

III. Appendices

E. Water Appendix

8. OP Usage Information by Region

The tables that follow summarize the most recent usage information for each OP-crop combination assessed in each of the regions. This information was the basis for the application-specific inputs used in the PRZM-EXAMS modeling. The crop acreage served as inputs in deriving the region-specific cumulative adjustment factors. Sources of information are provided below each table.

In the preliminary OP cumulative risk assessment (12/3/01), OPP generated OP cumulative distributions in drinking water sources for twelve regions. Several regions have been combined to form seven regions for the revised assessment. The tables that follow list both the usage information for the revised seven regions and those use profiles for other locations that were used to evaluate OP impacts on drinking water sources in other parts of the region, but were not used to represent the region.

Any mitigation actions (cancellation/phase-out or reduction in rates) taken since the preliminary assessment have been noted in the tables. The revised rates or cancellations have been reflected in the revised regional distributions.

In the preliminary assessment, OPP used NASS-derived usage information for every region except the Southwest Fruitful Rim (California), where it used census data collected by California Department of Pesticide Regulations. Since then, OPP collected usage data from NASS for the same Central Valley area to compare the impacts of using a census (e.g., all data collected) source such as CDPR or a survey such as NASS. This comparison is discussed in Appendix III.E.11. The NASS usage information for the Central Valley has been added to this appendix.

a. Region A: Florida (Palm Beach Co)

Crop	Crop Acres	Pesticide	% Treated	Number of Applications	Rate (lbs ai/a)	Application Method	Stage	Date(s)	Range
Corn, Sweet (Fresh)	24,022 Planted	Chlorpyrifos	80	2(1.8)	0.66	Aerial	Foliar	October 1 February 15	Oct1-Dec1 Feb15-May15
		Phorate	69	1	1.3	Ground	At Planting	Sept 1	Sep1-Feb1
Grapefruit	1,971 Planted	Chlorpyrifos	5	2(1.5)	1.88	Ground	Foliar	January 1 February 15	Jan1-Mar31
Lettuce	3,200 Planted	Diazinon	51	2(1.7)	0.69	Ground	Foliar	October 15 January 22	Oct15-Apr30
Oranges	5,850 Planted	Chlorpyrifos	5	2(2.2)	0.57	Ground	Foliar	January 1 February 15	Jan1-Mar31
Peppers (Bell)	4,000 Planted	Acephate	28	3	0.76	Ground	Foliar	October 15 December 5 January 25	Oct15-Mar15
Sod	11,154 Planted	No OP Information Available							
Sugarcane	430,548 Planted	Ethoprop	6	1	3.5	Ground	At Planting	September 1	Sep1-Jan15
		Phorate	10	1	4	Ground	At Planting	September 1	Sep1-Jan15
Tangelos	352 Planted	Chlorpyrifos	5	1(1.2)	1.01	Ground	At Planting	January 1	Jan1-Mar31
Tangerines	1,216 Planted	Chlorpyrifos	10	2(1.7)	0.72	Ground	Foliar	January 1 February 15	Jan1-Mar31
Tomatoes (Fresh)	2,800 Planted	Diazinon	7	2(1.4)	0.58	Ground	Foliar	November 1 January 23	Nov1-Apr15
		Methamidophos	14	3(3.2)	0.47	Ground	Foliar	November 1 December 26 February 19	Nov1-Apr15

Sources:

Corn, Sweet

Total Acres: Florida Cooperative Extension Service, Palm Beach County. Palm Beach County Vegetable Production (1999-2000 Growing Season)

Pesticide Usage: NASS 2000 Vegetable Summary

Grapefruit

Total Acres: Florida Agricultural Statistics Service. Commercial Citrus Inventory 2000

Pesticide Usage: NASS 1997 Fruits Summary

Lettuce

Total Acres: Florida Cooperative Extension Service, Palm Beach County. Palm Beach County Vegetable Production (1999-2000 Growing Season)

Pesticide Usage: NASS 2000 Vegetable Summary

Oranges

Total Acres: Florida Agricultural Statistics Service. Commercial Citrus Inventory 2000

Pesticide Usage: NASS 1997 Fruits Summary

Peppers

Total Acres: Florida Cooperative Extension Service, Palm Beach County. Palm Beach County Vegetable Production (1999-2000 Growing Season)

Pesticide Usage: NASS 1998 Vegetable Summary

Sugarcane

Total Acres: Florida Cooperative Extension Service, Palm Beach County. Palm Beach County Agricultural Acreage (1999-2000 Growing Season)

Pesticide Usage: US EPA Organophosphate Use/Usage Matrix - Crop Summary (Draft). Site: Sugarcane. Region: National (Florida, Louisiana, Texas and Hawaii). Date: 01/29/99.

Tangelos

Total Acres: Florida Agricultural Statistics Service. Commercial Citrus Inventory 2000

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Tangerines

Total Acres: Florida Agricultural Statistics Service. Commercial Citrus Inventory 2000

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Tomatoes

Total Acres: Florida Cooperative Extension Service, Palm Beach County. Palm Beach County Vegetable Production (1999-2000 Growing Season)

Pesticide Usage: NASS 2000 Vegetable Summary

b. Region B: Northwest (Willamette Valley, OR)

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range	
Apples	1,880 Harvested	Azinphos-methyl	86	3 (2.7)	0.89	Ground	Foliar	May 1 June 11 July 22	May1-Sep1	
		Chlorpyrifos	81	1 (1.1)	1.84	Ground	Dormant-DelayedD	February 1	Feb1-Apr1	
		Diazinon	4	2 (1.4)	0.65	Ground	Dormant-Foliar	February 1 May 15	Feb1-Sep1	
		Dimethoate	29	1	0.77	Ground	Foliar	May 1	May1-Jul1	
		Malathion	6	2 (1.9)	0.94	Ground	Foliar	May 1 June 1	May1-Jul1	
		Methyl-para.	45	2	1.39	Use canceled.				
		Phosmet	16	2 (1.5)	2.24	Ground	Foliar	May 1 July 1	May1-Sep1	
Beans, Snap	22,081a Harvested	Diazinon	21	1	0.55	Ground	Foliar	June 15	Jun 15-Aug31	
		Ethoprop	53	1	2.42	Ground	At Planting	April 30	Apr30-Jun30	
Blackberries	5,935	Azinphos-Me	11	1(1.1)	0.41	Ground	Foliar	April 1	Ap 1-June 30	
		Diazinon	16	1	1.16	Ground	Foliar	March 15	March 15-March 30	
Blueberries	2,395	Diazinon	28	1	0.8	Ground	Foliar	March 1	Mar 1-Jun 30	
		Malathion	9	2(1.5)	1.62	Ground	Foliar	April 1 June 2	Ap 1-Jul 31	
Broccoli	2,560b Harvested	Bensulide	15	1(1.1)	3.64	Ground	At Planting	May 1	May 1-Jul31	
		Chlorpyrifos	31	1(1.2)	1.28	Ground	At Planting	May 1	May 1-Jul31	
		Diazinon	21	1(1.3)	0.81	Foliar	Foliar	July 1	Jul1-Sep15	
		Disulfoton	6	1	1.02	Foliar	Foliar	July 1	Jul1-Sep15	
		Naled	6	1	1.4	Foliar	Foliar	July 1	Jul1-Sep15	
Cabbage	885c Harvested	Bensulide	10	1	3.82	Ground	At Planting	March 15	Mar15-Jul31	
		Chlorpyrifos	45	1(1.1)	0.67	Ground	At Planting	March 15	Mar15-Jul31	
		Dimethoate	40	2(1.8)	0.48	Ground	Foliar	July 15 August 7	Jul15-Aug30	
		ODM	48	2(1.4)	0.57	Ground	Foliar	July 15	Jul15-Aug30	
Cauliflower	1,910d Harvested	Acephate	4	1	0.84	Ground	Foliar	August 15	Aug15-Oct15	
		Diazinon	6	2(1.4)	0.54	Ground	Foliar	August 15 Sept 15	Aug15-Oct15	
		Dimethoate	32	1(1.2)	0.47	Ground	Foliar	August 15	Aug15-Oct15	
		Naled	14	1	1.41	Ground	Foliar	August 15	Aug15-Oct15	
Cherries, sweet	3,195 Harvested	Azinphos-methyl	25	1 (1.2)	0.75	Ground	Foliar	May 15	May15-Jun30	

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range
		Chlorpyrifos	65	1	2.2	Ground	Dormant-DelayedD	February 1	Feb1-Mar30
		Diazinon	10	1	0.97	Ground	Dormant-Foliar	February 1	Feb1-Jul15
		Dimethoate	24	1	0.81	Ground	Foliar	April 15	Apr15-Jun15
		Malathion	66	4 (4.1)	1.16	Aerial	Foliar	May 15 May 30 June 15 June 30	May15-Jul15
Cherries, tart		Dimethoate	79	1	0.91	Ground	Foliar	April 15	Apr15-Jun15
		Diazinon	48	1 (1.3)	0.91	Ground	Foliar	February 1	Feb1-Jul15
		Phosmet	7	2 (1.5)	1.3	Ground	Foliar	May 15 June 7	May15-Jun30
Christmas trees	38,018	Chlorpyrifos	6	1	1	Ground	Foliar	May 1	May 1-Jun 15
		Dimethoate	7	1	0.5	Ground	Foliar	May 1	May 1-Jun 15
		ODM	3	1	0.38	Ground	Foliar	April 15	April 15-Jun 15
Corn, sweet	35,070e Planted	Chlorpyrifos	28	1	1.33	Ground	At Planting	April 15	Apr15-Jul10
Cucumbers	2,815f Harvested	Bensulide	23	1	3.24	Ground	At Planting	May 10	May10-Jun30
Hazelnut	29,080 Bearing Trees	Chlorpyrifos	20	1(1.2)	1.24	Ground	Foliar	April 15	Apr15-Jul30
Hops	5,810 Harvested	Diazinon	50	3	1	Ground	Foliar	June 1 July 2 August 2	Jun1-Aug 31
Mint	12,100g Harvested	Acephate	39	1	0.97	Ground	Foliar	July 15	Jun15-Jul15
		Chlorpyrifos	32	1	1.89	Ground	Foliar	August 20	Aug20-Sep30
Nursery Trees, and Shrubs	21,000	Acephate	25	1	1	Ground	Foliar	April 1	Apr 1-Sept 1
		Chlorpyrifos	25	1	1	Ground	Foliar	April 1	Apr 1-Sept 1
		Diazinon	15	1	0.69	Ground	Foliar	April 1	Apr 1-Sept 1
Onions, Dry	1,580h Harvested	Chlorpyrifos	89	1	1.02	Ground	At Planting	March 20	Mar20-Apr15
		Diazinon	9	1	0.8	Ground	Foliar	July 1	Jul1-Aug31
		Malathion	8	2 (1.5)	1.86	Ground	Foliar	July 1 August 1	Jul1-Aug31
		Methyl parathion	35	2	0.5	Ground	Foliar	July 1 August 1	Jul1-Aug31
Orchard grass	16,400	Chlorpyrifos	88	1	1.0	Ground	Foliar	April 1	April 1-June 1

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range
Pears	428i Harvested	Azinphos-methyl	54	2 (1.6)	0.97	Ground	Foliar	April 15 June 15	Apr15-Aug15
		Chlorpyrifos	59	1	2.02	Ground	Dormant-delayed D	February 1	Feb1-Apr1
		Methidathion	2	1	1.31	Ground	Dormant-delayed D	February 1	Feb1-Apr1
		Phosmet	66	2 (1.7)	2.86	Ground	Foliar	April 15	Apr15-Aug15
		Diazinon	9	1	1.04	Ground	Foliar	May 15	May15-Aug15
Peas, green	3,635j Harvested	Dimethoate	67	1(1.1)	0.18	Ground	Foliar	May 1	May1-Jun1
		Diazinon	3	1	0.5	Ground	Foliar	May 1	May1-Jun1
Raspberries	3,345	Diazinon	38	1	1.06	Ground	Foliar	March 1	Mar15-30
		Malathion	52	1	2.06	Ground	Foliar	May 1	May1-Jul30
Squash	2,795k	Malathion	9	2 (1.5)	1.43	Ground	Foliar	July 1 July 16	Jul1-Aug1

* Use and usage data is for California; NASS data not reported for Oregon.
a Includes fresh (156), processed (19,105), and non-disclosed processed (2,280) for 2000.
b Includes fresh (70) for 2000 and non-disclosed processed (2,490) for 1998.
c Includes Clackamas, Marion, Polk and non-disclosed counties for 2000.
d Includes fresh (25) acreage for 2000 and non-disclosed Willamette Valley for 1998
e Includes fresh (3,740), processed (15,790), and non-disclosed processed (15,540) for 2000.
f Includes fresh (215) for 2000 and non-disclosed processed (2,600) for 1998.
g Peppermint for oil in 2000.
h Dry storage onions for 2000.
i Includes Bartlett (250), Asian (138), and winter (40) pears for 2000.
j Includes non-disclosed (3,635) for Willamette Valley for 2000.
k Includes squash and pumpkins (2,795) for 2000.

Sources:

Apple

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 5105 Apples in 2000

Pesticide Usage: Azinphos-methyl, chlorpyrifos, diazinon, dimethoate and phosmet: NASS 1999 Fruit and Nut Summary; malathion: NASS 1997 Fruits Summary

Bean, Snap

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7210 Snap Beans, Fresh in 2000 and 7310 Snap Beans, Processed in 2000. Includes fresh (156 acres) and disclosed and non-disclosed processed (21,925 acres) Willamette Valley counties

Pesticide Usage: NASS 2000 Vegetable Summary

Blackberries

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 6122 Evergreen Blackberries in 200 and 6124 Marion and Other Blackberries in 2000

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Blueberries

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 6140 Blueberries in 2000

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Broccoli

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7260 Broccoli, Fresh in 2000 and 7360 Broccoli Processed in 1998. Includes fresh (70 acres) for 2000 and non-disclosed processed (2,490 acres) Willamette Valley counties for 1998

Pesticide Usage: NASS 2000 Vegetable Summary. Data from California was used as a surrogate for Oregon; there was no NASS survey of broccoli in Oregon.

Cabbage

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7140 Cabbage in 2000. Includes disclosed and undisclosed Willamette Valley counties.

Pesticide Usage: NASS 2000 Vegetable Summary. Data from California was used as a surrogate for Oregon; there was no NASS survey of cabbage in Oregon.

Cauliflower

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7270 Cauliflower, Fresh in 2000 and 7370 Cauliflower, Processed in 1998. Includes fresh (25 acres) and non-disclosed processed (1,885) Willamette Valley counties

Pesticide Usage: NASS 2000 Vegetable Summary. Data from California was used as a surrogate for Oregon; there was no NASS survey of cauliflower in Oregon.

Cherries, Sweet

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 5110 Sweet Cherries in 2000

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Cherries, Tart

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 5115 Tart Cherries in 2000

Pesticide Usage: Dimethoate: NASS 1999 Fruit and Nut Summary; diazinon and phosmet: NASS 1997 Fruits Summary

Christmas Trees

Total Acres: Jenkins, J. and P. Thomson. 1998. Pesticide Use in Oregon's Drainage Basins. Agriculture Chemistry Extension, Department of Environmental and Molecular Toxicology, Oregon State University.

Pesticide Usage: Rinehold, J.W. 1999. USDA Crop Profile for Christmas Trees in Oregon and Washington. Revised January 1999.

Corn, Sweet

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7240 Sweet Corn, Fresh in 2000 and 7340 Sweet Corn, Processed in 2000. Includes fresh (3,740 acres) and disclosed (15,790 acres) and non-disclosed (15,540 acres) Willamette Valley counties

Pesticide Usage: NASS 2000 Vegetable Summary

Cucumbers

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7280 Cucumbers, Fresh in 2000 and 7380 Cucumbers, Processed in 1998. Includes fresh (215 acres) and non-disclosed processed (2,600 acres) for Willamette Valley Counties.

Pesticide Usage: NASS 2000 Vegetable Summary. Data for fresh cucumbers in California was used as a surrogate for Oregon; there were no NASS surveys of cucumbers in Oregon.

Hazelnuts

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 5150 Hazelnuts in 2000

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Hops

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 4220 Hops in 2000. Includes non-disclosed (5,810 acres) Willamette counties.

Pesticide Usage: USDA 1999. Crop Profile for Hops in Oregon. Revised November 23, 1999

Mint

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 4205 Peppermint Oil in 2000

Pesticide Usage: Rinehold, J.W., J.J. Jenkins and R. Lundy. 1999. Pesticide use in Oregon peppermint and spearmint. Draft. Prepared for the Mint Industry Research Council, Stevenson, WA, 1999. Summary cited in USDA Crop Profile for Mint in Oregon, Revised September 2, 1999.

Nursery: Trees and Shrubs

Total Acres: Rinehold, J. and J.J. Jenkins. 1994 Pesticide Use Survey. Oregon Pesticide Use Estimates for Seed and Specialty Crops, 1992. Oregon State University Publication No. EM 8658

Pesticide Usage: Rinehold, J. and J.J. Jenkins. 1994 Pesticide Use Survey. Oregon Pesticide Use Estimates for Seed and Specialty Crops, 1992. Oregon State University Publication No. EM 8658

Onions, Dry

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7115 Dry Storage Onions in 2000.

Pesticide Usage: NASS Vegetable Summary

Orchardgrass

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 3165 for Orchardgrass in 2000

Pesticide Usage: Rinehold, J. and J.J. Jenkins. 1994 Pesticide Use Survey. Oregon Pesticide Use Estimates for Seed and Specialty Crops, 1992. Oregon State University Publication No. EM 8658

Pears

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 5125 Bartlett Pears in 2000, 5127 Asian Pears in 2000, and 5130 Winter Pears in 2000

Pesticide Usage: All pesticides except diazinon: NASS 1999 Fruit and Nut Summary; diazinon: NASS 1997 Fruits Summary

Peas, Green

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7420 Green Peas in 2000. Includes non-disclosed (3,635 acres) Willamette Valley counties.

Pesticide Usage: Dimethoate: NASS 2000 Vegetable Summary; diazinon: 1998 Vegetable Summary

Raspberries

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 6110 Red Raspberries in 2000 and 6115 Black Raspberries in 2000.

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Squash

Total Acres: Oregon State University Extension Service, Oregon Agricultural Information Network (OAIN) Commodity Report (By County) for 7440 Squash and Pumpkins in 2000. Includes acreage for both squash and pumpkins.

Pesticide Usage: NASS 2000 Vegetable Summary. Data from California was used as a surrogate for Oregon; squash was not surveyed by NASS in Oregon.

c. Region C: Arid/Semiarid West (Central Valley); CDPR Use Information

Crop Stages and Pesticide Use for Alfalfa

Week	Midpoint Date	Crop Stage				Chlorpyrifos	Dimethoate	Malathion	Methyl Para.	Phosmet
		P	E	M	H					
Total Pounds (AI) Applied:						32,602	1,063	2,446	925	6,267
Total Acre Treatments:						57,959	3,038	2,168	1,109	8,799
Application Rate (lbs ai/Acre), 1998:						0.56	0.35	1.13	0.83	0.71
Total Acre Treat. / Acre Planted (88,940):						6.5e-01	3.4e-02	2.4e-02	1.2e-02	9.9e-02
1	January 4									
2	January 11									
3	January 18									
4	January 25									
5	February 1									
6	February 8									
7	February 15									
8	February 22									
9	March 1									
10	March 8	P				1	1		3	1
11	March 15	P	E			1	1		1	2
12	March 22	P	E			1	1	1	1	1
13	March 29	P	E				1	1		1
14	April 5	P	E					1		
15	April 12	P	E					1		
16	April 19	P	E					1		
17	April 26	P	E	M		1				
18	May 3		E	M						
19	May 10		E	M						
20	May 17			M	H1					
21	May 24			M	H1		1			
22	May 31			M	H1					
23	June 7			M	H1					
24	June 14			M	H1					
25	June 21			M	H1					
26	June 28				H1					
27	July 5				H1					
28	July 12				H1					
29	July 19									
30	July 26				H2					
31	August 2				H2					
32	August 9				H2					
33	August 16				H2					
34	August 23				H2					
35	August 30				H2	1				
36	September 6									
37	September 13				H3					
38	September 20				H3					
39	September 27				H3					
40	October 4				H3					
41	October 11									
...	...									
51	December 20									
52	December 27									

Assume alfalfa is planted in the spring and it is cut at approximate 30 day intervals after the first harvest.

Crop Stages and Pesticide Use for Broccoli (Brassica)

Week	Midpoint Date	Crop Stage				Diazinon	Dimethoate	Methamidophos	ODM
		P	E	M	H				
Total Pounds (AI) Applied:					25	459	694	195	
Total Acre Treatments:					25	1,273	466	390	
Application Rate (lbs ai/Acre), 1998:					1.00	0.36	1.49	0.50	
Total Acre Treat. / Acre Planted (3,306):					7.6e-03	3.9e-01	1.4e-01	1.2e-01	
1	January 4								
2	January 11							1	
3	January 18								
4	January 25								
5	February 1								
6	February 8								
7	February 15							1	
8	February 22								
9	March 1								
10	March 8								
11	March 15								
12	March 22								
...	...								
19	May 10								
20	May 17								
21	May 24								
22	May 31								
23	June 7								
24	June 14								
25	June 21								
26	June 28								
27	July 5								
28	July 12								
29	July 19								
30	July 26	P							
31	August 2	P	E						
32	August 9	P	E						
33	August 16	P	E		5	1			
34	August 23	P	E						
35	August 30	P	E			1			
36	September 6	P	E			1	1		
37	September 13	P	E			1			
38	September 20	P	E	M					
39	September 27	P	E	M			3		
40	October 4		E	M	H				
41	October 11			M	H	1			
42	October 18			M	H		1	3	
43	October 25			M	H				
44	November 1			M	H				
45	November 8			M	H				
46	November 15			M	H				
47	November 22			M	H				
48	November 29				H				
49	December 6				H				
50	December 13				H				
51	December 20				H				
52	December 27				H				

Crop Stages and Pesticide Use for Sugar Beets (Root & Tubers)

Week	Midpoint Date	Crop Stage				Chlorpyrifos	Methamidophos	Naled	ODM	Phorate
		P	E	M	H					
Total Pounds (Al) Applied:					2,479	668	48	223	40	
Total Acre Treatments:					4,051	914	48	506	165	
Application Rate (lbs ai/Acre), 1998:					0.61	0.73	1.01	0.44	0.25	
Total Acre Treat. / Acre Planted (8,607):					4.7e-01	1.1e-01	5.6e-03	5.9e-02	1.9e-02	
1	January 4	P								
2	January 11	P								
3	January 18	P	E							
4	January 25	P	E							
5	February 1	P	E							
6	February 8	P	E							
7	February 15	P	E							
8	February 22	P	E							
9	March 1		E							
10	March 8		E							
11	March 15									
12	March 22									
13	March 29									
14	April 5									
15	April 12								5	
16	April 19							2		
17	April 26							1		
18	May 3			M						
19	May 10			M		1				
20	May 17			M		1				
21	May 24			M						
22	May 31			M						
23	June 7			M						
24	June 14			M						
25	June 21			M						
26	June 28			M	H					
27	July 5				H					
28	July 12				H					
29	July 19				H					
30	July 26				H	1				
31	August 2				H		1			
32	August 9				H		1			
33	August 16				H	1	1			
34	August 23				H					
35	August 30				H					
36	September 6				H	1		1		
37	September 13					1				
38	September 20						5	1		
39	September 27									
40	October 4						1			
41	October 11									
42	October 18									
43	October 25									
44	November 1									
45	November 8									
46	November 15									
47	November 22									
48	November 29									
49	December 6									
50	December 13									
51	December 20									
52	December 27									

Crop Stages and Pesticide Use for Grapes (Small Fruits & Berries)

Week	Midpoint Date	Crop Stage				Chlorpyrifos	Diazinon	Dimethoate	Fenamiphos	Malathion	Naled
		P	E	M	H						
Total Pounds (Al) Applied:					636	144	186	4,252	1,965	657	
Total Acre Treatments:					342	428	658	2,638	1310	986	
Application Rate (lbs ai/Acre), 1998:					1.86	0.34	0.28	4.64	1.5	0.67	
Total Acre Treat. / Acre Planted (94,485):					3.6e-03	4.5e-03	7.0e-03	2.8e-02	1.4e-02	1.0e-02	
1	January 4		E								
2	January 11		E								
3	January 18		E								
4	January 25		E								
5	February 1		E								
6	February 8		E								
7	February 15		E								
8	February 22		E								
9	March 1										
10	March 8				3						
11	March 15				2						
12	March 22										
13	March 29										
14	April 5										
15	April 12										
16	April 19										
17	April 26										
18	May 3										
19	May 10							1			
20	May 17					1					
21	May 24										
22	May 31										
23	June 7										
24	June 14			M							
25	June 21			M					5	1	
26	June 28			M	H			1			
27	July 5			M	H			1			
28	July 12			M	H						
29	July 19			M	H		5			1	
30	July 26			M	H						
31	August 2			M	H					1	
32	August 9			M	H	4				1	
33	August 16			M	H						
34	August 23			M	H						
35	August 30			M	H						
36	September 6			M	H					1	
37	September 13			M	H						
38	September 20			M	H						
39	September 27			M	H						
40	October 4			M	H						
41	October 11				H						
42	October 18				H						
43	October 25				H						
44	November 1				H			1			
45	November 8				H						
46	November 15							1			
47	November 22										
48	November 29										
49	December 6										
50	December 13										
51	December 20										
52	December 27										

Crop Stages and Pesticide Use for Almonds (Tree Nuts)

Week	Midpoint Date	Crop Stage				Azinphos Methyl	Chlorpyrifos	Diazinon	Malathion	Methidathion	Naled	Phosmet
		P	E	M	H							
Total Pounds (AI) Applied:						6,080	48,154	23,307	1	12,335	1,091	14,249
Total Acre Treatments:						3,930	28,576	11,998	10	12,835	685	5,040
Application Rate (lbs ai/Acre), 1998:						1.55	1.69	1.86	0.13	0.96	1.59	2.83
Total Acre Treat. / Acre Planted (123,907):						3.2e-02	2.3e-01	9.7e-02	8.1e-05	1.0e-01	5.5e-03	4.1e-02
1	January 4		E									
2	January 11		E					1		1		
3	January 18		E					1		2	1	
4	January 25		E					2		1	3	
5	February 1							1		1	1	
6	February 8											
7	February 15											
8	February 22											
9	March 1											
10	March 8											
11	March 15											
12	March 22											1
13	March 29											
14	April 5											
15	April 12											
16	April 19											
17	April 26											
18	May 3											
19	May 10							1				
20	May 17							1				
21	May 24									5		
22	May 31											
23	June 7							1				
24	June 14											
25	June 21											
26	June 28			M								
27	July 5			M								
28	July 12			M		1						
29	July 19			M		2						1
30	July 26			M		2	1					1
31	August 2			M	H		1					1
32	August 9			M	H							1
33	August 16			M	H							
34	August 23			M	H							
35	August 30			M	H							
36	September 6			M	H							
37	September 13			M	H							
38	September 20				H							
39	September 27				H							
40	October 4				H							
41	October 11				H							
42	October 18				H							
43	October 25											
44	November 1											
45	November 8											
46	November 15											
47	November 22											
48	November 29											
49	December 6											
50	December 13											
51	December 20											
52	December 27											

Crop Stages and Pesticide Use for Apples (Pome Fruits)

Week	Midpoint Date	Crop Stage				Azinphos Methyl	Chlorpyrifos	Diazinon	Dimethoate	Methadathion	Phosmet
		P	E	M	H						
Total Pounds (AI) Applied:						2,234	4,237	1,743	85	2,411	16,107
Total Acre Treatments:						2,157	3,252	1,166	148	2,115	5,381
Application Rate (lbs ai/Acre), 1998:						1.04	1.30	1.49	0.57	1.14	2.99
Total Acre Treat. / Acre Planted (7,089):						3.0e-01	4.6e-01	1.6e-01	2.1e-02	3.0e-01	7.6e-01
1	January 4		E								
2	January 11		E								
3	January 18		E						1		
4	January 25		E					1	1		
5	February 1		E								
6	February 8										
7	February 15										
8	February 22								1		
9	March 1								1		
10	March 8						1	2		1	
11	March 15							1			
12	March 22										
13	March 29										
14	April 5										
15	April 12										
16	April 19							3			
17	April 26						1				
18	May 3						1				
19	May 10							1			
20	May 17										1
21	May 24					1	1				
22	May 31										1
23	June 7							1			
24	June 14			M		1					
25	June 21			M		1	1				
26	June 28			M	H						
27	July 5			M	H						1
28	July 12			M	H						
29	July 19			M	H	1					
30	July 26			M	H						1
31	August 2			M	H						
32	August 9			M	H						
33	August 16			M	H						
34	August 23			M	H	1		1			1
35	August 30			M	H						
36	September 6			M	H						
37	September 13			M	H						
38	September 20				H						
39	September 27				H						
40	October 4				H						
41	October 11										
42	October 18										
43	October 25										
44	November 1										
45	November 8										
46	November 15										
47	November 22										
48	November 29										
49	December 6										
50	December 13										
51	December 20										
52	December 27										

Crop Stages and Pesticide Use for Peaches (Stone Fruits)

Week	Midpoint Date	Crop Stage				Chlorpyrifos	Diazinon	Dimethoate	Fenamiphos	Methadathion	Naled	Phosmet
		P	E	M	H							
Total Pounds (AI) Applied:					738	3,805	36	224	2,370	306	9,376	
Total Acre Treatments:					408	1,818	10	64	2,044	189	3,399	
Application Rate (lbs ai/Acre), 1998:					1.81	2.09	3.58	3.50	1.16	1.62	2.76	
Total Acre Treat. / Acre Planted (10,537):					3.9e-02	1.7e-01	9.5e-04	6.1e-03	1.9e-01	1.8e-02	3.2e-01	
1	January 4		E							2		
2	January 11		E									
3	January 18		E						1	3		
4	January 25		E			2						
5	February 1		E			1						
6	February 8		E									
7	February 15		E									
8	February 22											
9	March 1								1			
10	March 8											
11	March 15											
12	March 22											
13	March 29											
14	April 5											
15	April 12											
16	April 19											
17	April 26											
18	May 3			M								
19	May 10			M	H							
20	May 17			M	H							
21	May 24			M	H							
22	May 31			M	H			2			1	
23	June 7			M	H			5			1	
24	June 14			M	H						1	
25	June 21			M	H							
26	June 28			M	H							
27	July 5			M	H						1	
28	July 12			M	H							
29	July 19			M	H						1	
30	July 26			M	H							
31	August 2			M	H							
32	August 9			M	H							
33	August 16			M	H							
34	August 23			M	H							
35	August 30			M	H							
36	September 6			M	H							
37	September 13				H			1				
38	September 20				H							
39	September 27				H							
40	October 4				H			2				
41	October 11				H							
42	October 18				H							
43	October 25				H							
44	November 1											
45	November 8											
46	November 15											
47	November 22						2					
48	November 29											
49	December 6					2	1		1			
50	December 13											
51	December 20						1		2			
52	December 27						1					

Crop Stages and Pesticide Use for Tomatoes (Fruiting Veg.)

Week	Midpoint Date	Crop Stage				Acephate	Chlorpyrifos	Diazinon	Dimethoate	Malathion	Methamidophos
		P	E	M	H						
Total Pounds (AI) Applied:					217	127	1,500	17,091	113	5,448	
Total Acre Treatments:					268	210	1,361	39,007	96	6,436	
Application Rate (lbs ai/Acre), 1998:					0.81	0.60	1.10	0.44	1.18	0.85	
Total Acre Treat. / Acre Planted (57,374):					4.7e-03	3.7e-03	2.4e-02	6.8e-01	1.7e-03	1.1e-01	
1	January 4	P									
2	January 11	P	E								
3	January 18	P	E								
4	January 25	P	E								
5	February 1	P	E								
6	February 8	P	E								
7	February 15	P	E								
8	February 22	P	E								
9	March 1	P	E								
10	March 8	P	E				1				
11	March 15	P	E								
12	March 22	P	E								
13	March 29	P	E								
14	April 5	P	E								
15	April 12	P	E								
16	April 19	P	E								
17	April 26	P	E								
18	May 3		E	M			1				
19	May 10			M	H						
20	May 17			M	H		1				
21	May 24			M	H		1				
22	May 31			M	H						
23	June 7			M	H						
24	June 14			M	H						
25	June 21			M	H						
26	June 28			M	H						
27	July 5			M	H			1			
28	July 12			M	H		1	1		1	
29	July 19			M	H			1			
30	July 26			M	H			1	2	1	
31	August 2			M	H		2	1	2		
32	August 9			M	H	2					
33	August 16			M	H				1	1	
34	August 23			M	H		2	1			
35	August 30			M	H	2					
36	September 6				H	1				1	
37	September 13				H						
38	September 20				H						
39	September 27				H					1	
40	October 4				H						
41	October 11				H						
42	October 18				H						
43	October 25				H						
44	November 1				H						
45	November 8				H						
46	November 15				H						
47	November 22				H						
48	November 29				H						
49	December 6				H						
50	December 13				H						
51	December 20				H						
52	December 27				H						

Crop Stages for Cantaloupes (Melons, Cucurbits)

Week	Midpoint Date	Crop Stage				Diazinon	Dimethoate	ODM		
		P	E	M	H					
Total Pounds (AI) Applied:					140	102	24			
Total Acre Treatments:					415	212	65			
Application Rate (lbs ai/Acre), 1998:					0.34	0.48	0.37			
Total Acre Treat. / Acre Planted (1,464):					2.8e-01	1.4e-01	4.4e-02			
1	January 4									
2	January 11									
3	January 18									
4	January 25									
5	February 1									
6	February 8	P								
7	February 15	P								
8	February 22	P	E							
9	March 1	P	E							
10	March 8	P	E							
11	March 15	P	E							
12	March 22	P	E							
13	March 29	P	E							
14	April 5	P	E							
15	April 12	P	E							
16	April 19	P	E							
17	April 26	P	E							
18	May 3	P	E							
19	May 10	P	E							
20	May 17	P	E		1					
21	May 24	P	E		1					
22	May 31	P	E							
23	June 7	P	E							
24	June 14	P	E							
25	June 21	P	E							
26	June 28	P	E							
27	July 5	P	E	M						
28	July 12	P	E	M	H					
29	July 19	P	E	M	H					
30	July 26	P	E	M	H			5		
31	August 2		E	M	H	3	2			
32	August 9			M	H		2			
33	August 16			M	H		1			
34	August 23			M	H					
35	August 30			M	H					
36	September 6			M	H					
37	September 13			M	H					
38	September 20			M	H					
39	September 27			M	H					
40	October 4			M	H					
41	October 11			M	H					
42	October 18			M	H					
43	October 25				H					
44	November 1									
45	November 8									
46	November 15									
47	November 22									
48	November 29									
49	December 6									
50	December 13									
51	December 20									
52	December 27									

Crop Stages for Asparagus

Week	Midpoint Date	Crop Stage				Chlorpyrifos	Disulfoton	Malathion
		P	E	M	H			
Total Pounds (AI) Applied:					2,752	16,823	1,768	
Total Acre Treatments:					4,270	15,967	1,791	
Application Rate (lbs ai/Acre), 1998:					0.64	1.05	0.99	
Total Acre Treat. / Acre Planted (22,633):					1.9e-01	7.1e-01	7.9e-02	
1	January 4							
2	January 11							
3	January 18							
4	January 25							
5	February 1							
6	February 8							
7	February 15		E					
8	February 22		E	M				
9	March 1		E	M	H			
10	March 8		E	M	H			
11	March 15		E	M	H			
12	March 22		E	M	H			
13	March 29		E	M	H			
14	April 5		E	M	H			
15	April 12		E	M	H			
16	April 19		E	M	H			
17	April 26		E	M	H			
18	May 3		E	M	H			
19	May 10		E	M	H			
20	May 17		E	M	H			
21	May 24		E	M	H			
22	May 31		E	M	H			
23	June 7		E	M	H		3	
24	June 14			M	H			
25	June 21				H		1	
26	June 28				H		1	
27	July 5				1			
28	July 12							
29	July 19							
30	July 26				1			
31	August 2				1			
32	August 9					1		
33	August 16							
34	August 23							
35	August 30							
36	September 6					1		
37	September 13				1			
38	September 20					1		
39	September 27							
40	October 4					1		
41	October 11					1		
42	October 18				1			
43	October 25							
44	November 1							
45	November 8							
46	November 15							
47	November 22							
48	November 29							
49	December 6							
50	December 13							
51	December 20							
52	December 27							

Crop Stages for Field Corn

Week	Midpoint Date	Crop Stage				Chlorpyrifos	Dimethoate	Disulfoton	Malathion	Phorate
		P	E	M	H					
Total Pounds (AI) Applied:						8,731	45	171	64	19,484
Total Acre Treatments:						7,686	140	169	128	16,682
Application Rate (lbs ai/Acre), 1998:						1.14	0.32	1.01	0.50	1.17
Total Acre Treat. / Acre Planted (95,151):						8.1e-02	1.5e-03	1.8e-03	1.3e-03	1.8e-01
1	January 4									
2	January 11									
3	January 18									
4	January 25									
5	February 1									
6	February 8									
7	February 15									
8	February 22									
9	March 1									
10	March 8									
11	March 15						4			
12	March 22								2	
13	March 29	P								
14	April 5	P	E						1	
15	April 12	P	E							
16	April 19	P	E							
17	April 26	P	E							
18	May 3	P	E							1
19	May 10	P	E							
20	May 17	P	E			1				1
21	May 24	P	E							
22	May 31	P	E							1
23	June 7	P	E			1				1
24	June 14	P	E			1	1			1
25	June 21	P	E							
26	June 28	P	E			1				
27	July 5	P	E							
28	July 12	P	E			1				
29	July 19	P	E	M						
30	July 26	P	E	M						
31	August 2	P	E	M	H					
32	August 9		E	M	H					
33	August 16			M	H			5	1	
34	August 23			M	H				1	
35	August 30			M	H					
36	September 6			M	H					
37	September 13			M	H					
38	September 20			M	H					
39	September 27			M	H					
40	October 4			M	H					
41	October 11			M	H					
42	October 18			M	H					
43	October 25			M	H					
44	November 1			M	H					
45	November 8				H					
46	November 15				H					
47	November 22									
48	November 29									
49	December 6									
50	December 13									
51	December 20									
52	December 27									

Crop Stages for Dry Beans

Week	Midpoint Date	Crop Stage				Acephate	Dimethoate	Malathion	Naled
		P	E	M	H				
Total Pounds (AI) Applied:					20,791	9,222	1,294	1,923	
Total Acre Treatments:					24,373	22,705	1,214	2,215	
Application Rate (lbs ai/Acre), 1998:					0.85	0.41	1.07	0.87	
Total Acre Treat. / Acre Planted (22,312):					1.1e+00	1.0e+00	5.4e-02	9.9e-02	
1	January 4								
2	January 11								
3	January 18								
4	January 25								
5	February 1								
6	February 8								
7	February 15								
8	February 22								
9	March 1								
10	March 8								
11	March 15								
12	March 22								
13	March 29								
14	April 5	P							
15	April 12	P	E						
16	April 19	P	E						
17	April 26	P	E						
18	May 3	P	E						
19	May 10	P	E						
20	May 17	P	E						
21	May 24	P	E						
22	May 31		E						
23	June 7								
24	June 14								
25	June 21			M					
26	June 28			M	H		1		
27	July 5			M	H				
28	July 12			M	H				
29	July 19			M	H	1			
30	July 26			M	H				
31	August 2			M	H	1	1	1	
32	August 9			M	H	1	1	2	
33	August 16			M	H	1		1	
34	August 23			M	H				
35	August 30				H	1	1	1	
36	September 6					1		1	
37	September 13						1	2	
38	September 20								
39	September 27							1	
40	October 4								
41	October 11								
42	October 18								
43	October 25								
44	November 1								
45	November 8								
46	November 15								
47	November 22								
48	November 29								
49	December 6								
50	December 13								
51	December 20								
52	December 27								

d. Region C: Arid/Semi-arid West (Central Valley); Comparison of NASS and CDPR Use Information

Chemical	NASS Agricultural Chemical Usage Summary (1997-2000)					CDPR Pesticide Usage Report information (1997)				
	Crop/Use	%Treated	Rate(lbsai/a)	Date(s)	Range	Crop/Use	%Treated	Rate(lbsai/a)	Date(s)	Range
AzinphosMethyl	Almond	7	1.90	Jul 12	Jul12-Jul26	Almonds, walnuts	3	1.55	Jul 12	Jul 12-Jul 26
AzinphosMethyl	Walnut	4	1.74	May 24	May24-Sep6					
Chlorpyrifos	Almond	17	1.67	May 10	May10-Aug2	Almonds, walnuts	23	1.69	May 10	May 10-Aug 2
Chlorpyrifos	Walnut	30	1.72	May 17	May17-Aug30					
Diazinon	Almond	9	2.51	Jan 11	Jan11-Feb1	Almonds, walnuts	10	1.86	Jan 11	Jan 11-Feb 1
Diazinon	Walnut	1	1.24	May 10	May10-Aug23					
Methidathion	Almond	7	1.17	Jan 11	Jan11-Feb1	Almonds, walnuts	10	0.96	Jan 11	Jan 11-Feb 1
Methidathion	Walnut	2	2.28	May 10	May10-Aug30					
Naled	Walnut	3	0.74	Jul 19	Jul19-Sep13	Walnuts	1	1.59	Jan 18	Jan 18-Feb 1
Phosmet	Almond	18	2.49	Mar 29	Mar29-Aug2	Almonds, walnuts, pistachio	4	2.83	Mar 22	Mar 22-Aug 9
Phosmet	Walnut	13	3.75	Jan 14	Jun14-Aug16					
Phosmet	Pistachio	34	2.65	Jun14	Jun14-Aug30					
AzinphosMethyl	Apple	29	1.25	May 24, Jul 12	May24-Aug23	Apples, pears	30	1.04	May 24, Jul 12	May 24-Aug 23
AzinphosMethyl	Pear	34	1.09	May 10, May 24	May10-Jun7					
Chlorpyrifos	Apple	54	1.52	Mar 8, May 3	Mar8-Jun21	Apples	46	1.30	Mar 8, May 3	Mar 8-Jun 21
Diazinon	Apple	12	1.62	Jan 25, May 10	Jan25-Aug23	Apples, pears	16	1.49	Jan 25, May 10	Jan 25-Aug 23
Diazinon	Pear	11	1.39	Apr 26	Apr26					
Dimethoate	nr	nr	nr			Apples, pears	2	0.57	Apr 19	Apr 19-Jun 7
Methidathion	Apple	7	1.17	Jan 18	Jan18-Mar8	Apples, pears	30	1.14	Jan 18	Jan 18-Mar 8
Phosmet	Apple	38	2.51	May 17, Jul 5	May17-Aug23	Apples, pears	76	2.99	May 17, Jul 5	May 17-Aug 23
Phosmet	Pear	24	3.25	Jun 14, Jul 7	Jun14-Jul19					
Chlorpyrifos	Nectarine	39	1.98	Feb 1	Feb1	Peaches, apricots, nectarines	4	1.81	Jan 25	Jan 25-Dec 6
Chlorpyrifos	Peaches	17	1.80	Jan 18	Dec6-Feb1					
Diazinon	Apricot	15	1.53	Jan 25, Mar 26	Jan25-May24	Peaches, apricots, nectarines	17	2.09	Nov 22	Nov 22-Dec 27
Diazinon	Nectarine	22	1.84	Jan 25	Jan25-May31					
Diazinon	Peaches	19	1.80	Nov 22	Nov22-Dec27					
Dimethoate	nr	nr	nr			Peaches, apricots, nectarines	0.1	3.58	Jun 7	Jun 7
Methidathion	Apricot	7	1.37	Feb 8	Feb8-Mar8	Peaches, apricots, nectarines	19	1.16	Jan 18	Jan 25-Dec 20

Chemical	NASS Agricultural Chemical Usage Summary (1997-2000)					CDPR Pesticide Usage Report information (1997)				
	Crop/Use	%Treated	Rate(lbsai/a)	Date(s)	Range	Crop/Use	%Treated	Rate(lbsai/a)	Date(s)	Range
Methidathion	Nectarine	6	1.49	Feb 1, Dec 27	Feb1-Dec27					
Methidathion	Peaches	10	1.40	Dec 6	Dec6-Mar1					
Naled	nr	nr	nr			Peaches, apricots, nectarines	2	1.62	Jan 4	Jan 4-Jan 18
Phosmet	Apricot	18	2.06	Jan 11	Jan11-Jun14	Peaches, apricots, nectarines	32	2.76	May 31	May 31-Jul 19
Phosmet	Nectarine	52	1.56	May 31	May31-Jul19					
Phosmet	Peaches	22	2.35	May 31	May31-Jul19					
Chlorpyrifos						Asparagus	19	0.64	Jul 5	Jul 5-Oct 18
Disulfoton	Asparagus	73	0.97	Aug 9, Sep 13	Aug9-Oct11	Asparagus	71	1.05	Aug 9, Sep 13	Aug 9-Oct 11
Malathion	nr	nr	nr			Asparagus	8	0.99	Jun 7	Jun 7- Jun 28
Acephate	Legume (beans)	30	0.78	Aug 2, Aug 23	Aug2-Sep6	Legume (dry/succulent beans)	100+	0.85	Aug 2, Aug 23	Aug 2-Sep 6
Dimethoate	Legume (beans)	58	0.42	Jul 19, Aug 16	Jul19-Sep13	Legume (dry/succulent beans)	100+	0.41	Jul 19, Aug 16	Jul 19-Sep 13
Malathion	nr	nr	nr			Legume (dry/succulent beans)	5	1.07	Jun 28	Jun 28-Aug 16
Naled	nr	nr	nr			Legume (dry/succulent beans)	10	0.87	Aug 30	Aug 30-Sep 27
Bensulide	Broccoli, brassicas	15	2.64	Aug 2	Aug2-Oct25					
Chlorpyrifos	Broccoli, brassicas	31	1.28	Jun 28	Jun28-Oct11					
Diazinon	Broccoli, brassicas	21	0.81	Aug 16	Aug16	Broccoli, brassicas	1	1.00	Aug 16	Aug 16
Dimethoate	Broccoli, brassicas	6	1.02	Sep6	Sep6-Sep20	Broccoli, brassicas	39	0.36	Aug 16	Aug 16-Oct 11
Methamidophos	nr	nr	nr			Broccoli, brassicas	14	1.49	Sep6	Sep 6-Oct 18
Naled	Broccoli, brassicas	6	1.40	Apr 5	Apr5-Oct11					
ODM	Broccoli, brassicas	39	0.42	Jan 11	Jan11-Oct18	Broccoli, brassicas	12	0.50	Jan 11	Jan 11-Oct 18
Bensulide	Cantaloupe	18	2.19	Jan 11	Jan 11-Mar 6					
Bensulide	Honeydew Melon	5	2.41	Jan 11	Jan 11-Mar 8					
Diazinon	Cantaloupe	15	0.71	May 17	May17-Aug2	Cantaloupe	28	0.34	May 17	May 17-Aug 2
Diazinon	Honeydew Melon	6	1.11	May 17	May17-Aug2					
Dimethoate	Honeydew Melon	19	0.45	Apr 12	Apr 12-Sep 13	Cantaloupe	14	0.48	Aug 2	Aug 2-Aug 16
ODM	nr	nr	nr			Cantaloupe	4	0.37	Jul 26	Jul 26

Chemical	NASS Agricultural Chemical Usage Summary (1997-2000)					CDPR Pesticide Usage Report information (1997)				
	Crop/Use	%Treated	Rate(lbsai/a)	Date(s)	Range	Crop/Use	%Treated	Rate(lbsai/a)	Date(s)	Range
Acephate	nr	nr	nr			Tomato	0.5	0.81	Aug 9	Aug 9-sep 6
Chlorpyrifos	nr	nr	nr			Tomato	0.4	0.60	Jul 12	Jul 12-Aug 23
Diazinon	nr	nr	nr			Tomato	2	1.10	Mar 8	Mar 8-Jul 12
Dimethoate	Tomato	13	0.42	Jul 5, Aug 2	Jul5-Aug23	Tomato	68	0.44	Jul 5, Aug 2	Jul 5-Aug 23
Malathion	nr	nr	nr			Tomato	0.2	1.18	Jul 26	Jul 26-Aug 16
Methamidophos	Tomato	10	0.77	Jul 12	Jul12-Sep27	Tomato	11	0.85	Jul 12	Jul 12-Sep 27
Chlorpyrifos	Alfalfa	65	0.56	Mar 8	Mar8-Aug30	Alfalfa	65	0.56	Mar 8	Mar 8-Aug 30
Dimethoate	Alfalfa	3	0.35	Mar 8	Mar8-May24	Alfalfa	3	0.35	Mar 8	Mar 8-May 24
Malathion	Alfalfa	2	1.13	Mar 22	Mar22-Apr9	Alfalfa	2	1.13	Mar 22	Mar 22-Apr 19
MethylParathion	Alfalfa	1	0.83	Mar 8	Mar8-Mar22	Alfalfa	1	0.83	Mar 8	Mar 8-Mar 22
Phosmet	Alfalfa	10	0.71	Mar 8	Mar8-Mar29	Alfalfa	10	0.71	Mar 8	Mar 8-Mar 29
Chlorpyrifos	FieldCorn	8	1.14	May 17	May17-Jul12	FieldCorn	8	1.14	May 17	May 17-Jul 12
Dimethoate	FieldCorn	0.1	0.32	Mar 15	Mar15-Jun14	FieldCorn	0.1	0.32	Mar 15	Mar 15-Jun 14
Malathion	FieldCorn	0.1	0.50	Mar 22	Mar22-Aug23	FieldCorn	0.1	0.50	Mar 22	Mar 22-Aug 23
Phorate	FieldCorn	18	1.17	May 3	May3-Jun14	FieldCorn	18	1.17	May 3	May 3-Jun 14
Chlorpyrifos	nr	nr	nr			Grapes	0.4	1.86	Mar 8	Mar 8-Mar 15
Diazinon	Grapes	2	0.98	May 17, Jun 28	May17-Aug9	Grapes	0.5	0.34	May 17, Jun 28	May 17-Aug 9
Dimethoate	Grapes	2	1.25	Jul 19	Jul 19	Grapes	1	0.28	Jul 19	Jul 19
Fenamiphos	nr	nr	nr			Grapes	3	1.61	May 10, Aug 16	May 10-Nov 15
Malathion	nr	nr	nr			Grapes	1	1.50	Jun 21	Jun 21
Naled	nr	nr	nr			Grapes	1	0.67	Jun 21	Jun 21-Sep 6
Chlorpyrifos	Sugarbeet	65	0.88	May 17	May17-Sep13	Sugarbeet	47	0.61	May 17	May 17-Sep 13
Methamidophos	nr	nr	nr			Sugarbeet	11	0.73	may 10	May 10-Oct 4
Naled	nr	nr	nr			Sugarbeet	1	1.01	Sep 20	Sep 20
DDVP	nr	nr	nr			Sugarbeet	1	0.20	Sep 20	Sep 20
ODM	nr	nr	nr			Sugarbeet	6	0.44	Apr 19	Apr 19-Sep 20
Phorate	nr	nr	nr			Sugarbeet	2	0.25	Apr 12	Apr 12

Sources:

Alfalfa

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Field Seed, Grass Seeds, Hay, Forage, and Silage

Pesticide Usage: California DPR 1998

Almond

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Apple

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: All pesticides except methidathion: NASS 1999 Fruit and Nut Summary; methidathion: NASS 1997 Fruits Summary

Apricot

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: Diazinon and phosmet: NASS 1999 Fruit and Nut Summary; methidathion: NASS 1997 Fruits Summary

Asparagus

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: NASS 2000 Vegetable Summary

Beans, Lima

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: NASS 2000 Vegetable Summary

Broccoli

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: All pesticides except fonofos and oxydemeton-methyl: NASS 2000 Vegetable Summary; fonofos and oxydemeton-methyl: NASS 1998 Vegetable Summary

Cantaloupe

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: NASS 2000 Vegetable Summary

Corn, Field

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Grains-Corn, Sorghum, Wheat, and Other Small Grains

Pesticide Usage: California DPR 1998

Grapes

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Fruits and Nuts

Pesticide Usage: Diazinon and fenamiphos: NASS 1999 Fruit and Nut Summary; dimethoate: 1997 NASS Fruits Summary

Honeydew

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: Bensulide and diazinon: NASS 2000 Vegetable Summary; dimethoate: NASS 1998 Vegetable Summary

Nectarine

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Peaches

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Pear

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Pistachio

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Sugarbeets

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Cotton, Tobacco, Soybeans, Dry Beans and Peas, Potatoes, Sugar Crops, and Peanuts

Pesticide Usage: NASS 2000 Field Crops Summary

Tomato

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: NASS 2000 Vegetable Summary

Walnut

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

e. Region D: Northeast/ North Central (Red River Valley/ND Use)

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range	Most Active
Corn	71,800	No OP use reported								
Potato	87,100	Azinphos-methyl	19	1	0.48	Aerial	Foliar	July31	Jul1-Aug30	
		Dimethoate	24	2(2.2)	0.27	Aerial	Foliar	July 31	Jul1-Aug30	
Sugarbeet	143,200	Chlorpyrifos	13	1(1.3)	1.25	Ground	Planting	May 10	Ap22-May30	Ap30-May20
		Phorate	4	1	1.03	Ground	Planting	May 10	Ap22-May30	Ap22-May3-
		Terbufos	69	1	1.97	Ground	Planting	May10	Ap22-May30	Ap30-May20
Wheat	840,900	Chlorpyrifos	4(3.6)	1	0.5	Aerial	Foliar	July 3	Jun15-Jul21	

Sources:

Corn

Total Acres: North Dakota Agricultural Statistics Service, Corn County Estimates, North Dakota 2000, Acres Planted

Pesticide Usage: No OPs published for this state in NASS surveys

Potato

Total Acres: North Dakota Agricultural Statistics Service, Potato County Estimates, North Dakota 2000, Acres Planted

Pesticide Usage: NASS 1999 Field Crops Summary

Sugarbeet

Total Acres: North Dakota Agricultural Statistics Service, Sugarbeets: Acreage and Production, North Dakota 1999, Acres Planted

Pesticide Usage: NASS 2000 Field Crops Summary

Wheat

Total Acres: North Dakota Agricultural Statistics Service, All Wheat County Estimates, North Dakota, 2000, Acres Planted

Pesticide Usage: Zollinger, R.K., G.K.Dahl, M.P. McMullen, P.A. Glogoza, A.G. Dexter, S.A. Fitterer, G.E. Waldhaus, & K. Ignaszewski. 1998. Pesticide use and pest management practices for major crops in North Dakota 1996. Extension Service Report No 43. No OP use published by NASS for wheat in North Dakota.

Other OP-Crop scenarios in Region D used in the preliminary cumulative assessment (12/01) but not in the revised assessment:

Region D: Heartland (Central Illinois)

Crop	Crop Acres	Pesticide	%Treated	Number of Applications	Rate (lbs ai/a)	Application Method	Stage	Date(s)	Range	Most Active
Corn	1,509,000 Planted for all purposes	Chlorpyrifos	13	1	1.2	Ground	Planting	May 9	Ap 22-May 28	Apr 30-May18
		Terbufos	4	1	1.24	Ground	Planting	May 9	Ap 22-May 28	Apr 30-May18
		Chlorethoxyfos	4	1	0.08	Ground	Planting	May 9	Ap 22-May 28	Apr 30-May18
		Tebupirimphos	3	1	0.1	Ground	Planting	May 9	Ap 22-May 28	Apr 30-May18

Sources:

Corn

Total Acres: Illinois Agricultural Statistics Service, 2000 Illinois County Statistics, Corn

Pesticide Use: Chlorpyrifos, Terbufos: NASS 2000 Field Crops Summary; Chlorethoxyfos, Tebupirimphos: NASS 1999 Field Crops Summary

Region D: Northern Crescent (South-central Pennsylvania)

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range	Most Active
Alfalfa	117,900	Chlorpyrifos	2	1(1.2)	0.66	Ground	Foliar	June 1	May1-Jul1	
Apple	22,456	Azinphos-methyl	89	7(6.5)	0.13	Ground	Foliar	May1,May18, Jun4,Jun21, Jul8,Jul25, Aug11	May1-Aug31	
		Diazinon	34	2(1.4)	0.22	Ground	Delayed Dormant-Petal Fall	March 15 April14	Mar15-May15 Mar15-May15	
		Dimethoate	2	2(2.1)	0.16	Ground	Foliar	May1, Jun1	May1-Jul31	
		Methidathion	3	2(1.7)	0.41	Ground	Grn Tip -Petal Fall	Apr1, Apr 23	Apr1-May15	
		Phosmet	24	3(2.9)	0.4	Ground	Foliar	May1, Jun18 Aug5	May1-Sept21	
Corn	459,000	Chlorpyrifos	7	1	1.1	Ground	Planting	May 17	Apr30-Jun15	May10-25

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range	Most Active
		Tebupirimphos	7	1	0.11	Ground	Planting	May 17	Apr30-Jun15	May10-25
		Terbufos	2	1	1.07	Ground	Planting	May 17	Apr30-Jun15	May10-25
Peach	4,082	Azinphos-methyl	80	5(4.7)	0.55	Ground		Apr15, May9 Jun2, Jun26 Jul25	Apr15-Aug15	
		Chlorpyrifos	11	1(1.1)	0.95	Ground	After Harvest	Sept. 30	Sep1-Oct-30	
		Phosmet	37	3(2.9)	0.43	Ground		Apr15, May26, Jul6	Apr15-Aug15	
Pear	626	Azinphos-methyl	86	3(2.4)	0.32	Ground	Foliar	Apr15, May26, Jul6	Apr15-Aug15	
		Chlorpyrifos	61	1	0.23	Ground	Dormant-D elayed D	March 1	Mar1-Apr1	
		Phosmet	69	5(4.6)	0.46	Ground	Foliar	Apr15, May9 Jun2, Jun26 Jul20	Apr15-Aug15	
Pumpkin	1060	Azinphos-methyl	3	2(1.6)	0.53	Ground	Foliar	Jul1, Aug16	Jul1-Oct1	

Sources:

Alfalfa

Total Acres: Pennsylvania Agricultural Statistics Service, Dry Alfalfa Hay-Acreage, Yield, Production & Value, 2000

Pesticide Usage: NASS 1998 Field Crops Summary. Northeast Region: Includes CT, DE, MA, ME, MD, NH, NJ, NY, PA, RI, VT

Apple

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Corn

Total Acres: Pennsylvania Agricultural Statistics Service, Corn for Grain-Acreage, Yield, Production & Value, 2000 **Pesticide Usage:**

Chlorpyrifos: NASS 2000 Field Crops Summary; Tebupirimphos, Terbufos: NASS 1998 Field Crops Summary

Peach

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Pear

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Fruits and Nuts

Pesticide Usage: NASS 1999 Fruit and Nut Summary

Pumpkin

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Vegetables, Sweet Corn, and Melons Harvested for Sale

Pesticide Usage: NASS 2000 Vegetable Summary

f. Region E: Humid Southeast (eastern North Carolina)

Crop	Crop Acres	Pesticide	%Treated	Number of Applications	Rate (lbs ai/a)	Application Method	Stage	Date(s)	Range	Most Active
Corn	62,500 Planted	Terbufos	38	1	1.14	Ground	Planting	April 17	Apr1-May20	Apr10-Apr25
		Chlorpyrifos	8	1	1.17	Ground	Planting	April 17	Apr1-May20	Apr10-Apr25
Cotton	209,300 Planted	Acephate	16	1	0.27	Ground	Foliar	June 11	May1-Jul21	
		Dimethoate	2	2(1.6)	0.1	Ground	Foliar	May1,Jun11	May1-Jul21	
		Phorate	4	1	0.9	Ground	Planting	May 10	Apr21-Jun8	May1-May20
		Tribufos	39	1	0.46	Ground	Harvest	Oct 19	Sep27-Dec15	Oct7-Nov15
		Disulfoton	11	1	0.66	Ground	Planting	May 10	Apr21-Jun8	May-May20
Peanuts	29,940 Acres Harvested	Acephate	5	1	0.47	Ground	Planting-Foliar	May 25	Apr28-Jun21	
		Chlorpyrifos	25	1	0.63	Ground	Foliar	July 7	Jun15-Aug1	
		Phorate	20	1	0.91	Ground	Planting	May 18	Apr28-Jun2	May8-May28
Tobacco	26,755 Acres Harvested	Acephate	70	1(1.2)	0.75	Ground	Foliar	June 30	May15-Aug15	
		Chlorpyrifos	25	1	2.3	Ground	Planting	May 16	Apr18-Jun2	May7-May25
		Ethoprop	6	1	5.2	Ground	Planting	May 16	Apr18-Jun2	May7-May25
		Fenamiphos	15	1	3	Ground	Planting	May 16	Apr18-Jun2	May7-May25

Sources:

Corn

Total Acres: North Carolina Department of Agriculture & Consumer Service, Agricultural Statistics Division-County Estimates. Corn for Grain-Acres, Yield, and Production By County, North Carolina, 1999-2000. Acres planted for all purposes 2000.

Pesticide Usage: Terbufos: NASS 2000 Field Crops Summary; Chlorpyrifos: NASS 1999 Field Crops Summary

Cotton

Total Acres: North Carolina Department of Agriculture & Consumer Service, Agricultural Statistics Division-County Estimates. Cotton-Acres, Yield, and Production By County, North Carolina, 1999-2000. Acres planted for all purposes 2000.

Pesticide Usage: All pesticides except disulfoton: NASS 2000 Field Crops Summary; disulfoton: NASS 1999 Field Crops Summary

Peanuts

Total Acres: North Carolina Department of Agriculture & Consumer Service, Agricultural Statistics Division-County Estimates. Peanuts-Acres, Yield, and Production By County, North Carolina, 1999-2000. Acres harvested for 2000.

Pesticide Usage: NASS 1999 Field Crops Summary

Tobacco

Total Acres: North Carolina Department of Agriculture & Consumer Service, Agricultural Statistics Division-County Estimates. Tobacco-Acres, Yield, and Production By Counties and By Types, North Carolina, 1999-2000. Acres planted for all purposes 2000.

Pesticide Usage: NASS 1999 Field Crops Summary

Other OP-Crop scenarios in Region E used in the preliminary cumulative assessment (12/01) but not in the revised assessment:

Region E: Eastern Uplands (western North Carolina)

Crop	Crop Acres	Pesticide	%Treated	No. Appl.	Rate (lbsai/a)	Appl. Method	Stage	Date(s)	Range	Most Active
Alfalfa	6,800 All Hay	Chlorpyrifos	10	1(1.2)	0.55		Foliar	15-Jul	May1-Sep1	
		Methyl parathion	3	1(1.1)	0.19		Foliar	15-Jul	May1-Sep1	
Corn	4,400 Planted all purposes	Terbufos	38	1	1.14	Ground	Planting	April 17	Apr1-May20	Apr10-Apr25
		Chlorpyrifos	8	1	1.17	Ground	Planting	April 17	Apr1-May20	Apr10-Apr25
Apple	7,000 Total (Bearing & NonB)	Azinphos-methyl	54	3(2.9)	0.59	Ground	Foliar	May 1 June10 Jul20	May1-Aug31	
		Chlorpyrifos	40	4(3.8)	0.91	Ground	Green Tip-Foliar	Apr1, May8 Jun15, Jul23	Apr1-Aug31	
		Dimethoate	21	1(1.1)	0.74	Ground	Foliar	June 1	May1-Jul30	
		Phosmet	43	2(1.4)	1.5	Ground	Foliar	May1, Jul7	May1-Sep21	

Alfalfa

Total Acres: North Carolina Department of Agriculture & Consumer Services, Agricultural Statistics Division, County Estimates, All Hay 2000

Pesticide Use: NASS 1998 Field Crops Summary. South Region: Includes AL, AR, FL, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV

Apple

Total Acres: North Carolina Cooperative Extension, Henderson County Center, 2000 Henderson County Agricultural Statistics 2000 (Estimates): Apple Acreage (Bearing and non-bearing trees)

Pesticide Use: NASS 1999 Fruit and Nut Summary

Corn

Total Acres: North Carolina Department of Agriculture & Consumer Services, Agricultural Statistics Division, County Estimates, Corn, Planted for All Purposes, 2000

Pesticide Use: Terbufos: NASS 2000 Field Crops Summary; Chlorpyrifos: NASS 1998 Field Crops Summary

g. Region F: Lower Midwest (Central Hills, Texas)

Crop	Crop Acres	Pesticide	% Treated	Number of Applications	Rate (lbs ai/a)	Application Method	Stage	Date(s)	Range	Most Active
Alfalfa	2,557 Harvested	Chlorpyrifos	10	1(1.2)	0.55		Foliar	June 16	May15-Jul15	
		Methyl parathion	3	1(1.1)	0.19		Foliar	June 16	May15-Jul15	
Corn	404,800 Planted	Chlorpyrifos	4	1	0.76	Ground	Planting	April 9	Feb28-May15	Mar20-Apr29
		Dimethoate	5	1	0.43	Aerial	Foliar	July 1	Jun1-Aug1	
		Phostebupirim	8	1	0.08	Ground	Planting	April 9	Feb28-May15	Mar20-Apr29
		Terbufos	12	1	0.82	Ground	Planting	April 9	Feb28-May15	Mar20-Apr29
Cotton	131,100 Planted	Acephate	6	2(1.5)	0.57	Ground	Foliar	May 1 May 21	May1-Jun10	
		Chlorpyrifos	5	2(1.9)	0.64	Aerial	Foliar	June 15 July 16	Jun15-Aug15	
		Dicrotophos	5	2(1.5)	0.14	Ground	Foliar	May 1 May 24	May1-Jun15	
		Malathion	41	7(6.5)	1.02	Ground Aerial Aerial Aerial Aerial Aerial	Foliar	May 15 June 6 June 28 July 20 Aug 11 Sept 2 Sept 24	May15-Oct15	
		Methyl parathion	6	2(2.3)	0.64	Ground Aerial	Foliar	May 15 July 31	May15-Oct15	
		Phorate	4	1	0.44	Ground	Planting	April 13	Mar20-Jun1	Apr1-Apr25
		Dimethoate	2	2(1.7)	0.24	Ground	Foliar	May 1 May 24	May1-Jun15	
		Tribufos	11	1	0.51	Aerial	Foliar	Nov 1	Aug10-Dec28	Oct1-Dec2
		Sorghum	200,300 Planted	Chlorpyrifos	5	1	0.44	Aerial	Foliar	May 2
Wheat	249,300 Planted	Dimethoate	5	1(1.1)	0.28	Aerial	Foliar	Nov 8	Oct15-Dec1	

Sources:

Alfalfa

Total Acres: USDA NASS 1997 Census of Agriculture-County Data, Field Seed, Grass Seeds, Hay, Forage, and Silage

Pesticide Usage: NASS 1998 Field Crops Summary. South Region: Includes AL, AR, FL, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV

Corn

Total Acres: Texas Agricultural Statistics Service County: Texas All Corn County Estimates 2000, Acreage Planted

Pesticide Usage: NASS 2000 Field Crops Summary

Cotton

Total Acres: Texas Agricultural Statistics Service County: Texas All Upland Cotton County Estimates 2000, Acreage Planted

Pesticide Usage: All pesticides except dimethoate and tribufos: NASS 2000 Field Crops Summary; dimethoate and tribufos: NASS 1999 Field Crops Summary

Sorghum

Total Acres: Texas Agricultural Statistics Service County: Texas All Sorghum County Estimates 2000, Acreage Planted

Pesticide Usage: NASS 1998 Field Crops Summary. Data from Kansas was used as a surrogate for Texas; NASS data was not collected for sorghum in Texas.

Wheat

Total Acres: Texas Agricultural Statistics Service County: Texas All Wheat County Estimates 2000, Acreage Planted

Pesticide Usage: NASS 1998 Field Crops Summary

h. Region G: Mid-South (Northeast LA)

Crop	Crop Acres	Pesticide	%Treated	Number of Applications	Rate (lbs ai/a)	Applica-tion Method	Stage	Date(s)	Range	Most Active
Corn	240,800	Chlorpyrifos	4	1	0.76	Ground	Planting	March 27	Mar10-Apr28	Mar19-Apr4
		Dimethoate	5	1	0.43	Aerial	Foliar	June 23	May 15-Jul 31	
		Phostebupirim	8	1	0.08	Ground	Planting	March 27	Mar10-Apr28	Mar19-Apr4
		Terbufos	12	1	0.82	Ground	Planting	March 27	Mar10-Apr28	Mar19-Apr4
Cotton	533,000	Acephate	41	2(1.7)	0.35	Ground	Planting-	May 6	Apr17-Aug31	
						Air	Foliar	June 24	Apr17-Aug31	
		Dicrotophos	20	2(1.7)	0.27	Ground	Foliar	May 1	May1-Aug31	
						Air		July 1		
		Dimethoate	3	2(1.6)	0.26	Ground	Foliar	June 15	Jun15-Jul31	
						Air		July 8		
		Malathion	77	9(8.6)	0.87	Ground	Foliar	May 1	May1-Oct20	
						Ground		May 20		
						Ground		June 8		
						Air		June 27		
Air	July 16									
Air	August 4									
Air	August 23									
Air	Sept 11									
	Sept 30									
Methamidophos	4	1	0.38	Air	Foliar	July 1	May1-Aug31			
Methyl Parathion	4	4(4.3)	0.39	Ground	Foliar	June 15	Jun15-Aug31			
				Air		July 4				
				Air		July 23				
				Air		August 11				
Phorate	3	1	0.61	Ground	Planting	May 6	Apr17-Jun15	Apr26-May16		
Profenofos	2	2(1.5)	0.86	Ground	Foliar	June 15	Jun15-Aug31			
Tribufos	49	1(1.1)	0.68	Air	Harvest	Oct 9	Sept15-Nov13	Sep28-Oct20		
Disulfoton	2	1	0.74	Ground	Foliar	May 23	May1-June15			
Soybean	370,000	Mehyl Parathion	32	1	0.46	Air	Foliar	Aug 31	Aug1-Sept30	

Sources:

Corn

Total Acres: Louisiana Agricultural Statistics Service, 2000 Louisiana Corn Parish Estimates

Pesticide Use: NASS 2000 Field Crops Summary: Data from Texas was used as a surrogate for Louisiana; there was no NASS survey of corn in Louisiana

Cotton

Total Acres: Louisiana Agricultural Statistics Service, 2000 Louisiana Cotton Parish Estimates

Pesticide Use: NASS 2000 Field Crops Summary for all chemicals except disulfoton; disulfoton: NASS 1999 Field Crops Summary

Soybean

Total Acres: Louisiana Agricultural Statistics Service, 2000 Louisiana Soybean Parish Estimates

Pesticide Use: NASS 1999 Field Crops Summary