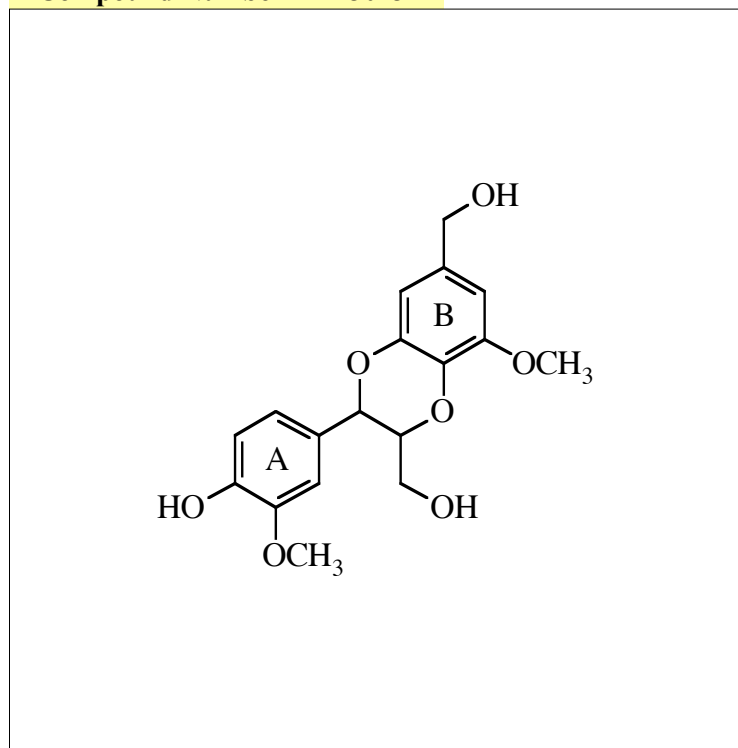
¹H (acetone)

Atom	H Shifts	Mult	J
Ac Me	2.23	s	
OMe	3.81	s	
β	4.20	s	
α	5.86	s	
2,6	6.81	s	

Notes:

FLj 144
As this dimer contains a plane of symmetry the CS's are reported for one unit.

Compound Number 3043

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3 OMe			56.26	98		
A3 OMe			56.32	105		
γ			61.83	53		
Bα			64.61	63		
α			76.97	93		
β			79.30	91		
B2			104.10	84		
B6			108.55	97		
A2			111.90	89		
A5			115.70	52		
A6			121.49	98		
A1			129.50	54		
B4			133.24	25		
B1			135.46	40		
B5			145.19	39		
A4			147.92	26		
A3			148.44	24		
B3			149.84	49		

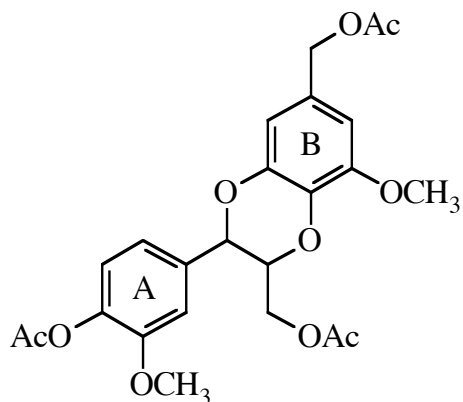
¹H (acetone)

Atom	H Shifts	Mult	J
γ1	3.47	m	
γ2	3.76	m	
B3 OMe	3.81	s	
A3 OMe	3.85	s	
β	3.99	ddd	7.9, 3.9, 2.5
Bα	4.49	m	
α	4.95	d	7.9
B6	6.53	ddd	1.8, 0.75, 0.75
B2	6.60	d	1.8
A5	6.86	d	8.1
A6	6.94	ddd	8.1, 1.9, 0.5
A2	7.09	d	1.9
A4 OH	7.80	s	

Notes:F. Lu
flm11

Compound Number 3044

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A4 Ac Me			20.45	18		
γ Ac Me			20.49	18		
Bα Ac Me			20.81	12		
A3 OMe			56.36	18		
B3 OMe			56.44	18		
γ			63.36	14		
Bα			66.36	17		
β			75.97	16		
α			77.01	16		
B2			106.08	14		
B6			110.41	15		
A2			112.77	15		
A6			120.75	16		
A5			123.88	16		
B1			129.92	9		
B4			133.65	8		
A1			136.00	10		
A4			141.45	7		
B5			144.92	9		
B3			149.98	8		
A3			152.57	9		
A4 Ac C=O			168.86	9		
γ Ac C=O			170.62	8		
Bα Ac C=O			170.83	5		

¹H (acetone)

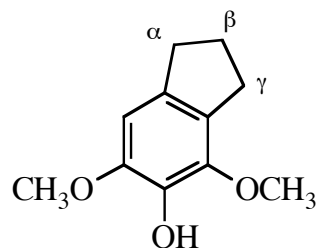
Atom	H Shifts	Mult	J
Bα Ac Me	1.99	s	
γ Ac Me	2.03	s	
A4 Ac Me	2.24	s	
B3 OMe	3.83	s	
A3 OMe	3.84	s	
γ1	4.02	dd	12.4, 4.3
γ2	4.28	dd	12.4, 3.4
β	4.40	ddd	7.7, 4.3, 3.4
Bα	4.98	s	
α	5.04	d	7.7
B6	6.61	d	1.9
B2	6.66	d	1.9
A6	7.08	dd	8.1, 1.7
A5	7.11	d	8.1
A2	7.26	d	1.7

Notes:

F. Lu
flml1Ac

Compound Number 3045

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			26.11			
γ			30.33			
α			33.51			
5 OMe			56.73			
3 OMe			59.83			
6			104.24			
2			128.60			
1			134.89			
4			138.17			
3			144.71			
5			148.47			

¹H (acetone)

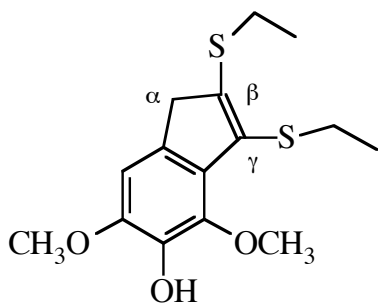
Atom	H Shifts	Mult	J
β	1.98	quint	7.2
α	2.78	br t	7.2
γ	2.83	br t	7.2
5 OMe	3.77	s	
3 OMe	3.79	s	
6	6.58	s	
<u>Benzene</u>			
β	1.86	quin	7.37
α	2.71	td	7.37, 0.66
γ	2.86	t	7.37
5 OMe	3.28	s	
3 OMe	3.75	s	
6	6.32	s	

Notes:

HKE-11
Raney nickel reaction of hke5.5

Compound Number 3046

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ S-CH3			15.11			
β S-CH3			15.41			
β S-CH2			26.33			
γ S-CH2			29.12			
α			41.68			
5 OMe			56.91			
3 OMe			62.30			
6			105.00			
γ			126.93			
2			131.50			
1			133.78			
3			104.04			
4			141.58			
5			147.06			
β			148.43			

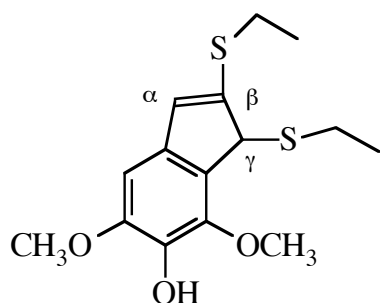
¹H (acetone)

Atom	H Shifts	Mult	J
γ S-CH3	1.15	t	7.37
β S-CH3	1.30	t	7.37
γ S-CH2	2.89	q	7.37
β S-CH2	2.95	q	7.37
α	3.58	d	0.92
5 OMe	3.82	s	
3 OMe	3.85	s	
6	6.87	br t	0.92

Notes:

hke 5.4.1
Thioacidolysis product of β-O-4 (S-G) aldehyde dimer

Compound Number 3047



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ S-CH3			14.39			
β S-CH3			14.45			
γ S-CH2			22.23			
β S-CH2			26.80			
γ			52.56			
5 OMe			56.71			
3 OMe			60.09			
6			100.11			
α			124.89			
2			128.89			
1			135.82			
4			137.70			
β			145.14			
3			145.23			
5			149.46			

¹H (acetone)

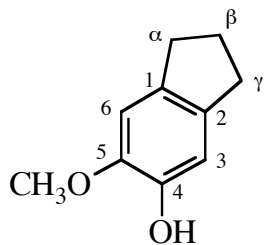
Atom	H Shifts	Mult	J
γ S-CH3	1.00	t	7.5
β S-CH3	1.33	t	7.37
γ S-CH2	2.22, 2.04	dq, dq	12.1, 7.5
β S-CH2	2.94	q	7.37
5 OMe	3.82	s	
3 OMe	3.96	s	
γ	4.39	d	1.18
α	6.38	d	1.18
6	6.63	s	

Notes:

hke 5.5
Thioacidolysis product of γ-O-4 (S-G) aldehyde dimer

Compound Number 3048

¹³C



6-methoxy-indan-5-ol

¹H (acetone)

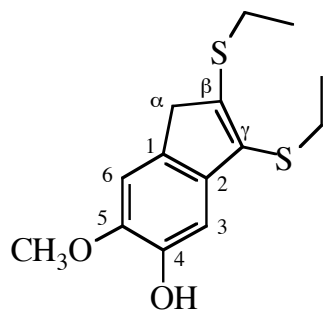
Atom	H Shifts	Mult	J
β	1.99	quint	7.63
α	2.74	t	7.63
γ	2.76	t	7.63
OMe	3.79	s	
3	6.66	s	
6	6.78	s	

Notes:

hke87
Desulfurized (Raney-nickle Rxn)
thioacidolysis product of β-O-4 (G-S) aldehyde model compound

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			26.45			
α			33.13			
γ			33.25			
OMe			56.48			
6			108.74			
3			111.56			
1			135.00			
2			136.73			
4			146.11			
5			147.01			

Compound Number 3049



2,3-bis-ethylsulfanyl-6-methoxy-1H-inden-5-ol

¹H (acetone)

Atom	H Shifts	Mult	J
γ S CH3	1.67	t	7.37
β S CH3	1.31	t	7.37
γ S CH2	2.81	q	7.37
β S CH2	2.99	q	7.37
α	3.58	d	0.79
OMe	3.83	s	
3	6.87	s	
6	7.06	br t	0.79

Notes:

hke83.3

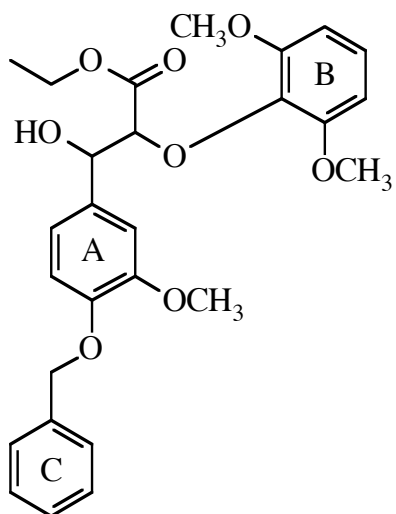
Thioacidolysis product of β-O-4 (G-S) aldehyde dimer model.

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β S CH3			15.47			
γ S CH3			15.74			
β S CH2			23.65			
γ S CH2			27.70			
α			41.57			
OMe			56.83			
4			106.37			
6			109.01			
γ			128.64			
1			133.31			
2			140.13			
5			146.09			
4			146.91			
β			148.16			

Compound Number 3050

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.41			
A OMe			56.13			
B OMe			56.44			
B OMe			56.44			
CH2			60.69			
C α			71.37			
α			74.31			
β			86.14			
B2			106.37			
B6			106.37			
A2			112.31			
A5			114.41			
A6			120.34			
B1			124.73			
C2			128.31			
C6			128.31			
C4			128.41			
C3			129.09			
C5			129.09			
A1			134.57			
B4			137.19			
C1			138.62			
A4			148.71			
A3			150.33			
B3			153.64			
B5			153.64			
γ			169.44			

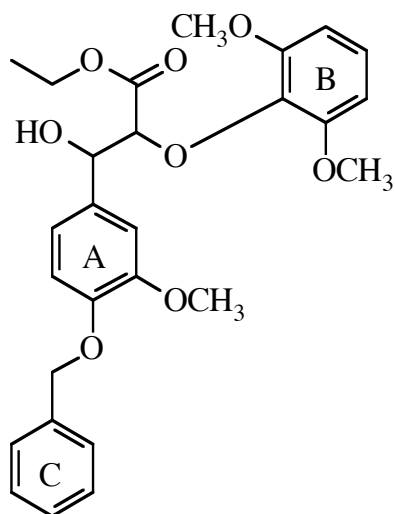
¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.09	t	7.10
B OMe	3.75	s	
A OMe	3.82	s	
CH2	4.04	m	
β	4.68	d	5.39
α	4.96	d	5.39
C α	5.09	s	
B 2,6	6.64	d	8.16
A6	6.92	dd	8.29, 1.71
A5	6.96	d	8.29
B1	6.99	t	8.16
A2	7.17	d	1.71
C 3,4,5	7.27-7.40	m	
C 2,6	7.37	br d	7.37

Notes:

hkd79.2C
possibly erythro

Compound Number 3051



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.30			
A OMe			56.15			
B OMe			56.42			
B OMe			56.42			
CH2			60.68			
C α			71.38			
α			76.04			
β			90.35			
B2			106.26			
B6			106.26			
A2			112.09			
A5			114.61			
A6			120.46			
B1			125.18			
C2			128.33			
C6			128.33			
C4			128.44			
C3			129.11			
C5			129.11			
A1			132.51			
B4			138.07			
C1			138.56			
A4			149.17			
A3			150.62			
B3			153.39			
B5			153.39			
γ			169.49			

¹H (acetone)

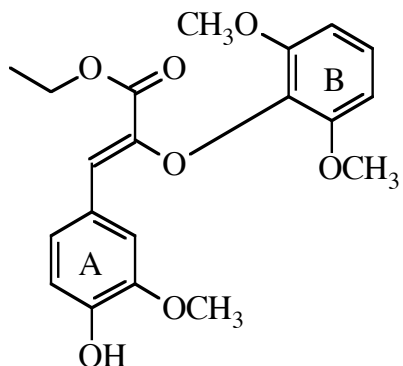
Atom	H Shifts	Mult	J
CH3	0.99	t	7.23
A OMe	3.79	s	
B OMe	3.82	s	
CH2	3.95	m	
β	4.02	d	8.42
α	4.84	d	8.42
C α	5.09	s	
B 2,6	6.71	d	8.5
A6	6.81	dd	8.29, 1.97
A5	6.94	d	8.29
A2	6.99	d	1.97
B1	7.05	t	8.55
C 3,4,5	7.29-7.39	m	
C 2,6	7.46	br d	7.37

Notes:

hkd79.2Ex
possibly threo

Compound Number 3052

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.35			
A OMe			56.09			
B OMe			56.79			
B OMe			56.79			
CH2			61.05			
B2			107.08			
B6			107.08			
A2			114.38			
A5			115.74			
α			119.07			
B1			123.37			
A6			125.09			
A1			126.76			
B4			136.27			
β			143.08			
A3			148.01			
A4			148.10			
B3			152.01			
B5			152.01			
γ			163.74			

¹H (acetone)

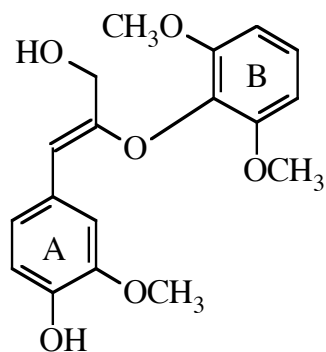
Atom	H Shifts	Mult	J
CH3	1.11	t	7.10
B OMe	3.74	s	
A OMe	3.76	s	
CH2	4.06	q	7.10
B 2,6	6.67	d	8.68
α	6.79	s	
A5	6.82	d	8.29
B1	6.94	t	8.68
A6	7.29	dd	8.29, 1.84
A2	7.52	d	1.84

Notes:

hkd 17.2.1.3

Compound Number 3053

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
1H data only						

¹H (acetone)

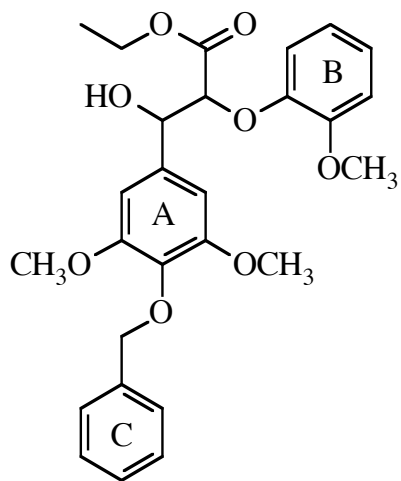
Atom	H Shifts	Mult	J
A OMe	3.76	s	
B OMe	3.77	s	
γ	3.97	br s	
α	5.75	br s	
B 2,6	6.68	d	8.42
A5	6.79	d	8.29
B1	7.07	t	8.42
A6	7.18	dd	8.29, 1.84
A2	7.46	d	1.84

Notes:

hkd87

Compound Number 3054

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.35			
B OMe			56.36			
A OMe			56.44			
A OMe			56.44			
CH2			61.29			
C α			75.06			
α			75.59			
β			84.38			
A2			105.44			
A6			105.44			
B2			113.87			
B5			117.25			
B6			121.61			
B1			123.44			
C4			128.31			
C3			128.76			
C5			128.76			
C2			128.82			
C6			128.82			
A1			136.70			
A4			137.61			
C1			139.47			
B4			148.70			
B3			151.03			
A3			154.17			
A5			154.17			
γ			169.85			

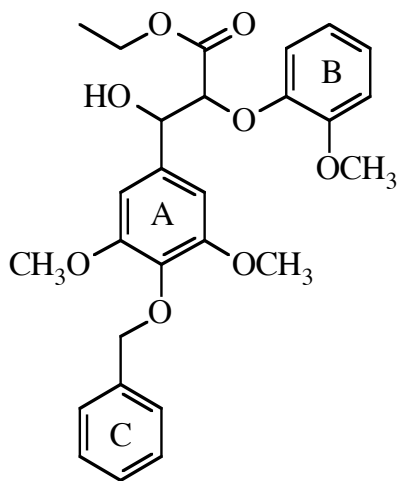
¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.08	t	7.1
B OMe	3.80	s	
A OMe	3.82	s	
CH2	4.04	m	7.1
β	4.72	d	5.52
Cα	4.93	s	
α	5.08	d	5.52
A 2,6	6.83	s	
B 5,6	6.77-6.85	m	
B 1,2	6.90-7.00	m	
C 3,4,5	7.24-7.38	m	
C 2,6	7.50	br d	7.37

Notes:

hkd35.2.1.2
possibly erythro (see 3055)
separated by cyclohexane:EtOAc:Acetic Acid (100:50:1)

Compound Number 3055



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.16			
B OMe			56.28			
A OMe			56.40			
A OMe			56.40			
CH2			61.28			
α			74.84			
C α			75.04			
β			83.40			
A2			105.51			
A6			105.51			
B2			113.77			
B5			116.96			
B6			121.52			
B1			123.43			
C4			128.28			
C3			128.73			
C5			128.73			
C2			128.80			
C6			128.80			
A4			137.51			
A1			137.79			
C1			139.50			
B4			148.35			
B3			151.08			
A3			154.04			
A5			154.04			
γ			170.25			

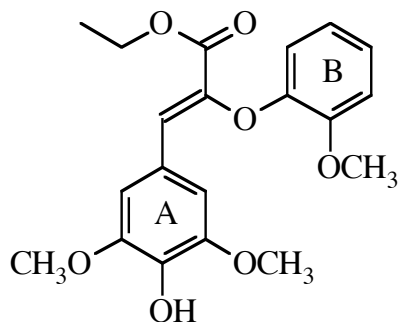
¹H (acetone)

Atom	H Shifts	Mult	J
CH3	1.19	t	7.10
B OMe	3.77	s	
A OMe	3.83	s	
CH2	4.16	q	7.10
β	4.70	d	6.71
C α	4.94	s	
α	5.07	d	6.71
B 5,6	6.79	m	
A 2,6	6.90	s	
B 1,2	6.90-6.97	m	
C 3,4,5	7.24-7.37	m	
C 2,6	7.5	br d	7.37

Notes:

hkd35.2.1.1
Possible threo (see 3054)
separated by cyclohexane:EtOAc:Acetic Acid (100:50:1)

Compound Number 3056

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
CH3			14.19			
B OMe			56.30			
A OMe			56.37			
A OMe			56.37			
CH2			61.58			
A2			109.09			
A6			109.09			
B2			113.72			
B5			114.15			
B6			121.49			
B1			123.24			
A1			124.12			
α			127.99			
β			138.78			
A4			138.94			
B4			146.94			
A3			148.50			
A5			148.50			
B3			149.87			
γ			164.06			

¹H (acetone)

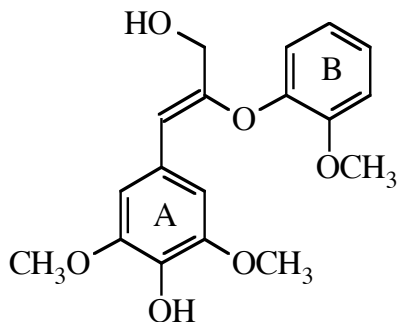
Atom	H Shifts	Mult	J
CH3	1.21	t	7.10
A OMe	3.73	s	
B OMe	3.90	s	
CH2	4.20	q	7.10
B5	6.72	dd	8.02, 1.58
B6	6.79	ddd	8.02, 7.37, 1.58
B1	6.94	ddd	8.02, 7.37, 1.58
B2	7.06	dd	8.02, 1.58
A 2,6	7.16	s	
α	7.33	s	

Notes:

hkd91.1.2

Compound Number 3057

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
1H data only						

¹H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.67	s	
B OMe	3.90	s	
γ	4.15	br s	
α	6.21	br s	
A 2,6	6.90	s	
B 1,2,5,6	6.75-7.05	m	
A4 OH	8.00	s	

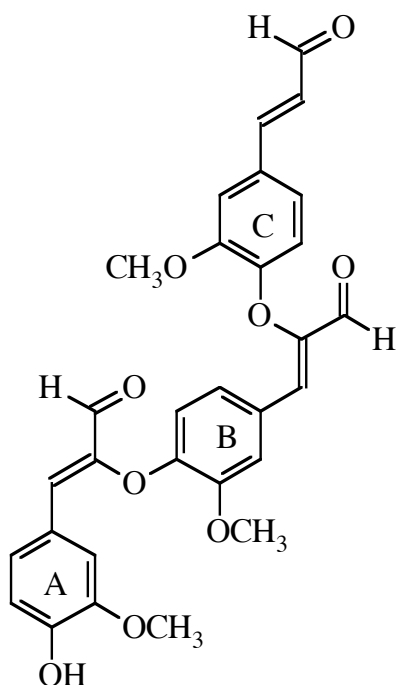
Notes:

hkd57.4

1H Data only

Compound Number 3058

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A OMe			55.93			
B OMe			56.14			
C OMe			56.50			
C2			112.55			
A2			113.95			
B2			114.87			
B5			115.18			
C5			115.42			
A5			116.26			
C6			123.59			
A1			125.21			
B6			125.59			
A6			126.78			
B1			128.03			
Cβ			128.38			
C1			130.35			
Bα			137.15			
Aα			138.31			
Aβ			147.52			
A3			148.46			
B4			148.47			
Bβ			148.51			
C4			148.72			
B3			149.91			
C3			150.35			
A4			150.58			
Cα			153.13			
Aγ			187.43			
Bγ			187.65			
Cγ			193.91			

¹H (acetone)

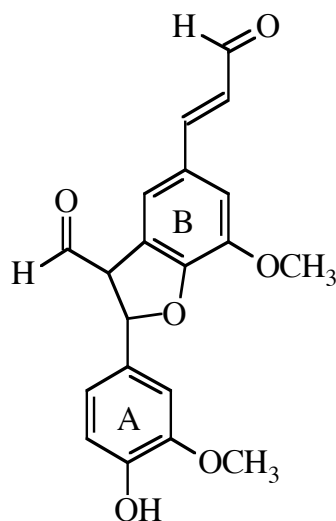
Atom	H Shifts	Mult	J
A OMe	3.69	s	
B OMe	3.83	s	
C OMe	3.98	s	
C β	6.70	dd	15.92, 7.65
B5	6.79	d	8.29
C5	6.82	d	8.29
A5	6.85	d	8.29
C6	7.15	dd	8.29, 1.97
B6	7.28	dd	8.29, 1.97
A6	7.30	dd	8.29, 1.97
A α	7.30	s	
B α	7.33	s	
C2	7.48	d	1.97
A2	7.52	d	1.97
C α	7.58	d	15.92
B2	7.67	d	1.97
A OH	8.37	bs	
Aγ	9.48	s	
Bγ	9.53	s	
Cγ	9.65	d	7.65

Notes:

hkc43.4.1

Compound Number 3059

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A OMe			56.31			
B OMe			56.54			
β			62.91			
α			85.24			
A2			110.66			
B2			114.27			
A5			115.93			
B6			119.49			
A6			119.81			
B5			125.79			
Bβ			127.69			
B1			129.66			
A1			132.18			
B3			146.01			
A3			147.91			
A4			148.57			
B4			151.77			
Bα			153.45			
Bγ			193.83			
γ			197.57			

¹H (acetone)

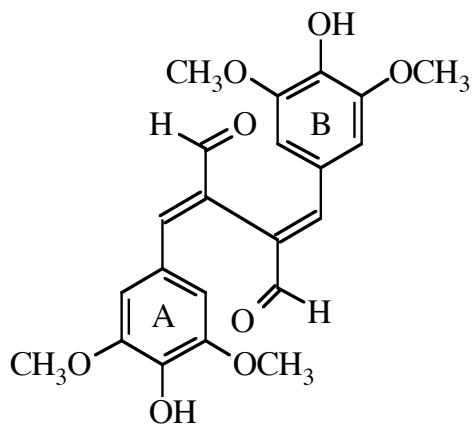
Atom	H Shifts	Mult	J
A OMe	3.82	s	
B OMe	3.92	s	
β	4.50	d	6.5
α	6.20	d	6.5
B β	6.70	dd	15.78, 7.76
A5	6.84	d	8.16
A6	6.90	dd	8.16, 1.84
A2	7.06	d	1.84
B2	7.38	s	
B6	7.43	s	
B α	7.61	d	15.78
A OH	8.29	s	
B γ	9.64	d	7.76
A γ	9.94	s	

Notes:

hkf69.2.2
F1173.12

Compound Number 3060

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
OMe			56.54			
2			109.07			
6			109.07			
1			126.05			
β			134.78			
4			140.10			
3			148.71			
5			148.71			
α			152.98			
γ			192.70			

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.72	s	
2,6	7.02	s	
α	7.79	s	
OH	7.94	bs	
γ	9.67	s	

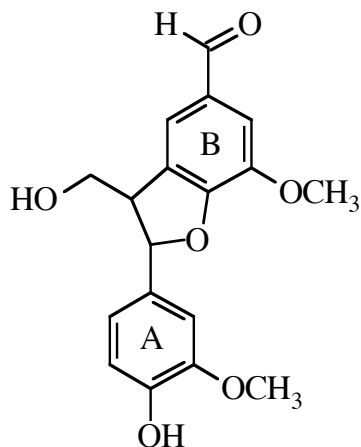
Notes:

hkf7-1

This compound has a plane of symmetry and so the signals are reported for only one half.

Compound Number 3061

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
β			53.84			
A OMe			56.30			
B OMe			56.37			
γ			64.22			
α			89.87			
A2			110.65			
B2			113.44			
A5			115.79			
A6			119.82			
B6			121.43			
B5			131.19			
B1			132.40			
A1			133.42			
B3			145.81			
A4			147.67			
A3			148.49			
B4			154.87			
B α			190.90			

¹H (acetone)

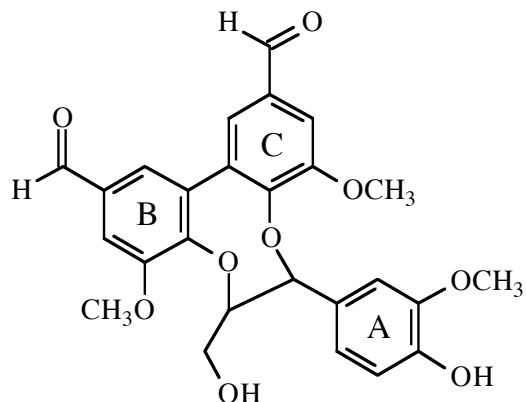
Atom	H Shifts	Mult	J
β	3.67	bq	
A OMe	3.82	s	
B OMe	3.92	s	
γ	3.92	m	
α	5.69	d	6.84
A5	6.81	d	8.16
A6	6.88	dd	8.16, 1.97
A2	7.05	d	1.97
B2	7.42	d	1.45
B6	7.53	dd	1.45, 0.92
A OH	7.65	bs	
B α	9.82	s	

Notes:

hkf75.322

Compound Number 3062

¹³C



Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
C OMe			56.32			
A OMe			56.37			
B OMe			56.62			
γ			62.29			
α			85.11			
β			87.48			
B2			111.71			
C2			111.88			
A2			112.08			
A5			115.64			
A6			121.57			
C6			125.15			
B6			125.32			
A1			130.25			
B5			133.27			
C5			133.72			
B1			134.42			
C1			134.56			
A4			147.73			
A3			148.23			
B4			152.46			
C4			152.81			
B3			154.23			
C3			154.39			
Cα			191.66			
Bα			191.71			

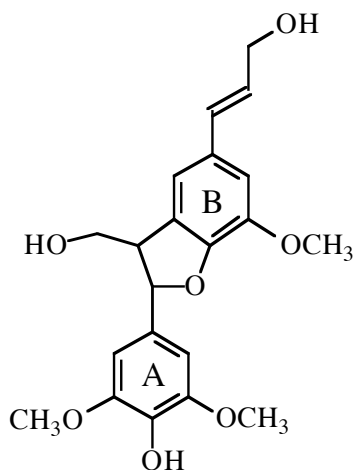
¹H (acetone)

Atom	H Shifts	Mult	J
γ1	3.48	m	
γ2	3.95	m	
A OMe	3.82	s	
C OMe	3.91	s	
B OMe	4.03	s	
β	4.18	m	
α	5.05	d	10.14
A5	6.84	d	8.16
A6	6.93	dd	8.16, 1.97
A2	7.05	d	1.97
C2	7.56	d	1.84
B2	7.65	d	1.84
C6	7.70	d	1.84
B6	7.74	d	1.84
C α	10.02	s	
B α	10.06	s	

Notes:

hkf83.2.1 (6 mg)

Compound Number 3063



Simulanol, S-(8-5)-G

4-[3-hydroxymethyl-5-(3-hydroxy-propenyl)-7-methoxy-2,3-dihydrobenzofuran-2-yl]-2,6-dimethoxy-phenol

¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Aβ			54.78			
B OMe			56.44			
B OMe			56.44			
A OMe			56.67			
Bγ			63.39			
Aγ			64.52			
Aα			88.74			
A2			104.55			
A6			104.55			
B2			111.80			
B6			116.07			
Bβ			128.38			
B5			130.47			
Bα			130.52			
B1			131.95			
A1			133.30			
A4			136.68			
B3			145.16			
A3			148.74			
A5			148.74			
B4			148.95			

¹H (acetone)

Atom	H Shifts	Mult	J
A OMe	3.79	s	
B OMe	3.86	s	
Aβ	3.54	m	
Bγ	4.19	td	J = 5.52, 1.58
Aα	5.54	d	J = 6.71
Bβ	6.23	dt	J = 15.92, 5.52
Bα	6.52	dt	J = 15.92, 1.58
A 2,6	6.74	s	
B2	6.84	s	
B6	6.97	s	
A4-OH	7.19	s	

Notes:

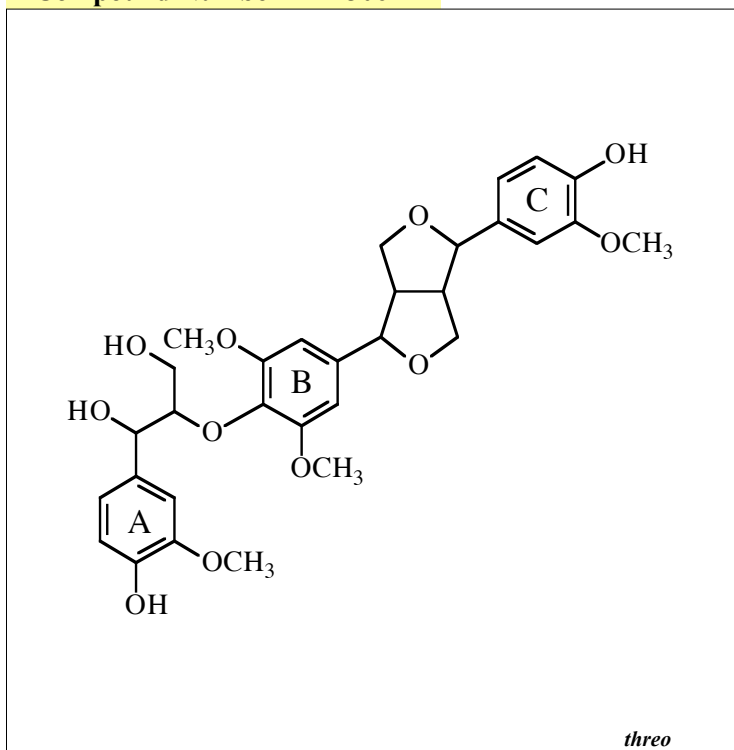
hkh 99.14

Compound #6: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W.

Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.

Compound Number 3064

¹³C



buddlenol E, G-(8-O-4)-S-(8-8)-G

1-(4-Hydroxy-3-methoxy-phenyl)-2-{4-[4-(4hydroxy-3-methoxy-phenyl)-tetrahydrO-furo[3,4-c]furan-1-yl]-2,6-dimethoxy-phenoxy}-propan e-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
Cβ + Bβ	3.10	m	
Aγ1	3.43	m	
Aγ2	3.84	m	
Cγ2 + Bγ2	3.86	m	
Aβ	4.15	m	
Cγ1 + Bγ1	4.24	m	
Cα	4.68	d	J = 4.34
Bα	4.73	d	J = 4.34
Aα	4.97	m	
B 2,6	6.76	s	
C2	6.98	d	J = 1.84
A2	7.03	d	J = 1.84
A4-OH	7.37	s	
C4-OH	7.49	s	

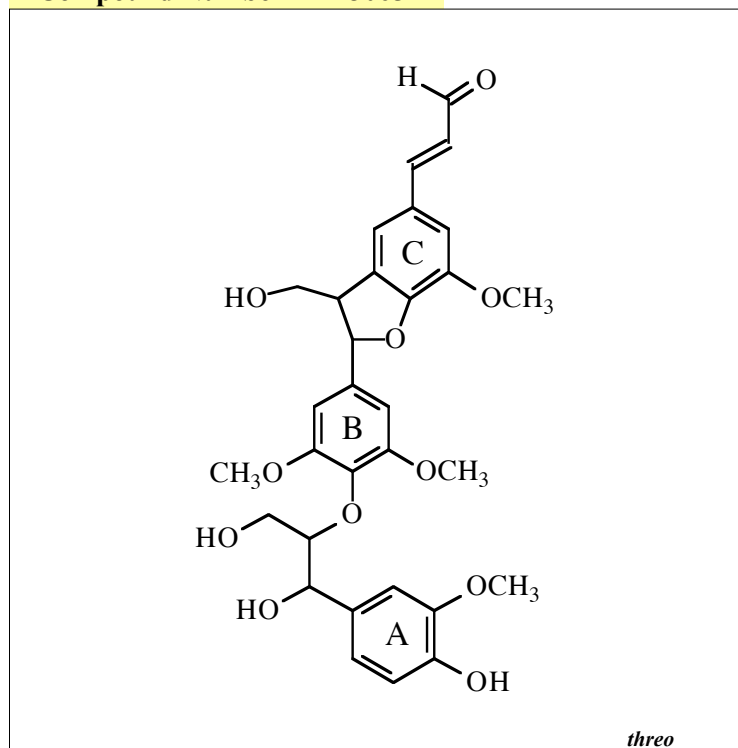
Notes:

hkh 99.6
 Compound #22: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W.
 Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Cβ			55.15			
Bβ			55.46			
OMe			56.24			
B OMe			56.59			
B OMe			56.59			
OMe			56.70			
Aγ			60.98			
Cγ			72.30			
Bγ			72.54			
Aα			73.38			
Bα			86.57			
Cα			86.60			
Aβ			87.86			
B2			104.12			
B6			104.12			
C2			110.62			
A2			110.92			
A5			115.20			
C5			115.54			
C6			119.60			
A6			120.04			
C1			133.77			
B1			113.80			
A1			134.10			
C4			135.72			
B4			139.10			
A3			146.47			
C3			146.90			
A4			147.98			
B3			154.20			
B5			154.20			

Compound Number 3065

¹³C



buddlenol A, G-(t8-O-4)-S-(8-5)-G'

3-(2-{4-[2-hydroxy-2-(4-hydroxy-3-methoxy-phenyl)1-hydroxymethyl-ethoxy]-3,5-dimethoxy-phenyl}-3-hydroxymethyl-7-methoxy-2,3-dihydrobenzofuran-5-yl)-propenal

¹H (acetone)

Atom	H Shifts	Mult	J
OMe	3.82	s	
B OMe	3.84	s	
OMe	3.94	s	
A α	4.97	t	J = 4.47
B α	5.70	d	J = 6.45
C β	6.66	dd	J = 15.78, 7.63
A5	6.76	d	J = 8.02
A6	6.83	dd	J = 8.02, 1.84
B 2,6	6.83	s	
A2	7.03	d	J = 1.84
C α	7.59	d	J = 15.78
C γ	9.64	d	J = 7.63

Notes:

hkh 19.1t

Compound #23: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W.

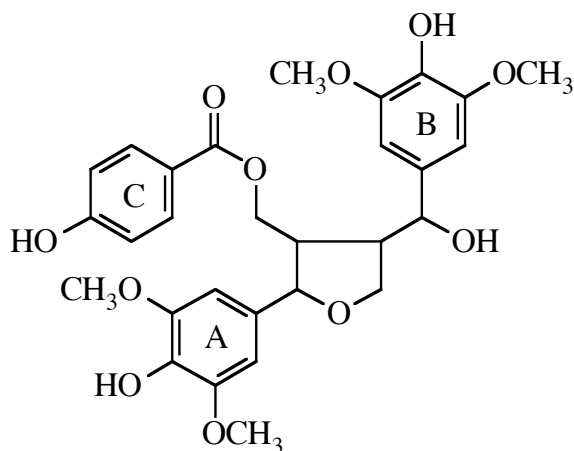
Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.

PROTON data only!!!

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
PROTON data only						

Compound Number 3066

¹³C



SP-(8-8)-S

tetrahydro- α 4,2-bis(4-hydroxy-3,5-dimethoxyphenyl)
 α -3O-(4-hydroxybenzoyl)-3,4-furandimethanol

¹H (acetone)

Atom	H Shifts	Mult	J
A β	2.55	m	
OMe	3.74	s	
OMe	3.78	s	
B β	3.99	m	
B γ	4.14	m	
A γ 1	4.41	m	
A γ 2	4.68	m	
A α	4.90	d	J = 6.3
B α	4.96	d	J = 5.0
A2,6	6.66	s	
B2,6	6.72	s	
C3,5	6.87	m	
C2,6	7.77	m	

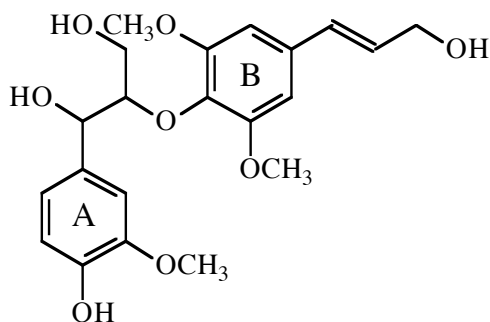
Notes:

Fln 117
 Compound #19: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A.,
 Messens, E., Boerjan, W.
 Profiling of oligolignols reveals monolignol coupling conditions in lignifying
 poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B β			48.37			
A β			49.80			
OMe			56.50			
OMe			56.50			
OMe			56.50			
OMe			56.50			
A γ			63.99			
B γ			69.95			
B α			72.59			
A α			85.34			
A2			104.45			
A6			104.45			
B2			104.53			
B6			104.53			
C3			115.98			
C5			115.98			
C1			122.40			
C2			132.45			
C6			132.45			
A1			134.49			
B1			134.91			
A4			136.01			
B1			136.01			
A3			148.54			
A5			148.54			
B3			148.54			
B5			148.54			
C4			162.56			
C α			166.43			

Compound Number 3067

¹³C



threo

G-(8-O-4)-S

threo-1-(4-hydroxy-3-methoxy-phenyl)-2-[2,6dimethoxy-phenoxy-4-(3-hydroxy-propenyl)]-propane-1,3-diol

¹H (acetone)

Atom	H Shifts	Mult	J
A γ	3.39	m	-
A3 OMe	3.83	s	
B3 OMe	3.87	s	
B γ	4.21	m	-
A α -OH	4.33	d	J = 3.8
A α	4.96	dd	J = 6.8, 8.4
B β	6.37	dt	J = 15.8, 5.1
B α	6.54	d	J = 15.8
A5	6.76	d	J = 8.2
B2/6	6.79	s	
A6	6.82	dd	J = 8.2, 1.3
A2	7.03	d	J = 1.3
A4-OH	7.33	br s	

Notes:

HKh83.5, FL1112

Compound #8: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W.

Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.

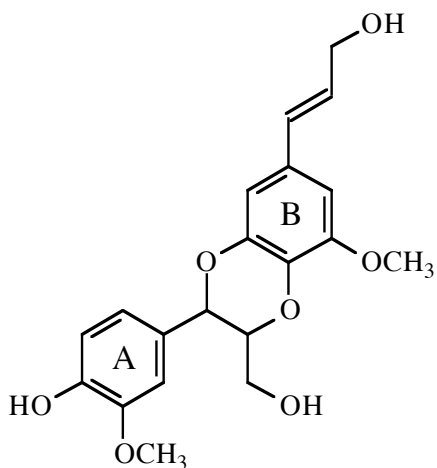
See compound #188 for peracetate!

isolated from mixture, not enough to get carbon data.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
PROTON data only						

Compound Number 3068

¹³C



trans

G-(8-O-4)-5H [nocomtol]

4-[3-hydroxymethyl-7-(E)-(3-hydroxypropenyl)-5-methoxy-2,3-dihydro-benzo[1,4]dioxin-2-yl]-2-methoxyphenol

¹H (acetone)

Atom	H Shifts	Mult	J
Aγ1	3.50	m	-
Aγ2	3.76	m	-
B3 OMe	3.85	s	
A3 OMe	3.85	s	
Aβ	4.05	m	-
Bγ	4.20	dd	J = 5.4, 1.6
Aα	4.96	d	J = 7.9
Bα	6.26	dt	J = 15.9, 5.4
Bβ	6.47	dt	J = 15.9, 1.6
B6	6.68	d	J = 1.8
A5	6.87	d	J = 8.1
A6	6.95	dd	J = 8.1, 1.8
A2	7.10	d	J = 1.8

Notes:

FLm08

Cmpd 1a: Morreel, K., Ralph, J., Lu, F., Goeminne, G., Busson, R., Herdewijn, P., Goeman, J.L., Van der Eycken, J., Boerjan, W., Messens, E.

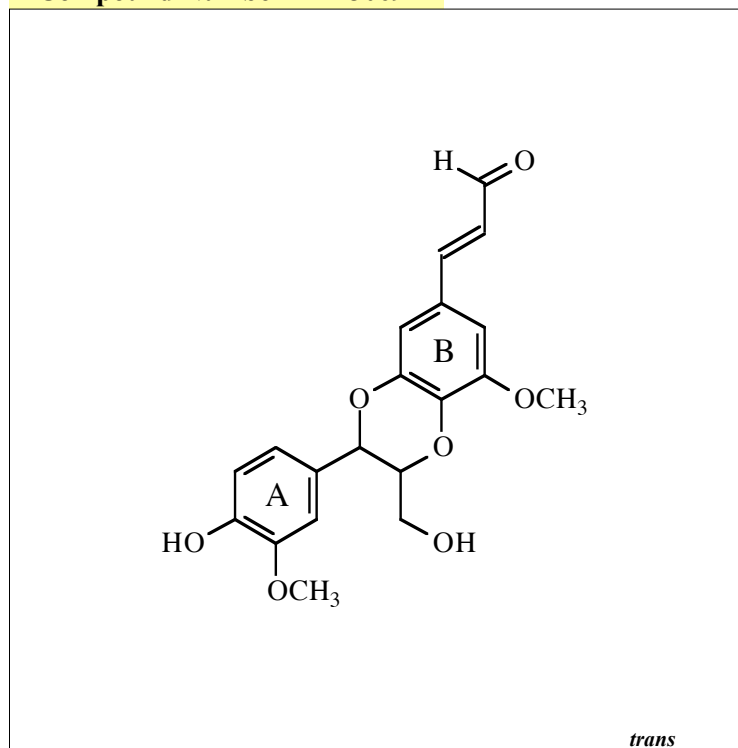
Phenolic profiling of COMT-deficient poplar reveals novel benzodioxane oligolignols.

Plant Physiol. 2004. in press: Accepted 8/27/2004.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
B3-OMe			56.2			
A3-OMe			56.2			
Aγ			61.9			
Bγ			63.6			
Aα			76.7			
Aβ			79.3			
B2			103.2			
B6			108.5			
A2			111.7			
A5			115.7			
A6			121.4			
Bβ			129.0			
A1			129.1			
Bα			130.1			
B1			130.3			
B4			133.7			
B5			145.2			
A4			147.8			
A3			148.3			
B3			149.8			

Compound Number 3069

¹³C



G-(8-O-4)-5H' [nocomtal]

(2E)-3-[3-(4-hydroxy-3-methoxy-phenyl)-2(hydroxymethyl)-8-methoxy-2,3-dihydro-1,4-benzodioxin-6-yl]acrylaldehyde

¹H (acetone)

Atom	H Shifts	Mult	J
A _γ 1	3.53	m	-
A _γ 2	3.82	m	-
A3 OMe	3.86	s	
B3 OMe	3.91	s	
A _β	4.14	ddd	J = 8.0, 3.8, 2.6
A _α	5.01	d	J = 8.0
B _β	6.67	dd	J = 15.8, 7.6
A5	6.88	d	J = 8.0
B6	6.92	d	J = 2.0
A6	6.97	dd	J = 8.0, 2.0
B2	7.02	d	J = 2.0
A2	7.12	d	J = 2.0
B _α	7.53	d	J = 15.8
A4-OH	7.59	bs	-
B _γ	9.64	d	7.6

Notes:

FLn55

Cmpd 3: Morreel, K., Ralph, J., Lu, F., Goeminne, G., Busson, R., Herdewijn, P., Goeman, J.L., Van der Eycken, J., Boerjan, W., Messens, E.

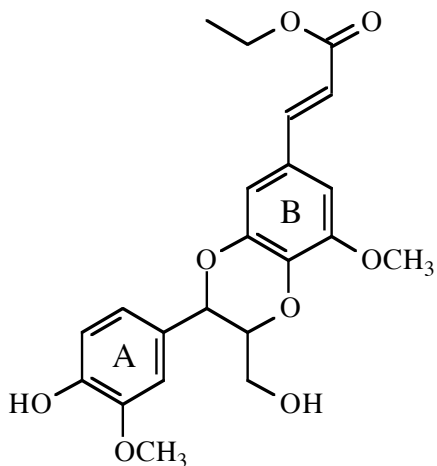
Phenolic profiling of COMT-deficient poplar reveals novel benzodioxane oligolignols.

Plant Physiol. 2004. in press: Accepted 8/27/2004.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
A3-OMe			56.4			
B3-OMe			56.5			
A _γ			61.6			
A _α			77.0			
A _β			79.8			
B2			105.5			
B6			111.9			
A2			112.0			
A5			115.8			
A6			121.6			
B1			127.5			
B _β			128.0			
A1			128.9			
B _α			137.4			
B5			145.6			
A3			148.1			
A4			148.5			
B3			150.4			
B4			153.7			
B _γ			193.8			

Compound Number 3070

¹³C



trans

G-(8-O-4)-5H''

3-[3-(4-hydroxy-4-methoxyphenyl)-2-hydroxymethyl-8-methoxy-2,3-dihydrobenzo[1,4] dioxin-6-yl]-acrylic acid ethyl ester

¹H (acetone)

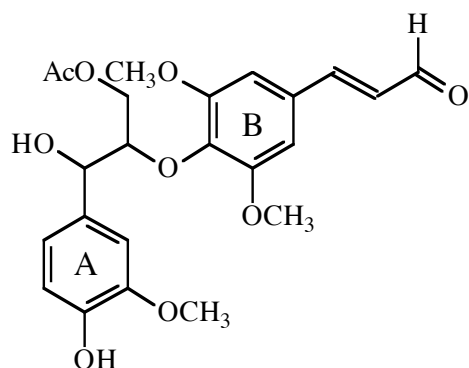
Atom	H Shifts	Mult	J
Me	1.25	t	J = 7.1
Ay1	3.50	m	-
Ay2	3.83	m	-
B3 OMe	3.85	s	
A3 OMe	3.92	s	
Aβ	4.09	m	-
CH2	4.17	q	J = 7.1
Aα	4.98	d	J = 8.0
Bβ	6.40	d	J = 15.9
B6	6.85	d	J = 1.5
A5	6.88	d	J = 8.1
B2	6.95	d	J = 1.5
A6	6.96	dd	J = 8.1, 1.8
A2	7.10	d	J = 1.8
Bα	7.54	d	J = 15.9

Notes:

FL1111
 Cmpd c: Morreel, K., Ralph, J., Lu, F., Goeminne, G., Busson, R., Herdewijn, P., Goeman, J.L., Van der Eycken, J., Boerjan, W., Messens, E.
 Phenolic profiling of COMT-deficient poplar reveals novel benzodioxane oligolignols.
 Plant Physiol. 2004. in press: Accepted 8/27/2004.

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Me			14.6			
B3-OMe			56.2			
A3-OMe			56.3			
Ay			61.6			
CH2			61.6			
Aα			76.9			
Aβ			79.5			
B2			104.7			
B6			111.1			
A2			111.7			
A5			115.7			
Bβ			117.0			
A6			121.4			
B1			127.4			
A1			128.8			
B4			136.4			
Bα			145.2			
B5			145.3			
A4			147.8			
B3			148.3			
A3			150.1			
Bγ			167.2			

Compound Number 3071



¹³C

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
γ Ac Me			20.66			
A3 OMe			56.62			
B3 OMe			56.73			
γ			63.59			
α			73.31			
β			84.56			
A2/6			104.65			
B2/6			106.94			
Bβ			129.11			
B1			131.09			
A1			131.65			
A4			136.04			
B4			139.26			
A3/5			148.51			
Bα			153.45			
B3/5			154.57			
γ Ac C=O			167.76			
Bγ			193.90			

¹H (acetone)

Atom	H Shifts	Mult	J
γ Ac Me	1.84	s	-
A3/5 OMe	3.80	s	-
B3/5 OMe	3.94	s	-
γ1	4.12	dd	J = 11.9, 3.2
γ2	4.39	dd	J = 11.9, 7.4
β	4.62	m	-
α	4.94	dd	J = 6.7, 4.0
A2/6	6.70	s	-
Bβ	6.77	dd	J = 15.8, 7.6
B2/6	7.12	s	-
Bα	7.61	d	J = 15.8
Bγ	9.67	d	J = 7.6

Notes:

HKj51T6.7

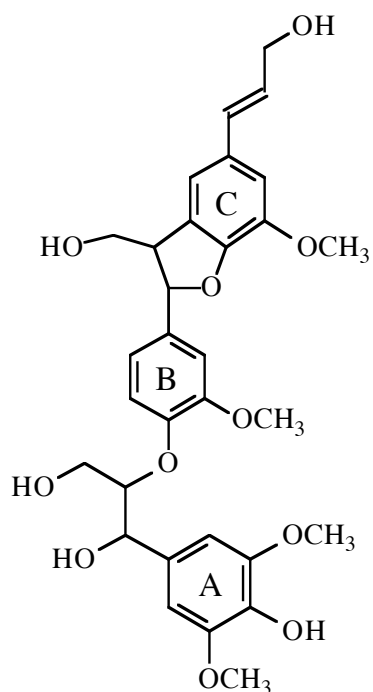
for Cmpd #9: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W.

Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.

Note the single g-acetate!!

Compound Number 3072

¹³C



S-(8-O-4)-G-(8-5)-G

Atom	CDCl ₃		Acetone		DMSO	
	CS	i	CS	i	CS	i
Bβ			54.8			
OMe			56.35			
OMe			56.39			
OMe			56.58			
Aγ			61.86			
Cγ			63.26			
Bγ			64.58			
Aα			73.84			
Aβe			86.32			
Aβt			88.03			
Bα			88.24			
A2/6			105.36			
C2/C6/B2/B5/B6			111.14-119.33			
Cβ			128.42			
Cα			130.48			
(couldn't separately assign C2, C6, B2, B5, B6)						

¹H (acetone)

Atom	H Shifts	Mult	J
Bβ	3.51	m	
Aγ1	3.51	m	
Aγ2	3.71	m	
Bγ	3.85	m	
OMe	3.77	s	
OMe	3.86	s	
OMe	3.94	s	
Cγ	4.19	dd	J = 5.5, 1.3
Aβt	4.24	m	
Aβe	4.32	m	
Aα	4.86	d	J = 5.9
Bα	5.59	d	J = 6.5
Cβ	6.23	dt	J = 15.9, 5.5
Cα	6.51	d	J = 15.9
A 2,6	6.76	s	

Notes:

HKf145, mixture of isomers
 Morreel #39: Morreel, K., Ralph, J., Kim, H., Lu, F., Goeminne, G., Ralph, S.A., Messens, E., Boerjan, W.
 Profiling of oligolignols reveals monolignol coupling conditions in lignifying poplar xylem. Plant Physiol. 2004. in press: Accepted 8/27/2004.