

# How To Grow In A New Era Of Weeds

## Protecting Cotton from Glyphosate-Resistant Pigweed

**JACKSON, TENN.**

**M**ention Palmer Pigweed to a mid-south farmer, and you're sure to evoke feelings of apprehension. Viewed by some experts as the 21st century equivalent to the boll weevil, this glyphosate-resistant weed has the potential to devastate cotton crops, choking them out with its incredible growth.



ton, or spraying pre-emergence with one of the following: Caparol, Prowl H2O, Cotoran or Direx. In addition he advocates a 1-2 leaf application as well as a layby application of various herbicides. Along with timing, Steckel stresses that farmers closely monitor their fields, as it does not take long for Pigweed to take root and spread.

"We're going to look back on the early 2000s as the easiest weed control is ever going to be. You stuck Roundup in your tank and you sprayed cotton, you sprayed soybeans and corn with one herbicide. And the timing really didn't matter; you killed big weeds, you killed small ones. Those days are over. You're going to have to go out timely. You're going to have

**Top Photo: West Tennessee field consumed with Palmer Pigweed.**

**Photo on bottom: Dr. Larry Steckel, University of Tennessee. Steckel says he spending most of the winter warning area farmers about the dangers of Palmer Pigweed and other glyphosate-resistant menaces.**

"It's one of the most competitive weeds period," says Dr. Larry Steckel, University of Tennessee Associate Professor of Plant Science. "Palmer Pigweed has the highest photosynthetic rates of any plant recorded. In June, when it's warm and gets lots of water, it will grow two inches a day."

With growth rates like that, it's easy to see how Palmer Pigweed is gaining ground in the Mid-South. There, counties with confirmed reports of pigweed more than doubled in 2008. In Tennessee, researchers have documented pigweed in more than 100 fields in 10 counties, with Shelby County (Memphis) suffering the



### GR Palmer Amaranth Management in Cotton

Up 30 To 14 DBP	OR	Pre Emergence	AND 1 to 2 If	AND	Layby
2 oz Valor or 16 oz Reflex		32 oz Caparol or 38 oz Prowl H <sub>2</sub> O or 32 oz Cotoran or 16 oz Direx	16 oz Dual (Parrlay 21 oz) +/- glyphosate		Valor or Reflex or Caparol or Suprend or Layby Pro or Direx + MSMA

#### Steckel's recommendations.

most damage. But Steckel says if there is a silver lining, it's that this plant can be controlled if farmers are prepared. This means a change of thinking as we enter a new era of weeds.

"Now that Roundup doesn't control Palmer Pigweed, we have to use different herbicides, and farmers are going to have to be much more timely," says Steckel. "They'll have to work on cotton when its three-to-four inches tall as opposed to six-to-eight inches tall. And we're talking a difference of maybe 72 hours."

According to Steckel, well-timed applications of a variety of herbicides are the best way to combat Pigweed. He recommends using Valor or Reflex a month to two weeks before planting cot-

ton, or spraying pre-emergence with one of the following: Caparol, Prowl H2O, Cotoran or Direx. In addition he advocates a 1-2 leaf application as well as a layby application of various herbicides. Along with timing, Steckel stresses that farmers closely monitor their fields, as it does not take long for Pigweed to take root and spread.

Steckel, along with experts from across the Mid-South, will be presenting more information about protecting cotton from glyphosate-resistant weeds along with other topics at "Cotton Focus 2009." The educational event takes place on February 12th. It will be held at the West Tennessee Research and Education Center located at 605 Airways Boulevard in Jackson, Tennessee. For more information call 731-424-1643 or visit the Website <http://westtennessee.tennessee.org>. Δ