ID-159

UK COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE

Corn and Soybean Production Calendar

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Introduction

The Corn and Soybean Production Calendar was developed to help producers prioritize and schedule work events in a timely fashion on the farm. Weather events and equipment breakdowns rarely follow an organized schedule. However, if other practices within the farming operation are prioritized, perhaps a producer can better address the emergencies that will occur.

This calendar does not include every single practice that a corn or soybean producer will face each year. It should be treated as a starting point and as a tool to help prioritize some of the practices involved in corn and soybean production.

Because each farming operation is unique, the order of events on this calendar may not fit the operating system of each farm but should help in scheduling.

For example, most producers work on the planter about a month or two before planting season; however, some producers believe that working on a planter or sprayer during the summer months is much more desirable due to good weather conditions for evaluating the equipment. In addition, if new parts are needed, they do not have to be rushed.

Facts and Figures

Commonly Used Test Wt.
1 bushel = 56 pounds
Minimum Test Weight
U.S. No. 1 Grade 1 bushel = 56 pounds
U.S. No. 2 Grade 1 bushel = 54 pounds
Seed Composition
protein, 9% oil, 4.7% starch, 66.8%
Seeds per Bushel
about 90,000 seeds
Biofuel
ethanol 2.74 gallons/bushel 17 lb distiller's grains/bushel

Commonly Used Test Wt.
1 bushel = 60 pounds
Minimum Test Weight
U.S. No. 1 Grade 1 bushel = 56 pounds
U.S. No. 2 Grade 1 bushel = 54 pounds
Seed Composition
protein, 36% oil, 19%
Seeds per Bushel
about 150,000 seeds
Biofuel
soy diesel 1.5 gallons/bushel 44 lb of meal/bushel

Row Width and Length of Row Needed to Equal 1/1,000th Acre

Row Width (inches)	Feet of Row Needed to Equal 1/1000th Acre
7	74 feet 8 inches
7.5	69 feet 8 inches
15	34 feet 10 inches
20	26 feet 2 inches
22	23 feet 9 inches
30	17 feet 5 inches
36	14 feet 6 inches
38	13 feet 9 inches

Equivalencies

1 acre
43,560 square feet
0.405 hectares

1 gallon
128 fluid ounces
3,785 milliliters
3.785 liters

1 pound (lb)
16 ounces
454 grams

Dates relating directly to crop production are based on years of research and are listed as dates that will produce maximum yield most years. Dates relating to equipment maintenance and repairs are suggested to reduce or ease the crunch that comes just prior to major events, such as planting. Dates relating to marketing and economics are suggested to alleviate the pressures close to tax time.

In general, the earlier dates within a certain practice, such as planting, are recommended for western and southern Kentucky, while the later dates within a practice are recommended for central and eastern Kentucky.

Additional tables can be found on pages 10 and 11.

Corn for Grain

Description of Production Calendar

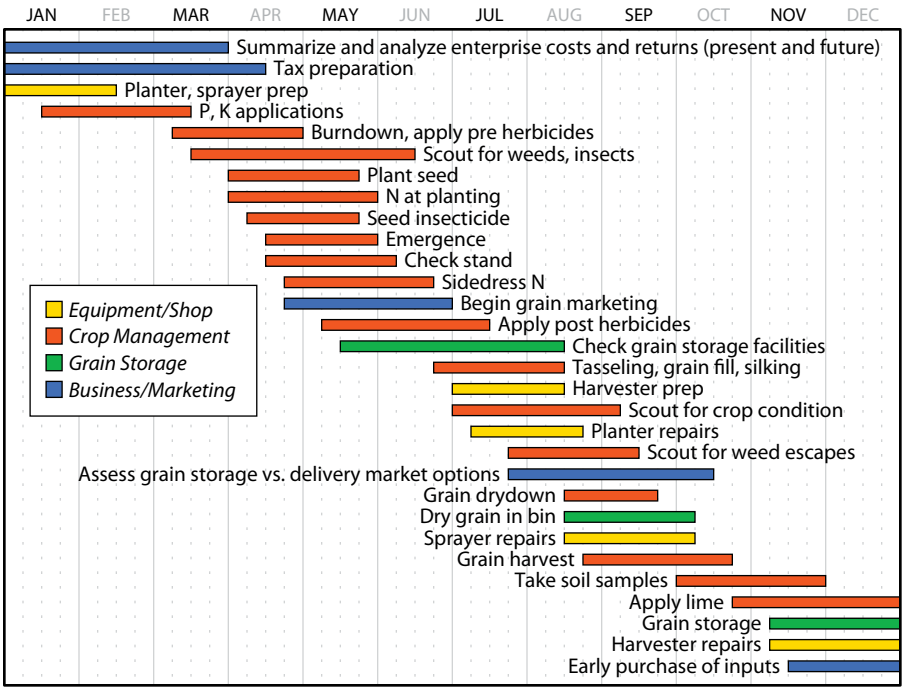
January—February: The weather is ideal for being in a warm shop, prepping planters, sprayers, and fertilizer application equipment (i.e., anhydrous injectors) for the spring and cleaning out combines from the fall harvest. The only type of field work that should be done this time of the year is P and K applications, if the soil will support equipment. This is a good time to analyze and summarize costs and returns, present and future, and to start tax preparation.

March: Although corn planting should not begin for at least another month, this is the month to scout for existing weeds and to spray those weeds with a burndown herbicide. Ideally, no corn should be planted into green weeds. Final calibration of the planter and sprayer (prior to planting and spraying) can be done. Anhydrous ammonia applications will need to start prior to planting. Final tax preparations and the business analysis should be completed.

April: Corn planting should begin April 1 in western Kentucky and April 15 in central and eastern Kentucky. Liquid or granular N can be applied with the planter or should be applied shortly after planting. Insecticide seed treatments are applied with the planter. Preemergence herbicides should be applied immediately after planting and before the crop emerges. Complete the tax filing process.

May: Stand counts should be conducted to determine the quality of the stand. On poorly drained soils, N sidedress applications should be made as late as possible but before corn is knocked over by the application equipment. Scout for weeds and determine weed pressure prior to postemergence herbicide applications. Be sure to check the herbicide labels and growth stages of corn before making an herbicide application. Scout for insects to prevent damage to corn in the early seedling stages. Some insects can damage corn in the early seedling stages even if a preventive control was applied. Scout for insects following emergence. If damage is found, identify the species and the level of damage and make an insecticide treatment only if necessary. Start the grain marketing process.

Quick Look: **Corn for Grain**



June: Continue scouting for weeds and insects and make necessary management decisions based on observations. Evaluate the grain marketing process and then make adjustments as needed. Check grain storage facilities and clean empty bins.

July: Scout crop conditions, including the pollination process. Prepare harvesters and repair planters and sprayers. This is actually one of the best times to evaluate planters and sprayers since there is usually plenty of time to order new parts and work on the equipment while weather conditions are favorable. Continue the grain marketing process. By the end of the month, start evaluating grain storage versus market delivery options.

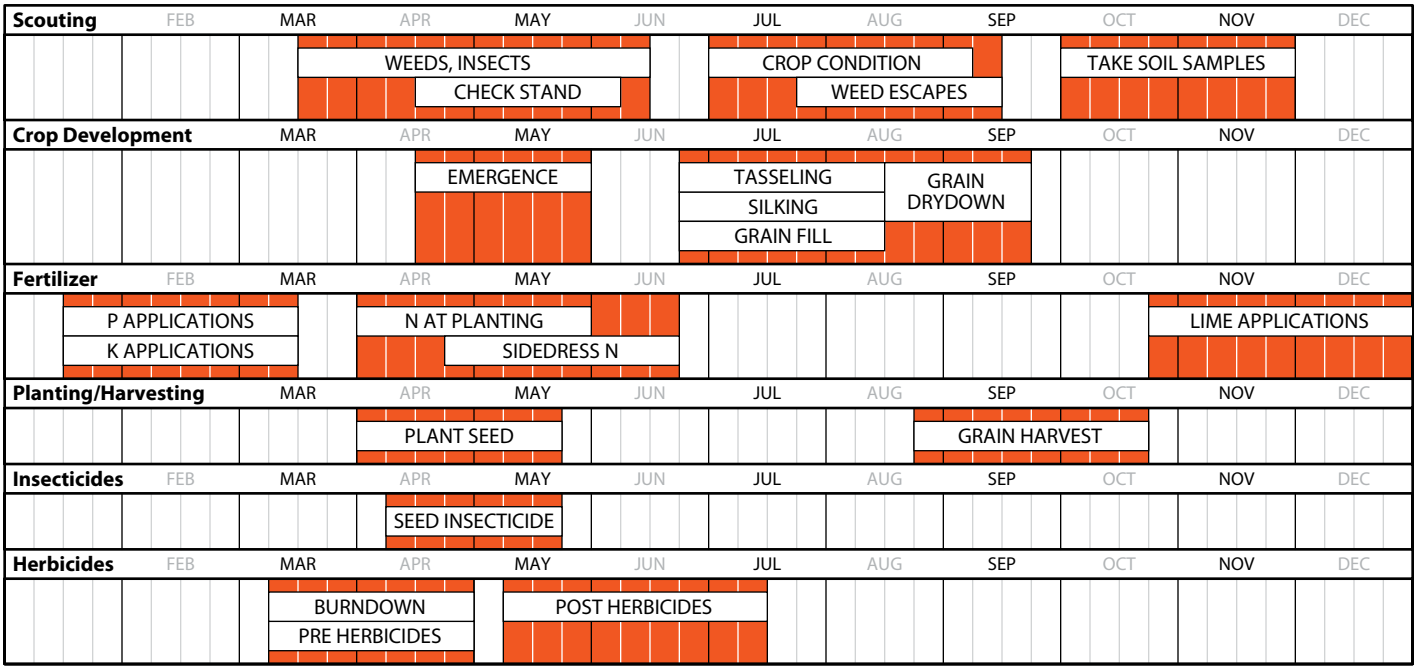
August: Scout crop conditions, including seed fill. Scout for weed escapes. Keep a record for the following season. Prepare for grain harvest, including bin and equipment cleanup to remove stored grain pests. Early harvesting will likely begin at the end of the month in western Kentucky. Complete any grain storage preparations. Continue to assess grain storage versus delivery market options.

September—October: Harvest grain. If necessary, dry grain to about 15% moisture for safe storage. Following harvest, start taking soil samples. Lime applications, if needed, could begin as soon as the end of October. Fall lime applications are recommended to allow the lime to neutralize the acidity in the soil and provide a benefit to the crops in the next growing season. Assess fields for compaction and make decisions to alleviate compaction layer(s), if possible. Continue marketing of grain.

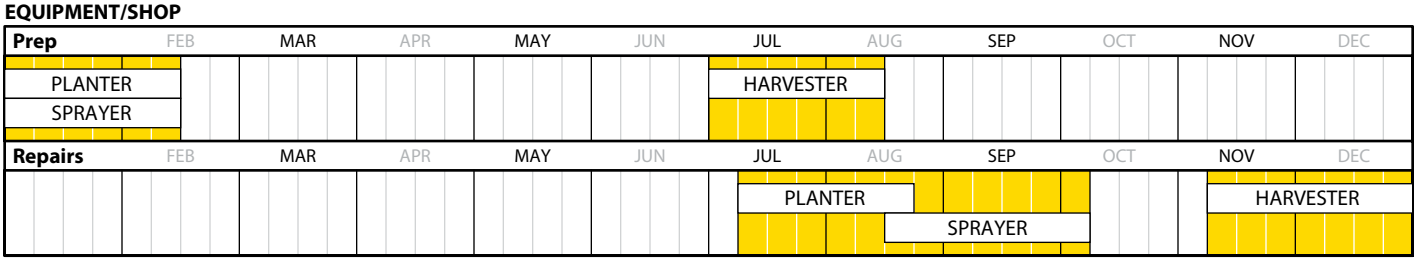
November—December: By November, most of corn harvest should be complete. Finish taking soil samples. Finish lime applications where needed. Conduct any deep ripping, but only if necessary. Clean out harvesters and start repairs. Check grain storage to ensure that grain is dry and in good condition. Begin evaluating what inputs are needed for the next growing season and take advantage of early purchase discounts. Make chemical inventory to determine products on hand and needs for the coming season.

Production Calendar: **Corn for Grain**

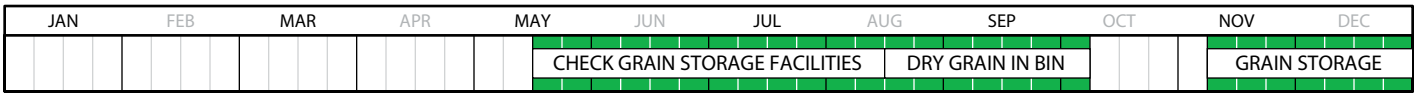
CROP MANAGEMENT



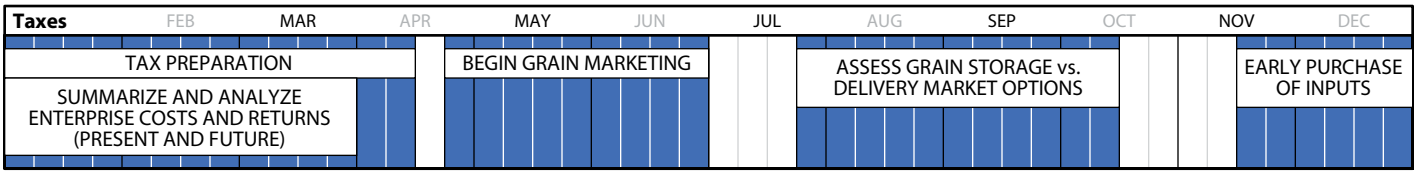
EQUIPMENT/SHOP



GRAIN STORAGE



BUSINESS/MARKETING



GROWING DEGREE DAYS *(Princeton, Ky.)*

Accumulated GDD*	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
41	66	192	352	526	710	808	780	613	378	174	66

** 30-year average of monthly GDD accumulations, University of Kentucky Agricultural Weather Center.*

Corn for Silage

Description of Production Calendar

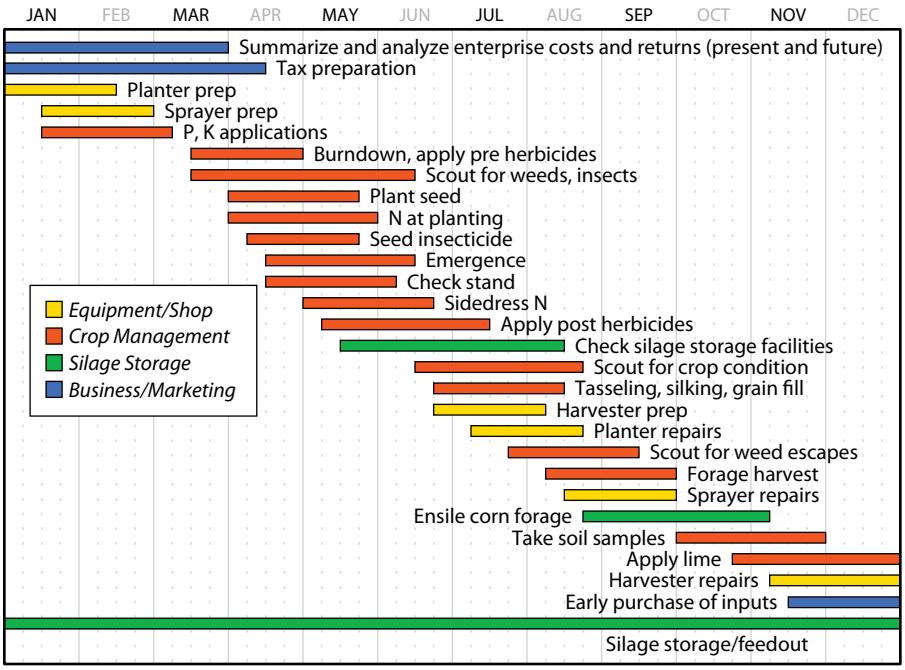
January—February: The weather is ideal for being in a warm shop, prepping planters, sprayers, and fertilizer application equipment (i.e., anhydrous injectors) for the spring and cleaning out combines from the fall harvest. The only type of field work that should be done this time of the year is P and K applications, if the soil will support equipment. This is a good time to analyze and summarize costs and returns, present and future, and to start tax preparation.

March: Although corn planting should not begin for at least another month, this is the month to scout for existing weeds and to spray those weeds with a burndown herbicide. Ideally, no corn should be planted into green weeds. Final calibration of the planter and sprayer (prior to planting and spraying) can be done. Anhydrous ammonia applications will need to start prior to planting. Final tax preparations and completion of the business analysis should be completed.

April: Corn planting should begin April 1 in western Kentucky and April 15 in central and eastern Kentucky. Liquid or granular N can be applied with the planter or should be applied shortly after planting. Insecticide seed treatments are applied with the planter. Preemergence herbicides should be applied immediately after planting and before the crop emerges. Complete the tax filing process.

May: Stand counts should be conducted to determine the quality of the stand. On poorly drained soils, N sidedress applications should be made as late as possible but before corn is knocked over by the application equipment. Scout for weeds and determine weed pressure prior to postemergence herbicide applications. Be sure to check the herbicide labels and growth stages of corn before making an herbicide application. Scout for insects to prevent damage to corn in the early seedling stages. Some insects can damage corn in the early seedling stages even if a preventive control was applied. Scout for insects following emergence. If damage is found, identify the species, the level of damage and make an insecticide treatment only if necessary. Start the grain marketing process.

Quick Look: **Corn for Silage**



June: Continue scouting for weeds and insects and make necessary management decisions based on observations. Check condition of silage storage facilities and clean out empty silos and bunkers.

July: Scout crop conditions, including pollination process. Prepare choppers, wagons, and loaders. Repair planters and sprayers. This is actually one of the best times to evaluate planters and sprayers since there is time to order new parts and work on the equipment in favorable weather conditions.

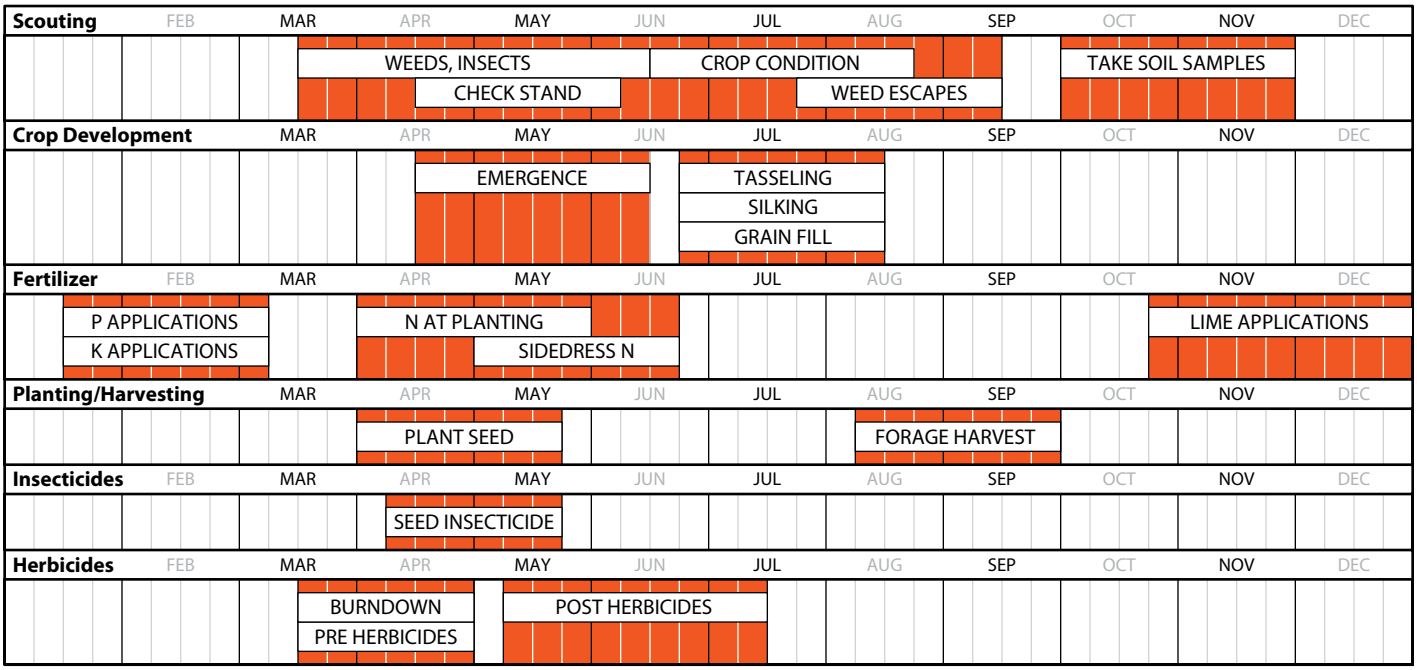
August: Scout crop conditions, including seed fill. Scout weeds not controlled. Keep a record for the following season. Forage chopping should start once corn kernels are dented and the starch layer is one-half to three-quarters the way down the kernel on at least 50% of the ears examined. Whole plant moisture should be near 65% (dry matter should be near 35%). Chop the forage into small pieces, about 1 to 2 inches in length. Ensile the forage immediately, being sure to remove as much oxygen a possible through proper packing. If the forage is drier than ideal, add water to the ensiling process. If the forage is wetter than normal, expect improper ensiling and nutrient loss.

September—October: Complete forage harvesting. Following harvest, start taking soil samples. Lime applications, if needed, could begin as soon as soil test results are received. Fall lime applications are recommended to allow the lime to neutralize the acidity in the soil and provide a benefit to the crops in the next growing season. Spring applications of lime will not benefit the immediate crop. Assess fields for compaction and make decisions to alleviate compaction layer(s), if possible. Conduct a quick assessment of the forage chopper, wagons, and sprayers to determine what repairs may be necessary. Order replacement parts.

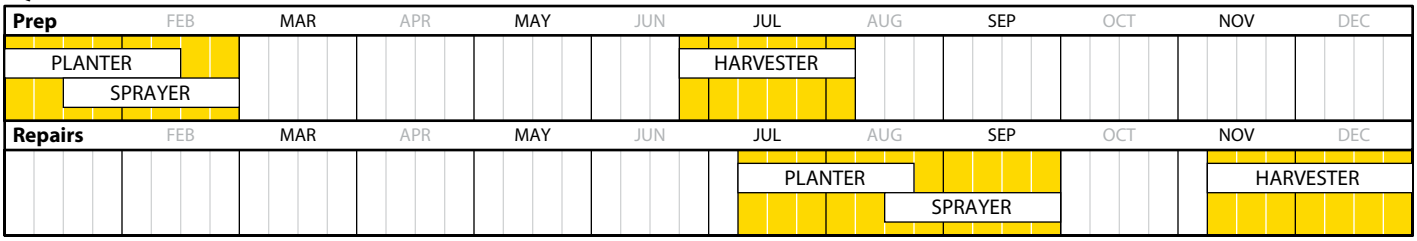
November—December: Finish taking soil samples. Finish lime applications where needed. Conduct any deep ripping, but only if necessary. Start repairs on harvesters and forage wagons. Complete repairs on planters and sprayers. Begin evaluating what inputs are needed for the next growing season and take advantage of early purchase discounts. Make chemical inventory to determine products on hand and needs for the coming season.

Production Calendar: **Corn for Silage**

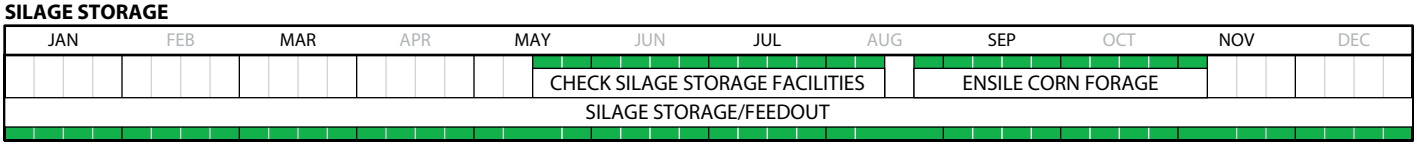
CROP MANAGEMENT



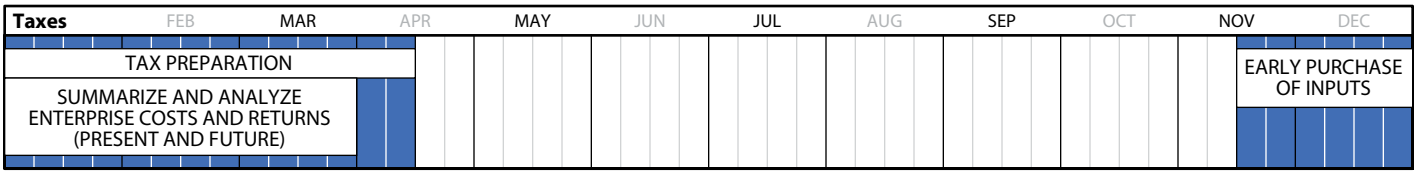
EQUIPMENT/SHOP



SILAGE STORAGE



BUSINESS/MARKETING



GROWING DEGREE DAYS *(Princeton, Ky.)*

Accumulated GDD*	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
41	66	192	352	526	710	808	780	613	378	174	66

** 30-year average of monthly GDD accumulations, University of Kentucky Agricultural Weather Center.*

Full-Season Soybean

Description of Production Calendar

January—February: The weather is ideal for being in a warm shop, prepping planters and sprayers for the spring and cleaning out combines from the fall harvest. The only type of field work that should be done this time of the year is P and K applications, if the soil will support equipment. This is a good time to analyze and summarize costs and returns, present and future, and start tax preparation.

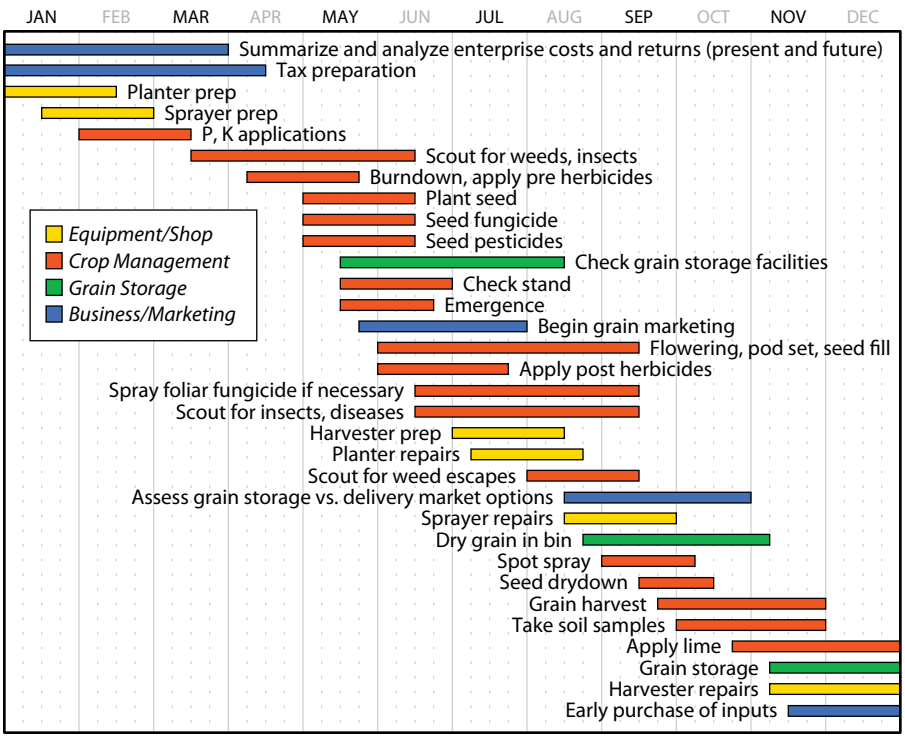
March: Final calibration of the planter and sprayer (prior to spraying) can be done. Final tax preparations and the business analysis should be completed.

April: Although full-season soybean planting should not begin for at least another month, this is the time to scout for existing weeds. Assess the weed pressure and determine if herbicide(s) will be needed at planting. Complete the tax filing process before the April deadline.

May: Full-season soybean planting should begin by May 1 in western Kentucky and May 10-15 in eastern Kentucky. Burn down or till weeds prior to planting. Soybean should not be planted into green weeds. Preemergence herbicides should be applied immediately after planting and before the crop emerges. Stand counts should be conducted to determine the quality of the stand. Start the grain marketing process.

June: If a soil residual herbicide was not used earlier, then summer annual weeds will likely be competing with soybean within four weeks after soybean emergence. Scout for weeds and insects and make necessary management decisions based on observations. Scout for insects. Evaluate the grain marketing process and then make adjustments as needed. Check grain storage facilities and clean empty bins.

Quick Look: **Full-Season Soybean**



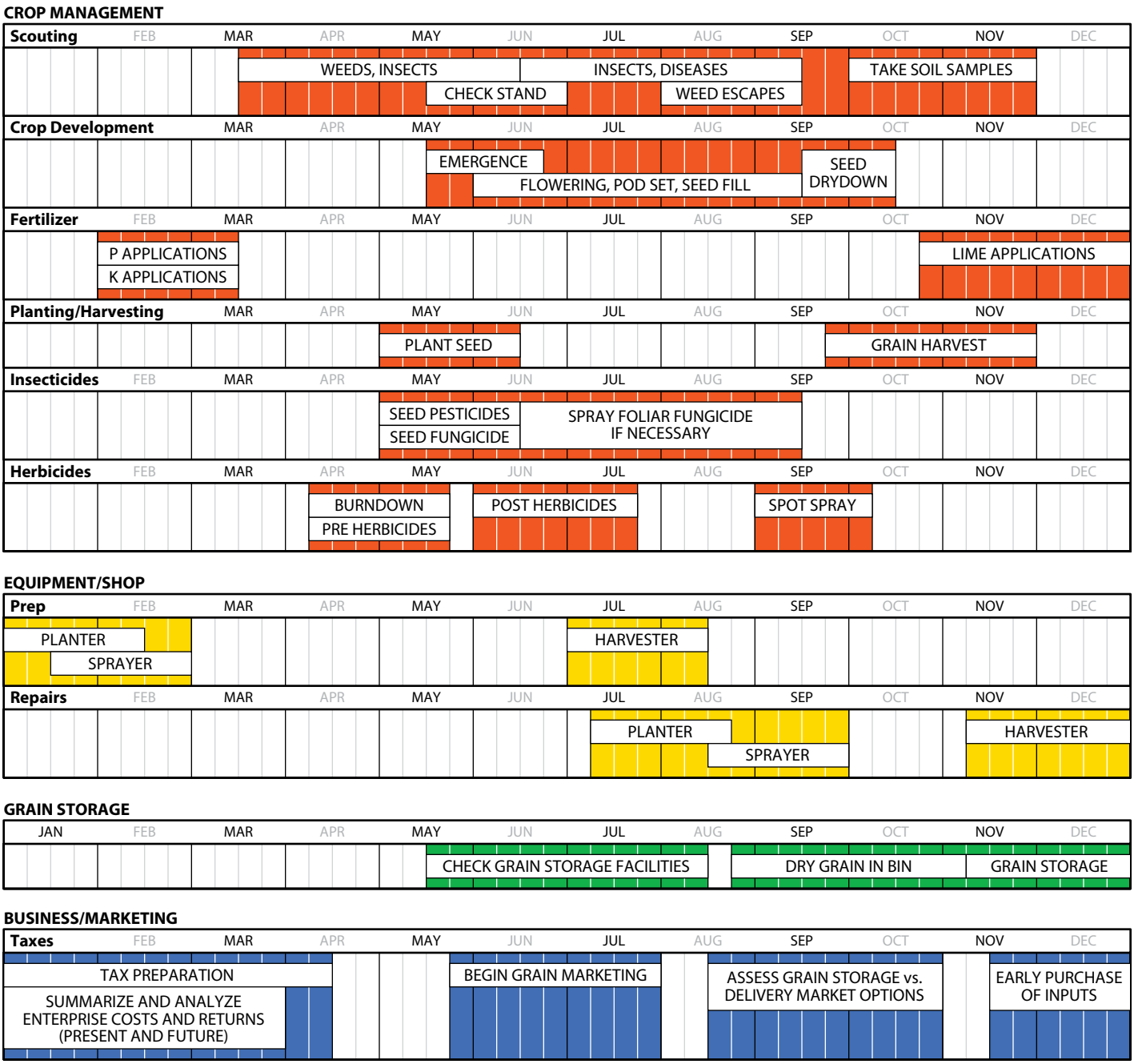
July: Full-season soybean should be flowering in July and starting pod set. Scout crop conditions. Scout for late-emerging weeds. Begin scouting for soybean rust, if weather forecasts and soybean rust tracking indicate rust is in Kentucky. Prepare harvesters and repair planters and sprayers. This is actually one of the best times to evaluate planters and sprayers since new parts can be ordered without rush shipments and weather conditions are favorable. Continue the grain marketing process. By the end of the month, start evaluating grain storage versus market delivery options.

August: Scout crop conditions, including seed fill. Scout weed escapes and spot spray, if necessary. Keep a record for the following season. Prepare for grain harvest. Complete any grain storage preparations. Continue to assess grain storage versus delivery market options.

September—October: Continue scouting for diseases, especially soybean rust. Grain harvest could begin in September, depending on maturity of the varieties. If necessary, dry grain to about 15% moisture for safe storage.

November—December: Harvest should be nearly complete. Following harvest, start taking soil samples. Lime applications, if needed, could begin as soon as soil sample results are received. Fall lime applications are recommended to allow the lime to neutralize the acidity in the soil and provide a benefit to the crops in the next growing season. Assess fields for compaction and make decisions to alleviate compaction layer(s), if possible. Continue marketing of grain. Clean out harvesters and start repairs. Check grain storage to ensure that grain is dry and in good condition. Begin evaluating what inputs are needed for the next growing season and take advantage of early purchase discounts. Make chemical inventory to determine products on hand and needs for the coming season.

Production Calendar: **Full-Season Soybean**



Double-Crop Soybean

Description of Production Calendar

January—February: The weather is ideal for being in a shop, prepping planters and sprayers for the spring and cleaning out combines from the fall harvest. The only type of field work that should be done this time of the year is P and K applications, if the soil will support equipment. This is the time to analyze and summarize costs and returns, present and future, and start tax preparation.

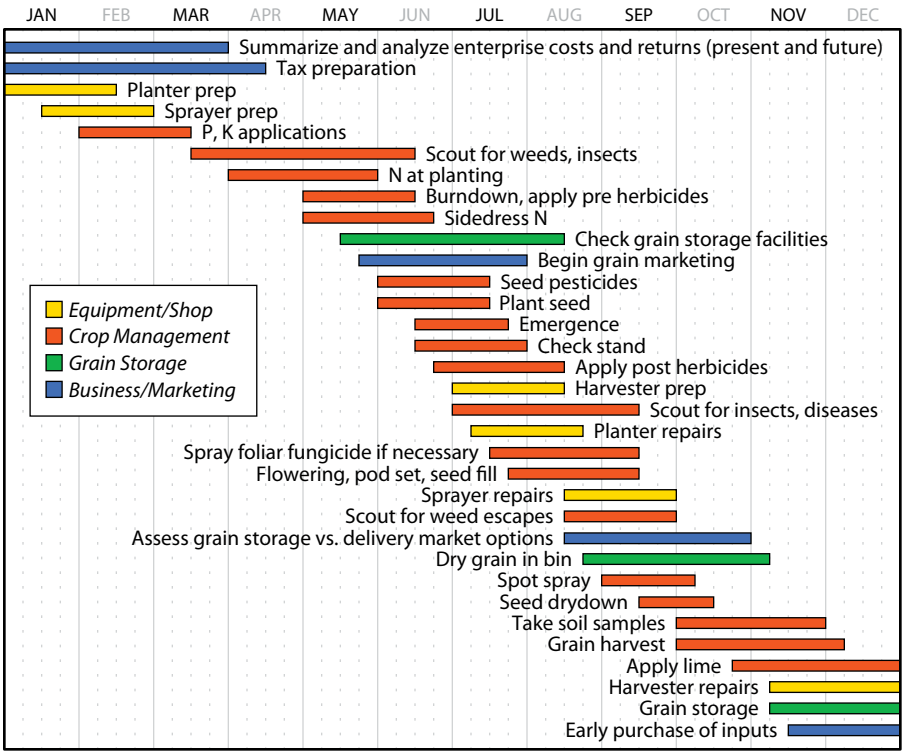
March—April: Final calibration of the planter and sprayer (prior to spraying) can be done. Final tax preparations and the business analysis should be completed.

May: Full-season soybean planting should begin May 1 in western Kentucky and May 10-15 in central and eastern Kentucky.

June: Double-crop soybean planting should begin immediately following wheat harvest. Yield losses from late planting will typically occur for soybean planted after June 10-15 (1.5% per day for each day delayed). If necessary, preemergence herbicides should be applied immediately after planting and before the crop emerges. Stand counts should be conducted to determine the quality of the stand. Start the grain marketing process.

July: If a soil residual herbicide was not used earlier, then summer annual weeds will likely be competing with soybean within three weeks after soybean emergence. Scout for weeds and make necessary management decisions based on observations. Scout for insects. Prepare harvesters and repair planters and sprayers. This is actually one of the best times to evaluate planters and sprayers, since new parts can be ordered without rush shipments and weather conditions are favorable. Check grain storage facilities and clean empty bins. Evaluate the grain marketing process and then make adjustments as needed.

Quick Look: **Double-Crop Soybean**



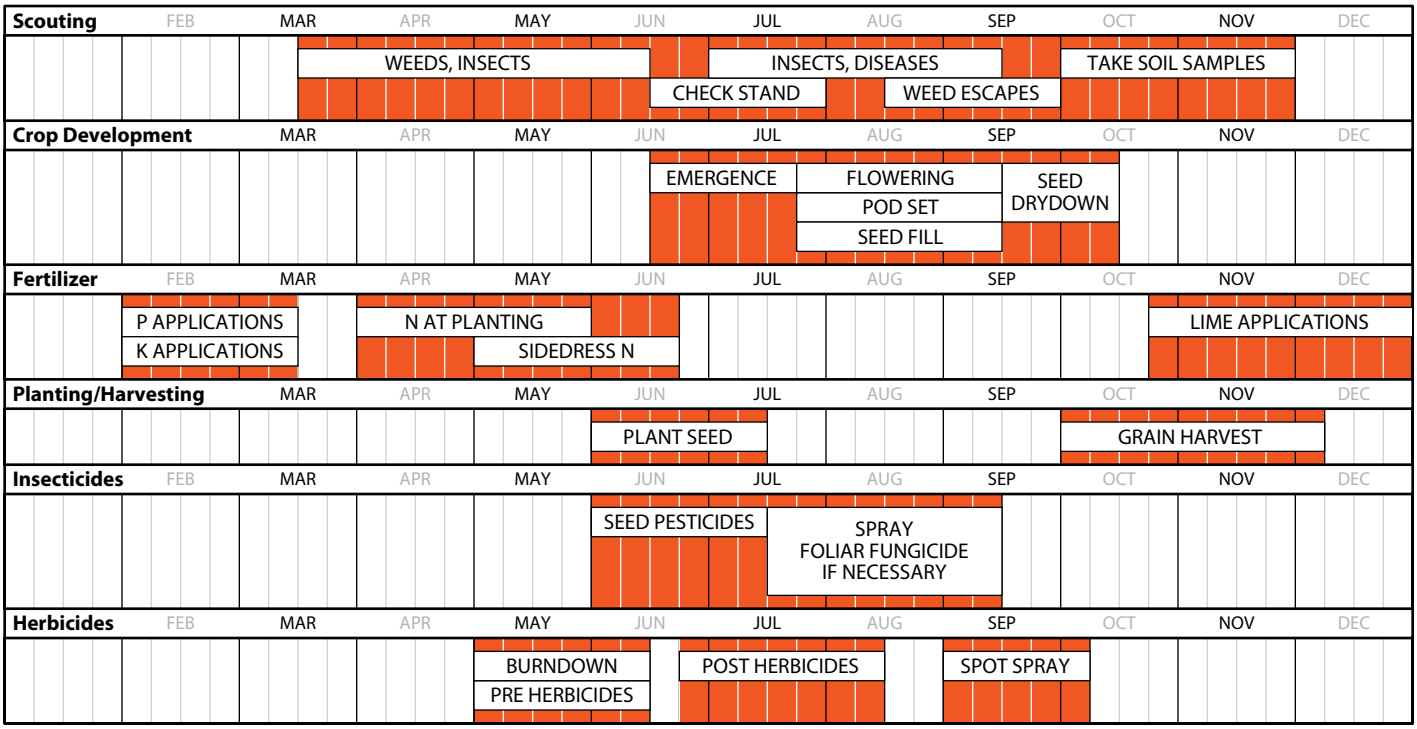
August: Double-crop soybean will flower and initiate pod set during August. Scout crop conditions, including seed fill. Scout for weed escapes and spot spray, if necessary. Keep a record for the following season. Begin scouting for soybean rust, if weather forecasts and soybean rust tracking indicate rust is in Kentucky. Continue the grain marketing process. By the end of the month, start evaluating grain storage versus market delivery options.

September—October: Continue scouting for soybean diseases, especially soybean rust. Grain harvest will likely begin in October, depending on maturity of the varieties. If necessary, dry grain to about 15% moisture for safe storage.

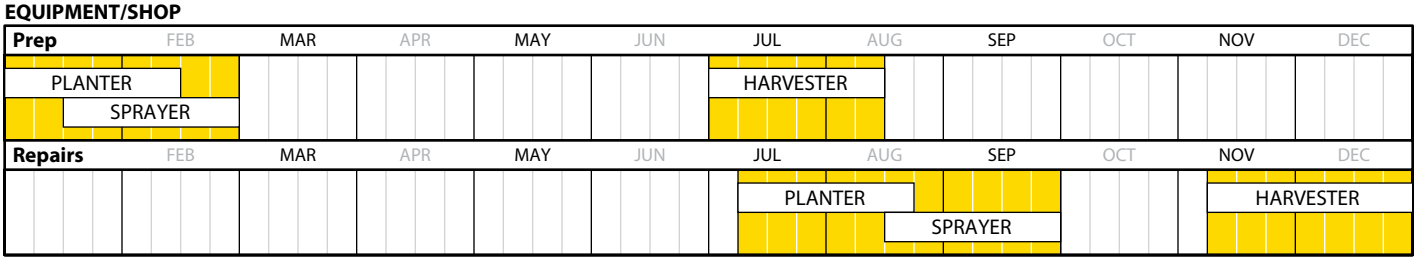
November—December: Following harvest, start taking soil samples. Lime applications, if needed, could begin as soon as the end of October. Fall lime applications are recommended to allow the lime to neutralize the acidity in the soil and provide a benefit to the crops in the next growing season. Assess fields for compaction and make decisions to alleviate compaction layer(s), if possible. Continue marketing of grain. Clean out harvesters and start repairs. Check grain storage to ensure that grain is dry and in good condition. Begin evaluating what inputs are needed for the next growing season and take advantage of early purchase discounts. Make chemical inventory to determine products on hand and needs for the coming season.

Production Calendar: **Double-Crop Soybean**

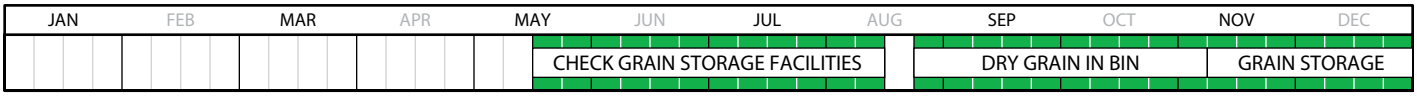
CROP MANAGEMENT



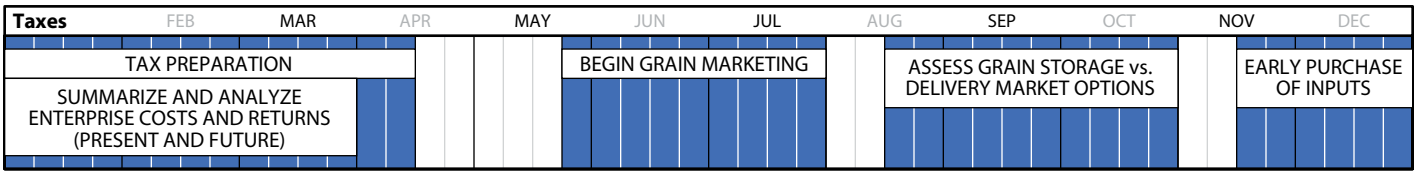
EQUIPMENT/SHOP



GRAIN STORAGE



BUSINESS/MARKETING



Corn Growth

Expected date for black layer formation based on location, planting date, and hybrid maturity (growing degree days).

Kentucky Location	Planting Date	Hybrid Maturity (GDD)		
		2400	2700	3000
		Date to Reach Black Layer		
Mayfield	15-Mar	28-Jul	8-Aug	20-Aug
	1-Apr	1-Aug	13-Aug	24-Aug
	15-Apr	6-Aug	18-Aug	30-Aug
	1-May	14-Aug	26-Aug	8-Sep
	15-May	23-Aug	4-Sep	19-Sep
	1-Jun	5-Sep	20-Sep	11-Oct
Bowling Green	15-Mar	27-Jul	7-Aug	19-Aug
	1-Apr	31-Jul	12-Aug	23-Aug
	15-Apr	5-Aug	17-Aug	29-Aug
	1-May	12-Aug	24-Aug	5-Sep
	15-May	21-Aug	2-Sep	16-Sep
	1-Jun	3-Sep	18-Sep	7-Oct
Henderson	15-Mar	27-Jul	8-Aug	20-Aug
	1-Apr	1-Aug	13-Aug	24-Aug
	15-Apr	6-Aug	18-Aug	30-Aug
	1-May	14-Aug	25-Aug	7-Sep
	15-May	23-Aug	4-Sep	19-Sep
	1-Jun	5-Sep	20-Sep	9-Oct
Somerset	15-Mar	3-Aug	15-Aug	28-Aug
	1-Apr	7-Aug	20-Aug	2-Sep
	15-Apr	13-Aug	26-Aug	8-Sep
	1-May	20-Aug	2-Sep	18-Sep
	15-May	29-Aug	12-Sep	1-Oct
	1-Jun	12-Sep	1-Oct	27-Oct
Spindletop Farm (near Lexington)	15-Mar	8-Aug	21-Aug	3-Sep
	1-Apr	11-Aug	24-Aug	7-Sep
	15-Apr	16-Aug	29-Aug	12-Sep
	1-May	22-Aug	4-Sep	21-Sep
	15-May	30-Aug	14-Sep	6-Oct
	1-Jun	13-Sep	4-Oct	19-Oct
Covington	15-Mar	11-Aug	24-Aug	4-Sep
	1-Apr	14-Aug	27-Aug	7-Sep
	15-Apr	18-Aug	1-Sep	13-Sep
	1-May	25-Aug	7-Sep	22-Sep
	15-May	2-Sep	17-Sep	14-Oct
	1-Jun	15-Sep	7-Oct	26-Oct

Source: Date to reach black layer based an average of growing degree day calculations for each year from 1995 through 2004 from the University of Kentucky Agricultural Weather Center.

Key growth stages

Growth Stage		Description
VE	Emergence	Mesocotyl pushes through the soil surface.
V3	3 collars	Nodal roots active.
		Growing point below ground
V6	6 collars	Growing point above ground.
		Tassel and ear development starting.
V12	12 collars	Ear size, kernel size, and kernel number being determined.
		Limits on water and/or nutrients will reduce yields.
V15	15 collars	Rapid growth, about 10 to 12 days before silking.
		Most sensitive to stress.
VT	Tassel	Last tassel branch is visible but prior to silking.
		Complete leaf loss will cause nearly 100% yield loss.
R1	Silking	N and P uptake are rapid.
		K uptake is nearly complete.
		Water needed for pollination.
		Pollination occurs.
R2	Blister	Ear size nearly complete.
		Silks begin to dry out.
		A miniature corn plant is being formed in each fertilized kernel.
R4	Dough	Kernels have accumulated one-half of total dry weight.
		Five leaves have formed in the kernel.
R5	Dent	Most kernels have dented and are near 55% moisture at start.
		Starch layer has formed and progresses down the kernel.
R6	Physiological maturity	Black layer has formed at bottom of kernel.
		Kernel is about 30 to 35% moisture.

Adapted from: Ritchie, S.W., John J. Hanway, and Garren O. Benson. 1998. How a Corn Plant Develops. Special Report No. 48. Iowa State University Press, Ames, Iowa.

Soybean Growth

Converting from seeds per acre to seeds per foot and vice versa

	Row Width (inches)				
Seeds per:	**30**	**20**	**15**	**7.5**	**7**
Acre	**Seeds per foot of row**				
80,000	4.6	3.1	2.3	1.1	1.1
100,000	5.7	3.8	2.9	1.4	1.3
120,000	6.9	4.6	3.4	1.7	1.6
140,000	8.0	5.4	4.0	2.0	1.9
160,000	9.2	6.1	4.6	2.3	2.1
180,000	10.3	6.9	5.2	2.6	2.4
200,000	11.5	7.7	5.7	2.9	2.7
Foot of row	**Plants per acre**				
1	17,424	26,136	34,848	69,696	74,674
2	34,848	52,272	69,696	139,392	149,349
3	52,272	78,408	104,544	209,088	224,023
4	69,696	104,544	139,392	278,784	
5	87,120	130,680	174,240		
6	104,544	156,816	209,088		
8	139,392	209,088	278,784		
10	174,240	261,360			

Key growth stages

Growth Stage		**Description**
VE	emergence	emergence
VC	cotyledon	cotyledon
V1	1st trifoliolate	one fully emerged three-leaflet leaf (the edges of the leaflets are no longer touching)
V2	2nd trifoliolate	two fully emerged three-leaflet leaves
V3	3rd trifoliolate	three fully emerged three-leaflet leaves
V(n)	nth trifoliolate	(n) fully emerged leaves
		soybeans in Kentucky will often have 4 to 7 fully emerged leaves on the main stem before flowering
R1	beginning bloom	one flower on any node on the main stem
R2	full bloom	one flower on the main stem at one of the two uppermost nodes with a fully developed leaf
R4	full pod	one pod is ¾ inches long at one of the four uppermost nodes on the main stem with a fully developed leaf
		the start of the most critical stage for yield determination
R5	beginning seed	seed is 1/8 inches long at one of the four uppermost nodes on the main stem with a fully developed leaf
R6	full seed	pod containing a green seed that fills the pod cavity at one of the four uppermost nodes on the main stem with a fully developed leaf
		the end of the most critical stage for yield determination
		R6 will occur for about 30 days in Kentucky, regardless of soybean variety
R7	beginning maturity	one pod on the main stem has reached mature pod color
		about 95% of the yield is complete at this stage
R8	full maturity	95% of pods have reached mature color

Adapted from: Pedersen, P. 2004. Soybean Growth and Development. Iowa State University Press, Ames, Iowa.

Typical First and Last Occurrences of 32°F in Kentucky

Location	Coordinates (°)	Date of First Fall Frost[a]					Date of Last Spring Frost[a,b]				
		Median	Early	10%	90%	Late	Median	Early	10%	90%	Late
Ashland	38.47N 82.63W	10/16	9/08	9/22	11/03	1/01	5/04	4/11	4/14	5/11	6/12
Berea	37.57N 84.31W	10/24	9/24	10/06	11/13	11/21	4/11	3/25	3/28	5/04	5/10
Bowling Green	36.98N 84.44W	10/22	10/03	10/08	11/08	11/13	4/11	3/21	3/26	4/25	5/05
Carrollton	38.65N 85.17W	10/19	10/03	10/06	11/02	11/08	4/21	4/03	4/08	5/05	5/10
Covington	39.01N 84.51W	10/19	10/02	10/04	11/02	11/08	4/21	3/26	4/10	5/06	5/10
Farmers	38.15N 83.54W	10/15	9/21	10/03	11/02	11/08	5/02	4/04	4/11	5/15	5/27
Hopkinsville	36.85N 87.46W	10/20	9/21	10/05	11/06	11/13	4/11	3/21	3/26	4/25	5/05
Leitchfield	37.46N 86.29W	10/18	10/03	10/05	11/06	11/08	4/19	3/22	4/04	5/08	5/11
Lexington	38.03N 84.44W	10/25	10/02	10/07	11/09	11/13	4/18	3/26	4/04	5/03	5/10
London	37.13N 84.07W	10/12	9/23	10/03	11/02	11/13	4/24	3/22	4/07	5/09	5/27
Mayfield	36.72N 88.64W	10/20	10/02	10/06	11/06	11/12	4/15	3/24	4/05	4/26	5/05
Maysville	38.61N 83.81W	10/21	10/03	10/04	11/03	11/08	4/24	3/27	4/02	5/09	5/27
Middlesboro	36.62N 83.73W	10/17	9/29	10/04	11/04	11/14	5/01	4/08	4/12	5/11	5/27
Monticello	36.85N 84.83W	10/17	10/03	10/04	11/05	11/13	4/25	4/03	4/08	5/08	5/27
Murray	36.62N 88.31W	10/30	10/03	10/14	11/18	11/21	4/04	3/18	3/20	4/15	4/20
Owensboro	37.77N 87.11W	10/20	10/03	10/06	11/07	11/13	4/10	3/21	3/25	4/24	5/05
Paducah	37.08N 88.62W	10/26	10/03	10/09	11/12	11/13	4/08	3/07	3/22	4/18	4/23
Princeton	37.09N 87.89W	10/20	10/03	10/06	11/06	11/13	4/10	3/21	3/26	4/21	3/26
Scottsville	36.74N 86.18W	10/24	10/07	10/10	11/14	11/21	4/10	3/21	3/27	4/27	5/27
Shelbyville	38.21N 85.21W	10/14	9/21	10/01	10/31	11/19	4/23	3/27	4/06	5/11	5/18
Somerset	37.08N 84.61W	10/13	10/03	10/04	10/31	11/05	4/22	3/22	4/07	5/10	5/27
West Liberty	37.91N 83.26W	10/09	9/15	9/24	10/17	11/04	5/05	3/29	4/17	5/21	5/27
Williamsburg[c]	36.74N 84.17W	10/19	9/26	10/04	11/07	11/13	4/22	4/04	4/08	5/10	5/27

[a] Temperatures are recorded by the University of Kentucky Agricultural Weather Service at 5 feet above ground and based on 30 years of data from 1961 to 1990.

[b] Median = date directly between the earliest and latest date of observed last occurrence; Early = earliest date recorded for last occurrence; 10% = date for last occurrence in one out of 10 years; 90% = date for last occurrence in nine out of 10 years; Late = latest date recorded for last occurrence.

[c] 28 years of data.

Source: University of Kentucky Agricultural Weather Center, Kentucky Climate Analysis, URL: http://wwwagwx.ca.uky.edu/analysis2/.

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