

# Pigweed Becomes A Major Pest In Arkansas: New Ways Developed To Stop Growth

KRISTEN JOHNSON-PIND  
Mid America Farmer Grower

KEISER, ARK.

**D**r. Ken Smith, a University of Arkansas Extension Weed Scientist, states that a resistant strain of pigweed is driving the train of weed control at this time.

"This is a major issue for us here in Arkansas.

nite in Liberty Link soybean or glyphosate + Dual in Roundup Ready soybean have been our best tools to manage pigweed.

If pigweed does escape and begin to germinate in Roundup Ready soybean, Flexstar is effective when the weeds are 2 inches or less in height.

Pigweed can grow at an alarming rate of almost two inches a day. Because of this rapid



Smith believes there are over 750,000 acres that are infected with resistant pigweed in Arkansas alone, and only expects the problem to become even more widespread in the next few years.

Photo by John LaRose, Jr.

It has sort of blown up on us in 2009. It is not unexpected, but it is something that is new to us as far as the magnitude of the problem," said Smith.

"We feel like we have over 750,000 acres that are infected with resistant pigweed in this state alone. Pretty much every county in our cropping area has some locations containing pigweed," said Smith, "and that just means that it is going to get even more widespread the next couple of years until every field has pigweed growing in it."

As of now, Smith and his colleagues are discussing some distribution management strategies in both the cotton and soybean fields in Arkansas.

"What it boils down to is yes, we can control pigweed, but it has to be done with a soil residual herbicide. We can no longer depend on post emergence with over the top herbicides," said Smith.

According to Smith, the soil seed bank is extremely high and in many fields the common protection against pigweed just doesn't cut it anymore.

"That first flush that comes in the spring will be solid pigweed. By this I mean the soil seed bank is so high we will have hundreds per square meter. You would not be able to touch the ground without touching pigweed," said Smith.

"Pigweed is an extremely prolific seed producer so the soil seed bank is something we must manage and the only way to manage it is going to be with the help of soil residual herbicides," said Smith.

Smith states that in his research he has looked at many different types of treatment combinations. His program approaches all combinations and ideas to find the most successful program to put in place.

According to Smith, the most successful program thus far is the program starting with a soil residual planting time and clean planting.

In soybean, Smith urges the use of a soil residual product such as Prefix, Authority MTZ, or Valor as a pre-emergence herbicide at the time of planting. These products followed by Ig-

growth, pigweed can get out of control easily if not taken care of.

"Early detection is key," said Smith, "early spraying in soybeans and in cotton will help but since pigweed grows at a rapid rate we don't always have that luxury. Extended rainy weather caused many of us to lose the game early in the season if we did not have a pre-emergence herbicide out on our cotton this year. Using a pre such as Cotoran or Direx and then coming back before the weeds can germinate with an application of Dual has given us the opportunity to give our cotton a head start."

"If we do see some pigweed that are beginning to break through the Dual plus Cotoran, our cotton should be large enough for a post-direct application of something like Caparol or MSMA plus one other product such as Direx. That should take out those small clusters and give us another layer of soil residual," said Smith.

"What this boils down to is keeping the pigweed from ever germinating in the cotton and soybeans as much as possible. The old way of farming allowing the weeds to germinate and start to grow before removing them is not an option, we must learn to manage this pest with new technology not the old," said Smith.

"Our goal is to find a program that is effective and will require no more than one post-directed pesticide application. That's our goal and that is what we are looking for," said Smith.

"We think we have some good programs already in place and a good system as well. We have had some developments in the University and those are going to fit right in with what we already have in place," said Smith.

"If you give a farmer a problem and there is a solution, it won't be long until he finds a way to solve it," said Smith.

Smith's advice to farmers is not to ignore the problem. If you see pigweed beginning in your fields take all precautions.

"I've been in this game for over 30 years and I have never seen anything that has this much potential of threatening our farmers crops in Arkansas," said Smith.  $\Delta$

KRISTEN JOHNSON-PIND: Associate Editor, MidAmerica Farmer Grower



Link Directly To: **APACHE**



Link Directly To: **FIRESTONE**



Link Directly To: **SYNGENTA**



Link Directly To: **MONSANTO**



Link Directly To: **VERMEER**