

Palmer amaranth & Waterhemp Best Management Tactics

Adapted from Efficacy of Weed Management Tactics SPES-268N9

Practices	Points
Crop Rotation • Corn/soy • Corn/soy/small grain • Corn/soy/small grain/forage	1 2 3
 Planting Considerations Narrow row spacing (<30") High residue cover crop (i.e. cereal rye, must be present on the soil surface) 	1 2
 Mechanical Weed Control Mowing (multiple times PRIOR to seed set) Flame weeding Weed electrocution Moldboard plow (once every four years) Inter-row cultivation 	1 1 1 2 2
Variety Selection • Roundup Ready/Liberty Link • Xtendflex (dicamba/glufosinate/glyphosate) • Enlist E3 (2,4-D/glufosinate/glyphosate)	1 1 2
 Herbicide Program Spring burndown with residual herbicide Residual herbicide at planting Timely POST (<3" weeds) Timely POST plus residual herbicide 	1 2 2 3
 Harvest Weed Seed Control Avoid harvesting weedy areas Chaff lining Clean combine before moving to non-infested areas/fields. Cage mill 	1 2 2 3

Key: 1 = Fair practice, 2 = Good practice, 3 = Excellent practice

How to use this table:

Palmer amaranth and waterhemp are herbicide-resistant weeds that can easily adapt to conventional spray programs. By combining different weed control strategies, these weeds are less likely to become more problematic as they cannot adapt to a constantly changing system.

Each practice listed has been assigned points based on the relative level of control obtained in university studies. The greater the number of points accumulated, the greater the likelihood of success of the management program.

It is **recommended that conventional farming operations accumulate at least 8 points** to control Palmer amaranth and waterhemp successfully. **Organic operations should accumulate at least 6 points**, including 2 different harvest weed seed control options.



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