



# Weed Control ALERT



Fall 2008

## Post-Harvest Palmer Amaranth Weed Control

Controlling Palmer amaranth is key for maintaining profitable cropping systems in the Mid-South and post-harvest operations can play a large role in assisting in your efforts. Palmer amaranth only has to reach a few inches in height in order to produce a seed head with thousands of viable seed that will be waiting to germinate when temperatures warm back up in the spring. It is critical to continue post-harvest control of Palmer amaranth with the diligence that you have been practicing during the growing season.

In order to reduce potential weed control problems in crop for 2009, farmers should start thinking about controlling Palmer amaranth that will germinate and set seed between now and the winter months. While not all fields are candidates for fall weed control programs, farmers should definitely concentrate on fields where patches of Palmer amaranth were seen pre-harvest, as harvest equipment has probably moved the seed to multiple areas of the field.

A two tiered approach should be considered for controlling fall-germinating Palmer amaranth and reducing the amount of new seed that will accumulate in the seedbed:

1. Tillage can be very valuable in many situations and should be considered as an alternate weed control practice where appropriate.
  - Tillage serves as another tool to control weeds and change weed emergence patterns.
  - Tillage reduces reliance solely on herbicides.
  - Periodic tillage is a reliable cultural practice that also benefits your system by removing a build-up of trash on the soil surface and can even out ruts or rough spots in fields. However, only use tillage when necessary.
2. The application of non-glyphosate containing herbicides alone or in tank-mixes with Roundup® brand herbicides can provide good weed control and provide a second mode of action
  - Contact herbicides such as paraquat can be used effectively to control small Palmer amaranth.
  - Tank-mixes of growth hormone herbicides such as 2,4-D with or without dicamba mixed with 22-32 fl oz/A of Roundup WeatherMAX® or Roundup PowerMax® can also be very effective in their control of small Palmer amaranth plants.
  - Use of a non-glyphosate containing herbicide adds another mode of action and reduces the use of glyphosate herbicides as stand alone products, which should lessen the potential for weed population shifts and decrease the risk of selecting for glyphosate weed resistance.

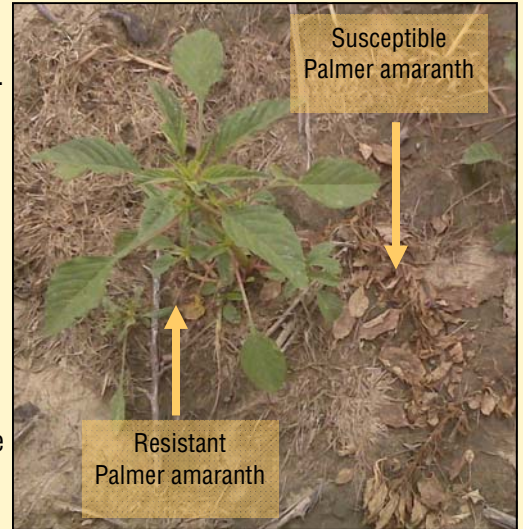


Figure 1. Pictured are two Palmer amaranth plants post glyphosate application. On the left is the glyphosate-resistant biotype and the plant on the right is glyphosate-susceptible.

The goal is to reduce weed populations from year to year, allowing for more efficient use of herbicides and other cultural practices to control weeds. If new Palmer amaranth plants are allowed to germinate and set seed in the fall, dramatically higher weed populations may result the next year. If you allow certain tough-to-control weeds to survive then you may accelerate a shift to weed species that are more difficult-to-control. Weed shift problems may require a substantially different weed management approach.

For more information contact your local Monsanto Technology Development Representative and visit the following websites:

[www.weedtool.com](http://www.weedtool.com)

[www.weedresistancemanagement.com](http://www.weedresistancemanagement.com)

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