FOCUS on South Plains Agriculture

A newsletter from the Texas AgriLife Research and Extension Center at Lubbock

Volume 51 number 8 23 August 2012

http://lubbock.tamu.edu/focus

Late-Season Weed Management - West Texas

By Peter Dotray And Wayne Keeling

Many fields have received timely herbicide applications this season. Some of these fields are still clean and a few are in need of a layby treatment to control the last "new" flush of small weeds. Even in fields where poor weed control has been observed, it is important to continue to try to control weeds for harvest efficiency and reduce weed seed production that will affect future cotton crops. Growers should not ignore weeds that have escaped previous control measure and the financial investment made today will pay off in the 2013 crop and beyond.

In 2011, several fields were investigated where Palmer amaranth was not controlled following several applications of glyphosate. Results from these tests indicated that glyphosate-resistant Palmer amaranth where present in several of these fields. In 2012, numerous fields in a least five counties have been reported withstanding multiple glyphosate applications, suggesting that that some level of resistance is likely present. Suspect fields are much more widespread than what was observed in 2011. One common theme in several of these fields was lack of any residual herbicide in a glyphosate-based weed management program.

Growers with weeds, whether they are herbicide resistant or not, should remove escaped plants because each female plant has the capability of producing over a half-million seed. A successful long-term strategy for effective control of Palmer amaranth should center on a "zero tolerance" approach. In this approach, the goal late-season is to remove escaped weeds from the field to reduce additional seed development for 2013. Additionally, large weeds growing through the cotton canopy have already reduced yield potential and will cause problems at harvest if not removed.

Producers are encouraged to look at their fields and surrounding areas and destroy all plants that are suspicious for herbicide resistance by any effective means available, which could include hand hoeing, cultivation, spot-spraying, or using hooded sprayer applications with effective burndown herbicides. This will limit the production of additional resistant seed and help prevent the problem from becoming more widespread next year. In small cotton, there may still be the possibility of cultivation or broadcast or hooded applications, but in larger cotton with lapped middles, spot spraying or hand removal might be the best option.

Be aware that weed seeds can travel with equipment from one area of the field to another and from field to field. If you have fields where you suspect resistant weeds may be present, do not transport equipment from a weedy field to a clean field without carefully cleaning the equipment. If you have a custom harvester moving into one of your fields, make sure it has been cleaned first. When considering fields at the same crop maturity, the harvesting order should be from cleaner fields to weedier fields. Transport of hay could serve as a means of resistant weed

seed dissemination. Effective late-season weed control in 2012 will assist in effective weed management for the future. This is also an excellent time to start planning on how to best utilize a soil residual herbicide in your 2013 weed management program. Effective weed management starts with a dinitroaniline herbicide. The use of soil residual herbicides at-planting will help to control difficult-to-control weeds that escape PPI herbicides and are a challenge for postemergence herbicides. There are several herbicides that may be applied with glyphosate in tank-mix at the first over-the top timing and several other soil residual herbicides are available for use at layby. Consider overlapping residual herbicides for effective resistance management in 2013.

Glyphosate resistant Palmer amaranth

FOCUS on South Plains Agriculture

Fair use policy

Editor

Patrick Porter

SEND US A COMMENT BY E-MAIL

Contributing Authors

Peter Dotray, Extension Weed Scientist
Wayne Keeling, Research Weed Scientist

Useful Web Links

Water Management Website, TAMU, Irrigation at Lubbock, IPM How-To Videos, Lubbock Center Homepage, Texas AgriLife Research Home , Texas AgriLife Extension Home, Plains Cotton Growers

County IPM Newsletters

Castro/Lamb, Dawson/Lynn, Crosby/Floyd, Gaines, Hale/Swisher, Hockley/Cochran, Lubbock, Parmer/Bailey, Terry/Yoakum