



<u>ARTICLES THIS ISSUE</u>	
Post-Harvest Weed Control in Corn and Grain Sorghum Roy Vidrine, Weed Science Extension Specialist Derek Scroggs, Research Associate Sandy Stewart, Cotton Specialist.....	p.1
Dean Lee Research Station Field Day Announcement.....	p.4

Post-Harvest Weed Control in Corn and Grain Sorghum.
Roy Vidrine, Derek Scroggs, Sandy Stewart

Weed control after the harvest of a corn or grain sorghum crop is typically not a major concern for most growers. However, with the threat of glyphosate-resistant weeds on the horizon, this type of weed control program may prove to become more important. Currently, corn and grain sorghum harvest for most of the state is underway. With such an early harvest, there is ample time for summer annual and perennial weeds to emerge and produce seed.

One example of a weed that can produce an abundant amount of seed is the pigweed species. A mature pigweed can produce an average of 400,000 seed per plant. Although a pigweed emerging late in the season will not produce this amount of seed, a small pigweed plant can still produce a large amount of seed in a short period of time. Anytime weeds are allowed to produce seed, the natural seed-bank will be increased and can result in many years of weed control problems.

If herbicide-resistant weeds are allowed to produce seed and establish a seed-bank, these weed control problems could be magnified. Controlling vegetation post-harvest can be a proactive approach to reducing natural and herbicide-resistant seed-banks and can allow for the introduction of herbicides with multiple modes of action (MOA).

Control Strategies

Tillage. There are a number of control measures that growers can utilize for post-harvest weed control in corn and grain sorghum. Tillage is one option that can be used; however, herbicides continue to be the preferred method of weed control, with many acres now managed in minimal- or no-till production systems. If tillage is to be utilized, growers may need to pay special attention to depth of tillage to ensure proper control of perennial weeds.

Figure 1. Weeds present following corn harvest.



Glyphosate. Glyphosate continues to be a major part of many weed control systems and could be used in a post-harvest situation as long as glyphosate-resistant weeds are not present. Many formulations of glyphosate are available for use such as Roundup WEATHERMAX and OriginalMAX, Touchdown and Touchdown Total, and numerous generics. Glyphosate rates may need to be increased in order to control some of the late season perennial weeds. Refer to the label for various rate information.

Tank-mix Partners with Glyphosate. Several herbicides are labeled for mixing with glyphosate. Below are some of those herbicides with corresponding rates.

2,4-D: Rates for 2,4-D can range from 12 to 24 oz/A depending on size of weeds to be controlled. Broadleaf weed control can be expected and the addition of glyphosate will aid in control of grasses. 2,4-D will injure cotton and should not be used where cotton is actively growing in the field. Check local regulations on the use of 2,4-D in cotton areas and avoid spray-drift as much as possible.

Clarity or Dicamba: Rates for Clarity or Dicamba can range from 8 to 24 oz/A depending on size of weeds to be controlled. Do not exceed 64 oz/A per year. Broadleaf weed control can be expected and the addition of glyphosate will aid in control of grasses. Similar to 2,4-D, dicamba will injure cotton and its use should be avoided with any cotton in the vicinity. Avoid spray-drift as much as possible, especially in cotton growing regions.

Aim and ET: Burndown rates of Aim range from 1 to 2 oz/A, and ET should be used at 1 oz/A. Use 1% v/v crop oil concentrate (COC) when applying these products. Both products work well on

morningglories, vines, and various broadleaf weeds. The addition of glyphosate will aid in the control of grasses.

Paraquat. Paraquat is another POST herbicide that can be used and can result in a quicker burndown than glyphosate. Use rates for paraquat range from 1 pt/A to 3 pt/A depending on formulation and size of weeds (Gramoxone Inteon needs higher rate because of lower AI). A non-ionic surfactant (NIS) can be added at 0.25 % v/v or a COC can be used at 1% v/v. Paraquat is non-selective and can provide control of most grass and broadleaf species with suppression of perennial weeds. Make sure proper coverage is achieved with application.

Ignite 280. The rate for Ignite 280 can range from 22 to 29 oz/A depending on target weed species. Weed size is important for adequate control with applications to smaller weeds preferred. Ignite 280 can control most grass and broadleaf weed species but can be weak on pigweeds and some grasses. For increased control, Ignite 280 can be tank-mixed with glyphosate or 2,4-D.

Valor SX. The rate for Valor SX can range from 2-3 oz/A. Add 0.25% v/v NIS to this application. Valor SX can control most broadleaf weeds that are present at application and can also provide residual control of most broadleaf weeds and suppression of grass species. Tank-mixing Valor SX with glyphosate can increase control of grasses that are present at application.

Envoke. The rate for Envoke can range from 0.10 to 0.15 oz/A. Do not exceed 0.4 oz/A per season. NIS can be added at 0.25% v/v for increased control. Envoke can provide control of certain broadleaf weeds and sedges at application and also through residual activity. Envoke can be tank-mixed with glyphosate for increased grass control.

Other Residual Herbicides. Several other herbicides can be used in post-harvest weed control either alone or as tank-mix partners. Always consult the label for proper application procedures and suitable tank-mix partners.

Prowl or Prowl H2O: Use rates for Prowl or Prowl H2O range between 1.5 to 3.0 pt/A depending on soil type. Prowl will not control established weeds and may need to be tank-mixed with glyphosate or other approved herbicides (consult label) for increased control. Prowl can provide residual control of small seeded broadleaves and most grass species. Adequate rainfall within 7 to 10 days is needed for proper activation.

Reflex: Use rates for Reflex range between 1-1.5 pt/A, not to exceed 1.5 pt/A per year. A NIS at 0.25% v/v or a COC at 0.5% v/v can be added to the spray mixture. Reflex can provide control of most broadleaf weeds present at application and also adds some residual control and suppression of annual grass and perennial weeds. Glyphosate can be tank-mixed with Reflex for increased grass control.

Goal 2XL or DeltaGoal: Use rates for Goal 2XL or DeltaGoal range from 1 to 2 pt/A. A NIS at 0.25% v/v can be added to the spray mixture. Goal 2XL or DeltaGoal can control grass and broadleaf weeds in the seedling stage and can provide residual control of both. If weeds are large at application, poor control may result. Good spray coverage is essential for adequate control. Glyphosate can be tank-mixed with Goal 2XL or DeltaGoal for increased weed control.

Rotational Crop Intervals for Wheat

Wheat acreage is expected to increase in Louisiana for the 2007-08 growing season. Strongly consider rotational crop intervals when choosing which post-harvest herbicide to use. If minimal- or no-till is being

utilized for growing wheat this fall, these summer crop post-harvest applications can be viewed as a burndown application in preparation for planting a wheat crop. Below are a few herbicides and the plant-back restrictions associated with them for following with a wheat crop. Always consult the label for plant-back restrictions when using these and other products.

Plant-back restrictions (days before planting) for commonly used herbicides prior to planting wheat.

Paraquat	0 d
Glyphosate	0 d
Ignite	70 d
Valor	30 d (2 oz.) & 60 d (3 oz.)
Reflex	120 d
Aim	0 d
ET	0 d
Prowl	120 d
Goal 2XL/DeltaGoal	10 months
Clarity	22 d per 8 oz.
2,4-D	30 d
Envoke	90 d

Dean Lee Research Station Row Crop Field Day – August 23.

The annual Dean Lee Research Station Row Crop Field Day will be held at the research station on US Hwy. 71 south of Alexandria on August 23. Registration will begin at 2:00 pm. A short program will precede loading trailers for the field tour at 3:00 pm. Following the field tour a social and meal will follow at 6:00 pm. Topics and speakers will include:

- Soybean Desiccation for Harvest** – *Dr. Jim Griffin, LSU AgCenter*
- IPM Strategies for Feed Grains** – *Dr. Roger Leonard, LSU AgCenter*
- Statewide Feed Grain Situation and Update** – *Dr. David Lanclous, LSU AgCenter*
- Twin Row Cotton** – *Dr. Trey Koger, Mississippi State University*
- Late Season Cotton Insect Management** – *Dr. Ralph Bagwell, LSU AgCenter*
- New Roundup Ready Flex Cotton Varieties** – *Dr. Sandy Stewart, LSU AgCenter*
- Double-Cropped Cotton and Wheat** – *Rob Ferguson, Dr. Sandy Stewart, and Donna Morgan, LSU AgCenter*
- Weed Competition and Resistance Issues** – *Dr. Donnie Miller, Roy Vidrine, Derek Scroggs, LSU AgCenter, and Dr. Larry Steckel, University of Tenn.*
- Maturity Group V Soybean Stunting** – *Dr. Steve Moore, LSU AgCenter*
- Wheat Seed Availability and Planting Date** – *Dr. Steve Harrison, LSU AgCenter*

In addition to field tours, a weed identification display will be available close to the registration area.

Please make plans to attend. For questions and/or directions, call the LSU AgCenter’s Central Region Office at 318-427-4424 or contact Dr. John Barnett at jbarnett@agcenter.lsu.edu.

Below is a list of contacts, both agents and specialists, in Louisiana cotton-producing parishes. They are ready and willing to assist you in any way they can.

COTTON COUNTY AGENTS			
PARISH	AGENT	PHONE	EMAIL
Avoyelles	Carlos A. Smith Jr	318-253-7526	CSmith@agcenter.lsu.edu
Bossier	Joe Barrett	318-965-2326	JBarrett@agcenter.lsu.edu
Caddo	John Levasseur	318-226-6805	JLevasseur@agcenter.lsu.edu
Caldwell	Jim McCann	318-649-2663	JMcCann@agcenter.lsu.edu
Catahoula	Cliff Watts	318-744-5442 318-334-0700 (cell)	cwatts@agcenter.lsu.edu
Concordia	Glenn Daniels	318-336-5315	GDaniels@agcenter.lsu.edu
DeSoto	Hubert Wilkerson	318-932-4342 318-453-1615 (cell)	HWilkerson@agcenter.lsu.edu
East Carroll	Donna Lee	318-559-1459 318-282-1292 (cell)	drlee@agcenter.lsu.edu
Evangeline	Keith Fontenot	337-363-5646	KFontenot@agcenter.lsu.edu
Franklin	Carol Pinnell-Alison	318-435-7551 318-267-6713 (cell)	CPinnell-Alison@agcenter.lsu.edu
Grant	Matt Martin	318-627-3675	MMartin@agcenter.lsu.edu
Lasalle	Jim Summers	318-992-2205	JSummers@agcenter.lsu.edu
Madison	Mike Rome	318-574-2465 or 2483	MRome@agcenter.lsu.edu
Morehouse	Terry Erwin Richard Letlow	318-281-5742 or 5741 318-281-5742 or 5741	terwin@agcenter.lsu.edu rletlow@agcenter.lsu.edu
Natchitoches	Hubert Wilkerson	318-932-4342 318-453-1615 (cell)	hwilkerson@agcenter.lsu.edu
Ouachita	Richard Letlow	318-281-5742 or 5741	rletlow@agcenter.lsu.edu
Pointe Coupee	Miles Brashier	225-638-5533 225-281-9469 (cell)	MBrashier@agcenter.lsu.edu
Rapides	Matt Martin	318-473-6605	MMartin@agcenter.lsu.edu
Red River	Hubert Wilkerson	318-932-4342 318-453-1615 (cell)	hwilkerson@agcenter.lsu.edu
Richland	Keith Collins	318-728-3216 318-355-0703 (cell)	KCollins@agcenter.lsu.edu
St. Landry	Keith Normand	337-948-0561	KNormand@agcenter.lsu.edu
Tensas	Randy Smith	318-766-3320 318-267-6709 (cell)	RASmith@agcenter.lsu.edu
West Carroll	Myrl Sistrunk	318-428-3571 318-267-6712 (cell)	MSistrunk@agcenter.lsu.edu
SPECIALISTS			
Cotton Specialist	Sandy Stewart	318-473-6522 318-308-5625(cell)	sstewart@agcenter.lsu.edu
Weeds Specialist	Roy Vidrine	318-473-6525 318-308-7225(cell)	rvidrine@agcenter.lsu.edu
Entomology Specialist	Ralph Bagwell	318-435-2157 318-334-0393(cell)	Rbagwell@agcenter.lsu.edu
Nematodes Specialist	Charlie Overstreet	225-578-2186	Coverstreet@agcenter.lsu.edu
Pathology Specialist	Boyd Padgett	318-435-2157 318-308-9391(cell)	bpadgett@agcenter.lsu.edu
Economics Specialist	Gene Johnson	504-388-4081	GJohnson@agcenter.lsu.edu
Fertility Specialist	J. Stevens	318-427-4408 318-308-0754(cell)	JStevens@agcenter.lsu.edu
LOUISIANA COTTON BULLETIN			
Designer	Brandi C. W. Garber	318-290-0625(cell)	bqarber@agcenter.lsu.edu

Louisiana State University Center Agricultural Center, William B. Richardson, Chancellor
Louisiana Agricultural Experiment Station, David J. Boethel, Vice-Chancellor and Director
Louisiana Cooperative Extension Service, Paul D. Coreil, Vice Chancellor and Director

Issued in furtherance of the Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension Service provides equal opportunities in programs and employment.