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Weed Management in Soybeans[1]

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Successful weed control is one of the most important practices for economical soybean production in Florida. Losses due to weeds have been one of the major limiting factors in soybean production. Weeds compete with soybeans for light, moisture, and nutrients, with early-season competition being the most critical. Most of the yield reduction due to weed competition occurs during the first six weeks after planting; therefore, major emphasis on control should be given during this period. However, producing a good crop of soybeans is only half the battle and will not be profitable unless the soybeans can be harvested. Late-season weeds can result in inefficient equipment operation and excessive harvest losses. Weeds can be controlled in soybeans; however, this requires good management practices in all phases of soybean production. Good soybean weed control involves utilizing all methods available and combining them in an integrated weed management system.

Crop Rotations

Crop rotations may be beneficial since many of the most troublesome weeds in soybeans (sicklepod, morningglories, cocklebur, and Florida beggarweed) can be more easily controlled in a crop such as corn. If the full benefit of the rotation is to be achieved, weeds must be controlled throughout the growing season of the rotational crop. Seed produced late in the season of the corn will be available to germinate and compete with the succeeding soybean crop.

The major goal of the rotational crop for weed control is to reduce the number of weed seed available for germination the following season. Other benefits of crop rotation may include reduction in insects, diseases, and nematodes.

Crop Competition

Crop competition is one of the most important, but often one of the most overlooked tools in weed control. A good stand of soybeans, which emerge rapidly and shade the middles early, is helpful in reducing weed competition. This involves good management practices such as choosing a well-adapted variety, good fertility, maintaining proper soil pH, adequate plant populations, and using row spacings as narrow as practical. Utilizing these good management practices is necessary for producing good soybean yields and is also an aid in weed control.

The plant that emerges first and grows most rapidly is usually the plant that will have the competitive advantage; therefore, everything possible should be done to ensure that the soybeans, and not the weeds, have this competitive advantage.

Cultivation

Cultivation is still a good and economical method of weed control; however, for cultivation to be effective in

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controlling weeds in the row, the soybeans must be taller than the weeds. The major reason for cultivation is weed control; therefore, if good weed control has been achieved with an herbicide, delay cultivation until weeds are present. Cultivate only deep enough to achieve weed control since deep cultivation may disturb soybean roots, bring weed seed to the surface, and disturb the layer of soil previously treated with an herbicide.

Know Your Weeds

Choose control methods that are effective for your specific weed problem. Generally, for preplant and preemergence applications, the weed problems must be anticipated since weeds may not have emerged at the time of application. This can best be done by observing the field in the fall and recording the weeds present and their location in the field. These "weed maps" can be very useful the next spring in refreshing your memory and making a decision on what herbicide to purchase. Before selecting your herbicides (Table 1, Table 2 and Table 3), identify your expected weed problems. Once your weed problems have been determined, Table 4 and Table 5 can be helpful in determining which herbicide is most effective for these weeds.

Herbicides

Herbicides are one of the most effective tools for weed control in soybeans (Table 1 and Table 2). Preplant or preemergence applications combined with the previously discussed management practices are important in ensuring that the soybeans have the initial competitive advantage. One of the problems often encountered during this period is lack of rain to activate surface-applied herbicides. Surface-applied herbicides require rainfall or irrigation to be effective, and for best results, moisture is needed within a week after application. Lack of moisture during this period often results in poor weed control. Incorporated herbicides are not dependent on rainfall or irrigation and have generally given more consistent weed control; however, they do require additional time and equipment for incorporation. Surface-applied herbicides can give excellent control and offer the greatest ease of application but they also carry the risk of failure if moisture is not received.

If good initial weed control is received with either a preplant or preemergence herbicide and the soybeans are taller than the weeds, then other control measures are available to extend the control throughout the season. Over-the-top applications are successful in controlling late germinating weeds and weeds not controlled by preplant or preemergence herbicides. They can also be used to aid in harvest efficiency.

Table 4 and Table 5 can be helpful in choosing the herbicide that is best suited for your particular situation.

Calibrate

Calibrate accurately since rates too high may injure the crop and rates too low may not provide weed control. The herbicides listed in Tables 1 and Table 2 are those that have performed well in UF/IFAS research at the rates and time of application suggested. Herbicides, like any other pesticide, should be handled with care. Store herbicides behind locked doors, in the original containers, with the label intact, and separated from seed, fertilizer, and other pesticides.

Prepack Mixes

During the past several years a great number of prepack mixes have become registered on soybeans and are legal for use within Florida. Currently, individual active ingredients recommended in this publication can be purchased prepacked in a number of combinations. To list all prepack mixes currently available would be prohibitive in this format. It is important to evaluate the weed problem to be controlled and consult this fact sheet for individual or tank mix combinations which give good activity. Upon deciding the appropriate active ingredient needed, shop around to see if the active ingredient or active ingredient combination desired can be purchased in prepack form. At times the proper ratio desired may not be available but if suitable ratios do exist many times price advantages will be noted when purchasing prepack mixtures.

A list of prepack mixes and active ingredients contained that are registered for soybeans in Florida is shown in Table 2.

Herbicide-Resistant Soybeans

Transgenic or herbicide-resistant soybeans are genetically altered to tolerate (the actual resistance is altered enzyme) herbicides that would normally kill or injure conventional or non-transgenic varieties. This genetic modification allows the use of broadspectrum herbicides over-the-top of soybeans and provides economical and efficient weed management.

The transgenic soybean varieties, which are commercially available, are Roundup Ready and Liberty Link. Using transgenic varieties can expand weed management options

while providing a more convenient and effective method of weed control. The following section provides information regarding herbicide applications for Roundup Ready and Liberty Link varieties. This is not intended to substitute for herbicide labels, which should be carefully read prior to planting these varieties.

Roundup Ready Soybeans

Roundup Ready varieties are genetically altered to tolerate over-the-top applications of glyphosate, Roundup WeatherMax, Glyphomax Plus, Glyphomax, Touchdown, and several other products containing glyphosate. However, be sure to check the product label for use on all Roundup Ready soybeans. Glyphosate controls most annual grasses and broadleaf weeds. The Roundup Ready system has been most successful where soybeans are drilled in 7- to 10-inch rows, where fields are scouted early, and when timely applications are made. Producers are encouraged to keep good records of planting to avoid spraying non-transgenic resistant fields with glyphosate. Drift to adjacent crops should be avoided. Sprayers should be cleaned thoroughly and flushed prior to and after application.

Application Timing—Glyphosate can be applied anytime from the cracking stage throughout flowering. Multiple applications can be made, but should not exceed the recommended limit on the label. Application rates are dependent on weed species and size; therefore, consult label for this information. Timely application is required. The first application should usually be made 16 to 20 days after planting; repeat applications can be made if needed. In narrow-row soybeans under good growing conditions, a single application is often sufficient. Wide-row soybeans normally require either a preemergence herbicide followed by glyphosate or two postemergence applications.

Herbicide Program—Any registered soil-applied herbicide can be used on Roundup Ready soybeans. Soil-applied herbicides are generally not needed with timely postemergence applications except for fields with Florida pusley. Use of soil-applied herbicides will, however, make the timing of postemergence herbicides less critical and usually eliminate the need for a second application. Consult the manufacturer label for use rates.

The addition of Cobra or Ultra Blazer will aid in morningglory control. For additional information on the weeds controlled by other herbicides, see Tables 4 and 5.

Table 1. Weed Management in No-Till Soybeans

Trade Name and Broadcast Rate/Acre of Commercial Product	Common Name and Broadcast Rate/Acre of Active Ingredient	Remarks
BURNDOWN NO-TILL SOYBEANS		
Gramoxone Inteon 1–2 qt	paraquat	For control of most annual weeds and top-kill of perennials. Apply before, during, or after planting but prior to emergence of soybeans for control of emerged vegetation. Good coverage is essential for effective control. Apply at 40 to 60 gal/A. Add a surfactant as recommended on the label.
Various	glyphosate (1.0–4 lb)	Apply 1 qt/A to control annual weeds less than 6" tall. Apply in 10–20 gallons of water per acre.

Table 2. Soil-applied package mixes for soybeans.

Trade Name and Broadcast Rate/Acre of Commercial Product	Common Name and Broadcast Rate/Acre of Active ingredient	Remarks
Canopy (4–5 oz)	metribuzin (0.19 lb) + chlorimuron (0.028 lb)	Provides good to excellent control of broadleaf weeds. May be applied preplant incorporated on preemergence. Rotational restrictions apply. Consult label for crop rotational guidelines.
Boundary (1.0–1.75 pt)	metolachlor (0.79–1.38) + metribuzin (0.19–0.22)	For broadspectrum control of grass and broadleaf weeds. Apply as a preplant incorporated or preemergence treatment. Soil moisture is required to activate. Some soybean varieties are highly sensitive to Boundary; consult your label of varietal information and restrictions. Soybeans should be planted 1.5 inches deep. Applications to sandy soils with low organic matter will increase soybean injury.
Herbicide recommendations in this report are contingent upon their registration by the Environmental Protection Agency. If a registration is canceled, the herbicide would no longer be recommended.		

Table 3. Weed Management in Soybeans

Trade Name and Broadcast Rate/Acre of Commercial Product	Common Name and Broadcast Rate/Acre of Active Ingredient	Remarks
PREPLANT		
Treflan 1–2 pt **or** Pendimethalin 3.3 1.2–1.8 pt or Prowl H_2O 2–3 pt **or** Sonalan HFD 1.5–2.0 pt	trifluralin pendimethalin ethafluralin	Good control of annual grasses and certain broadleaf weeds. Poor control of cocklebur, sicklepod (coffeeweed), morningglory, and ragweed. Does not control nutsedge spp. Incorporate thoroughly according to label directions. The spectrum of weeds controlled is similar for each of these herbicides.
Pursuit 1.44 oz	imazethapyr	Annual grasses, nutsedge, some broadleaf weeds are controlled. Poor control of beggarweed, sicklepod, and ragweed. Excellent on purple nutsedge and wild poinsettia, good on yellow nutsedge. Pursuit may be applied PPI, PRE, early-post or post-emergence; however, best nutsedge control is generally provided with PPI or early-post treatments. Rotation restrictions: wheat—4 months; corn—8 months; tobacco—9 months; cotton—18 months. No restriction for peanuts.
Scepter 70 DG 2.1–2.8 oz	imazaquin	For maximum grass control mix with Treflan, Prowl, or Dual. Scepter controls cocklebur, jimsonweed, smallflower and pitted morningglory, pigweeds, wild poinsettia, prickly sida, and smartweed. Sequential applications of Scepter will be required to control sicklepod and Florida beggarweed. Sequential post-emergence applications should be applied before these species exceed the 1 to 2 true-leaf stage. The total amount of Scepter applied per season should not exceed 1 1/3 pt. Rotation restrictions: wheat—3 months; corn, tobacco—9.5 months; peanuts—11 months; cotton—18 months.
PREEMERGENCE		
Dual Magnum and others 1–1.3 pt	S-metolachlor	Controls annual grasses and certain broadleaf weeds. Poor control of cocklebur, sicklepod (coffeeweed), morningglory, and Texas panicum. Apply band or broadcast soon after planting. Use lower rates on coarse soils. Best results when rainfall is received within 4–6 days after application.
Tricor, Glory, and others	metribuzin[2]	Good control of many broadleaf weeds, especially sicklepod and hophornbeam copperleaf. The range of crop tolerance is narrow; therefore, accurate application is critical. Refer to the label for soil texture and organic matter restrictions. Sandy soils with low organic matter are much more likely to result in soybean injury. See footnote 2.
Outlook 10–18 oz	dimethenamid	Similar to metolachlor. Application rate depends on soil properties. Check label for specific rates.
Valor 2–3 oz	flumioxazin	Provides good to excellent control of many annual broadleaf weeds. Valor will **not** control grass weeds, nutsedges, cocklebur, and sicklepod. Apply as a preemergence treatment only. **Do not apply to emerged soybeans**. Should be tank-mixed with Command or Prowl/Pendimax. **Do not use Valor in the same field with Axiom, Domain, Dual, or Outlook, because severe injury can occur.** Valor can also be tank-mixed with glyphosate in reduced tillage production systems. Refer to label for specific rotation restrictions.
Lorox 4L 0.6–1.6 pt	linuron	Provides good control of Florida beggarweed, common ragweed, and pigweed. Adjust rates depending on soil type. Sicklepod will not be controlled. Linuron may be tank-mixed with Dual, or Prowl. Plant soybeans at least 1.5 inches deep to reduce injury.

Trade Name and Broadcast Rate/Acre of Commercial Product	Common Name and Broadcast Rate/Acre of Active Ingredient	Remarks
Canopy[1] 4–5 oz	metribuzin + chlorimuron	Good control of several broadleaf weeds, which include cocklebur, Florida beggarweed, jimsonweed, several morningglories, prickly sida, and ragweed. May give partial control of nutsedges and seedling grasses. Crop tolerance is narrow, therefore accurate application is critical. Refer to the Canopy label for soil texture, pH and organic matter restrictions. Note recropping intervals and rotational guidelines on label. See footnote 2.
POSTEMERGENCE HERBICIDES FOR BROADLEAF WEEDS		
Basagran and others 1.0–2.0 pt	bentazon	Good to excellent control of certain weeds in the 2–6 leaf stage such as cocklebur, ragweed, morningglory, and yellow nutsedge. Use low rate on small weeds. Two applications at the low rate may be needed for yellow nutsedge control. Early treatment and good spray coverage are needed for best results. Soybeans have excellent tolerance. Always apply a crop oil concentrate (0.125%–0.75% v/v).
Ultra Blazer 0.5–1.5 pt	acifluorfen	Good to excellent control of many broadleaf weed species. Refer to the label for proper rate for each species. Apply over-the-top after beans reach the first trifoliate stage and before the weeds are 4″ tall. Sprayed leaves may be crinkled or cupped but new leaves should be unaffected. Add a surfactant at the rate recommended on the label. Do not apply if plants are drought stressed. May be tank mixed with several herbicides. Consult product labels for specifics.
Classic 0.5–0.75 oz	chlorimuron ethyl	Apply Classic as a postemergence treatment anytime after the first trifoliate has opened, but no later than 60 days before maturity. Weeds 2″–4″ in size that are actively growing. Treat weeds controlled include bristly starbur, cocklebur, Florida beggarweed, jimsonweed, pigweed, ragweed, smartweed and yellow nutsedge. A second application of Classic at ½ oz/A may be made 2–3 weeks after the initial application if conditions warrant. Postemergence applications of Classic should include a nonionic surfactant (80% active) at 1 qt per 100 gal of spray mixture. Strict recropping intervals apply. Check label for application specifics and recropping schedules.
Cobra 2EC 10–12.5 oz	lactofen	Good to excellent control of many broadleaf weed species. Refer to label for the proper rate for each species. Apply over-the-top when soybeans are at the first or second trifoliate leaf stage and weeds are 3″–4″ tall. Sprayed leaves may show some cupping at the tip and crinkled edges, but will soon outgrow this damage under good conditions. Always apply a nonionic surfactant (0.25% v/v) or a crop oil concentrate (0.125%–0.75% v/v) with Cobra herbicide. Cobra will exhibit more crop injury than Ultra Blazer.
Firstrate	cloransulam-methyl	May be applied any time prior to 50% flowering stage. Temporary yellowing of soybeans may occur in applications made prior to full emergence of the first trifoliate leaf. See label for tank mixes. Add a crop oil concentrate at 1.2% v/v. Provides good control of cocklebur and sicklepod. Rotation restrictions: 9 months (corn, cotton, peanut, sorghum), 18 months (sweet corn), 30 months (tobacco).
Pursuit 4 oz	imazethapyr	Pursuit may be applied anytime after soybean emergence but before weeds exceed 3 inches. Add 0.25% of a nonionic surfactant (2 pts/100 gals. of spray mixture). After application wait at least 10 days before cultivation. Do not apply Pursuit if Canopy, Scepter or Pursuit was used as a preplant incorporated, or preemergence treatment.
Resource 4 oz	flumiclorac	**Tank-mix with glyphosate for improved control of tall, ivyleaf, and entireleaf morningglory in Roundup Ready soybeans only.** Must be applied with a NIS (0.25% v/v) or COC (1 pt/A).

Trade Name and Broadcast Rate/Acre of Commercial Product	Common Name and Broadcast Rate/Acre of Active Ingredient	Remarks
Scepter 70 DG 1.4–2.8 oz	imazaquin	Apply Scepter as a postemergence treatment after crop emergence but before weeds exceed a height of 12". Apply when weeds are actively growing. The addition of 1 qt of non-ionic surfactant (80% active) per 100 gal of spray mixture is required. Weeds controlled include cocklebur, pigweeds and wild poinsettia. If postemergence treatment is in a sequential application scheme for the control of sicklepod or Florida beggarweed, spray should be made before these species exceed the 1-2 true leaf stage.
Storm 1.5 pts	bentazon + acifluorfen	Apply to actively growing weeds while soybeans are in the 2–3 trifoliate stage. A non-ionic surfactant (1–2 pt/100 gal) or crop-oil concentrate must be added. May be tank-mixed; consult label.
POSTEMERGENCE GRASS HERBICIDES		
Fusilade DX 6–12 oz	fluazifop-butyl	Apply for control of most annual and perennial grasses before they exceed 4" in height. See label for specific rates and weeds. Add crop oil concentrate (1 gal) or nonionic surfactant (2 pts) per 100 gal spray mixture.
Poast (1.0–1.5 pt) **or** Poast Plus (1.5–2.25 pt)	sethoxydim	Apply for control of most annual and perennial grasses, before grasses exceed 4" tall. Include a crop oil concentrate at 2 pt/A. Poast is less effective than on bermudagrass.
Clethodim 2EC 6–16 oz Select Max or TapOut 9–32 oz	clethodim	Apply for the control of annual and perennial grasses. For annual grasses up to 6" tall apply the lower use rates. A second application may be made. Higher rates will be necessary for rhizome johnsongrass, bermudagrass, and other perennial grasses. Add crop oil concentrate at 1 gal per 100 gal of spray mixture. Select Max can be sprayed with either surfactant or crop oil. Do not apply more than 32 oz of Select or 64 oz of Select Max per acre per year.
TRANSGENIC SOYBEANS		
Liberty 280 29–36 oz	glufosinate	Apply only to soybeans designated as Liberty Link. Can be applied from emergence until blooming. Do not apply more than 62 oz/A/yr. Very effective on morningglory, Florida pusley, cutleaf eveningprimrose. Less effective on grasses and sedges.
glyphosate— several products and formulations	glyphosate	**Apply glyphosate over-the-top of improved soybean varieties that are designated as soybeans with the Roundup Ready gene**. Severe injury or death of soybeans will result if any soybean varieties not designated as having the Roundup Ready gene are sprayed with glyphosate. Controls a wide range of grass and broadleaf weeds. May be applied from the cracking stage through the full-flowering stage of soybeans. Use the low rate on weeds up to 3 inches tall. Higher rates are needed as weeds increase in size. For morninglories, applications should be made when morninglories are less than 3 inches tall. Sequential treatments may be applied provided that the maximum postemergence (from cracking to flowering) total use rate does not exceed 3.0 quarts per acre of 4 lb/gal products or 2.4 qts/A of 5 lb/gal products, or 2 quarts of 5.5 lb/gal products. No additional surfactant is necessary. There are no crop rotational restrictions for glyphosate. Not all formulations are labeled for use on RR soybeans. Refer to specific product label.
HARVEST AID		
Various	2,4-DB (0.25 lb)	May be applied as an overall spray 7–10 days before bloom to mid-bloom for severe cocklebur infestations. Temporary injury may occur. The late season spray is a SALVAGE TREATMENT for use if cocklebur forms a canopy over the crop.

Trade Name and Broadcast Rate/Acre of Commercial Product	Common Name and Broadcast Rate/Acre of Active Ingredient	Remarks
Gramoxone SL 2.0 and others	paraquat	This is a harvest-aid treatment. Apply when half of the soybean leaves have dropped and the remaining half are yellow. Earlier applications will reduce yields. Harvest can begin 6–10 days after application. Weeds such as hairy indigo will not be desiccated by this treatment. Use as surfactant.

[1] **WARNING:** THE FOLLOWING STATEMENT HAS BEEN ADDED TO THE SENCOR/CANOPY LABEL. THIS STATEMENT SHOULD BE HEEDED BY ALL PROSPECTIVE USERS AND STEPS SHOULD BE TAKEN TO COMPLY WITH THIS LABEL CHANGE. SENCOR/LEXONE IS A CHEMICAL WHICH CAN TRAVEL (SEEP OR LEACH) THROUGH SOIL AND CAN CONTAMINATE GROUND WATER AS A RESULT OF AGRICULTURAL USE. SENCOR/LEXONE HAS BEEN FOUND IN GROUND WATER AS A RESULT OF AGRICULTURAL USE. USERS ARE ADVISED NOT TO APPLY SENCOR/LEXONE WHERE THE WATER TABLE (GROUND WATER) IS CLOSE TO THE SURFACE AND WHERE THE SOILS ARE VERY PERMEABLE, I.E., WELL-DRAINED SOILS SUCH AS LOAMY SANDS. YOUR LOCAL AGRICULTURAL AGENCIES CAN PROVIDE FURTHER INFORMATION ON THE TYPE OF SOIL IN YOUR AREA AND THE LOCATION OF GROUND WATER. IN ADDITION, SOME PRODUCT LABEL STATEMENTS INCLUDE AS A FURTHER QUALIFICATION OF RISKY SOILS, SOILS CONTAINING SINKHOLES OVER LIMESTONE BEDROCK, SEVERELY FRACTURED SURFACES, AND SUBSTRATES WHICH WOULD ALLOW DIRECT INTRODUCTION INTO AN AQUIFER.

[2] Metribuzin is not recommended for use on AP 55, AP 71, Burlison, Dassel, Tracy, Semmes, Altona, Vansoy, Coker 102, or Coker 156 soybeans: See the product label for the complete list of soybean cultivars. Crop injury may occur when metribuzin is used in conjunction with soil-applied organophosphate pesticides, such as Counter, Dasanit, etc.

Table 4. Estimated Effectiveness of Recommended Herbicides on Common Weeds in Florida[1]

Herbicides	Treflan, Prowl, Sonalan	Scepter	Pursuit	Prowl	Canopy	Dual Magnum	First Rate	Scepter
Time of Application	PPI	PPI	PPI	PRE	PRE	PRE	PPI/PRE	POT
WEEDS								
BROADLEAF								
Bristly starbur	P	F	F	P	G	P	E	-
Crotalaria	P	F	F	P	-	P	-	-
Cocklebur	P	E	G–E	P	E	P	E	E
Florida beggarweed	P	F	P	P	E	F	F–G	F
Florida pusley	E	E	E	E	E	G–E	E	P
Morningglory	P	G	F–G	P	G	P	G	G–F[2]
Pigweed	E	E	G	G	E	E	P	E
Ragweed	P	F–G	P	P	E	F	E	-
Sicklepod (coffeeweed)	P	F	P	P	E	P	F	G[3]
Smartweed	P	G	P–F	P	G	P	-	-
Wild Poinsettia	P	G	G–E	P	F–G	P–F	G	E
GRASS								
Junglerice/ Barnyardgrass	E	F	F	G	-	E	P	P
Crabgrass	E	F	F	G	G	E	P	P
Fall panicum	G–E	F	F	G	F	G	P	P
Goosegrass	E	F	F	G	G	E	P	P
Johnsongrass (seed)	E	F	F	G	F	F	P	P
Sandbur	E	F	F	G	F	G	P	P
Johnsongrass (rhizome)	P	P	P	P	P	P	P	P
Texas panicum	E	P	P–F	G–E	F	P	P	P
SEDGES								
Purple Nutsedge	P	F	G–E	P	P	F	P	P–F
Yellow Nutsedge	P	F	G	P	P	F	P	P–F

[1] Estimated effectiveness based on herbicide rates recommended in this report. Effectiveness may vary depending on factors such as herbicide rate, size of weeds, time of application, soil type, and weather conditions.
[2] Check label for particular species control differences.
[3] Must follow a sequential PPI Scepter treatment.

Weed Control Symbols: E = 90%–100% control; G = 80%–90% control; F = 60%–80% control; P = less than 60% control; - = insufficient observations.

Time of Application: PPI = preplant; PRE = preemergence; POT = postemergence over the top; PDS = postemergence directed.

Table 5. Estimated effectiveness of recommended herbicides on common weeds in Florida Soybeans (cont.)[1]

Herbicides	glyphosate*	Basagran	Classic	Gramoxone Inteon	Ultra Blazer, Cobra	Poast Plus, Fusilade, Select, or Assure II
Time of Application	POT	POT	POT	PDS	POT	POT
WEEDS						
BROADLEAF						
Bristly starbur	G–E	E	E	G–E	P–F	P
Crotalaria	F–G	P	-	G–E	E	P
Cocklebur	E	E	E	E	E	P
Florida beggarweed	G	P	G	G–E	P–F	P
Florida pusley	P	P	P	P	P	P
Morningglory	F–G	F–G	G[2]	G	E	P
Pigweed	G–E	G	E	G–E	E	P
Ragweed	G	F–G	E	G–E	E	P
Sicklepod (coffeeweed)	G–E	P	G	G–E	P	P
Smartweed	G	-	E	F	F	P
Wild Poinsettia	G–E	P	G	F	F–G	P
GRASS						
Junglerice/ Barnyardgrass	G	P	P	E	P	G–E
Crabgrass	E	P	P	E	P	E
Fall panicum	E	P	P	E	P	G–E
Goosegrass	E	P	P	E	P	G–E
Johnsongrass (seed)	E	P	P	E	P	G–E
Sandbur	G	P	P	E	P	G–E
Johnsongrass (rhizome)	E	P	P	P	P	G
Texas panicum	E	P	P	E	P	G–E
SEDGES						
Purple Nutsedge	F–G	P	F	F	P	P
Yellow Nutsedge	F–G	G	F	F	P	P

[1] Estimated effectiveness based on herbicide rates recommended in this report. Effectiveness may vary depending on factors such as herbicide rate, size of weeds, time of application, soil type, and weather conditions.
[2] Check label for particular species control differences.

*glyphosate can be used ONLY on Roundup Ready Soybeans.

Weed Control Symbols: E = 90%–100% control; G = 80%–90% control; F = 60%–80% control; P = less than 60% control; - = insufficient observations.

Time of Application: PPI = preplant; PRE = preemergence; POT = postemergence over the top; PDS = postemergence directed.