

## Post-Harvest Control of Palmer Amaranth

Control of Palmer amaranth is essential in maintaining profitable cropping systems in the Midsouth and Southeast. Post-harvest management can benefit long-term control of this difficult weed. When fields are harvested in late summer or early fall, weeds can continue to germinate and grow causing management problems for the following season. Palmer amaranth can be especially problematic since it only has to reach a few inches in height to produce a seed head with thousands of viable seeds.

To potentially reduce weed control problems for the next growing season, farmers should continue to control Palmer amaranth seedlings until temperatures no longer allow for germination. Palmer amaranth may be present in the fields that are getting close to harvest. Once the crop begins to mature and dry down the weed can once again grow vigorously. Weeds that are not controlled this season can set seed and contribute to the seedbed. While not all fields are candidates for fall programs, farmers should concentrate on fields where Palmer amaranth exists prior to harvest, as harvest equipment can move the seed to multiple areas of the field.

Two options should be considered for controlling existing and fall-germinating Palmer amaranth to reduce introduction of new seeds to the seedbed:

1. The introduction of herbicides with different modes of action can help reduce the risk of certain weeds from becoming dominant in a production system. Post-harvest herbicide recommendations include:
  - Contact herbicides, such as Gramoxone Inteon®, can be used effectively to control small Palmer amaranth.
  - Tank-mixes of Roundup® agricultural herbicides with a growth hormone herbicide, such as dicamba or 2,4-D can also help control small Palmer amaranth.
2. Tillage can be very valuable in many situations and may be considered an option for weed control where appropriate.
  - Tillage provides another method of control beyond herbicides.
  - Periodic tillage is a cultural practice that can benefit management systems by removing trash build up on the soil surface and can smooth field ruts.
  - Tillage can help break certain weed patterns.

When Palmer amaranth sets seed in the fall, dramatically higher weed populations may result during the next growing season. Controlling Palmer amaranth post harvest can help reduce weed populations from year to year and allow for more efficient use of herbicides and other cultural practices during the growing season. The benefits of a crop and herbicide rotation program that controls Palmer amaranth in-season can be negated if post-harvest seed production is allowed.

Sources: Weed Risk Assessment. Best Practices. 2007. Weed Resistance Risk Assessment Tool. Best Management Practices. [www.weedtool.com](http://www.weedtool.com)



**Individual results may vary**, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

**ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Tank mixtures:** The applicable labeling for each product must be in the possession of the user at the time of application. Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank mixture. Monsanto has not tested all tank mix product formulations for compatibility or performance other than specifically listed by brand name. Always predetermine the compatibility of tank mixtures by mixing small proportional quantities in advance. Roundup® and Technology Development by Monsanto and Design® are registered trademarks of Monsanto Technology LLC. All other trademarks are the property of their respective owners. ©2011 Monsanto Company. CRB7302010 JMM08172011