

Giant *Miscanthus* Weed Control

Giant *Miscanthus*

Giant *Miscanthus* (*Miscanthus* × *giganteus*) is a warm-season perennial grass with promising benefits as a commercial biomass crop in the United States. Giant *Miscanthus* originates from Southeast Asia and is a sterile hybrid of *M. sacchariflorus* and *M. sinensis*, two common ornamental grasses.

Weed Control

Weed control in Giant *Miscanthus* is crucial for establishing a successful and healthy stand that can last 30+ years. The first two years are most critical, with little weed management thereafter. Planting *Miscanthus* into weed-free fields following an herbicide-tolerant crop can reduce weed pressure during the two-to-three-year establishment period.

Herbicides

There are very few labeled herbicides for use on *Miscanthus* fields, but the following herbicides have been shown to control weeds with no *Miscanthus* injury.

Pre-emergents¹:

- Prowl® (pendimethalin)
- Harness® (acetochlor)*
- Harness® Xtra (acetochlor + atrazine)*

*Labeled

Post-emergent¹:

- Callisto® (mesotrione)
- 2, 4-D
- Dicamba
- Atrazine

Mechanical, inter-row cultivation can be used for weed control during the early part of the first growing season.

¹Anderson *et al.* (2010). *Weed Techn.* 24: 453-460.



Figure 1. Field comparison: high and low weed competition from left to right. *Photo credit: Heaton Lab.*



Figure 2. *Miscanthus* field cultivation, post-emergence. *Photo credit: Heaton Lab.*

Contacts/Authors:

Danielle Wilson, Research Assistant
Department of Agronomy
dwilson@iastate.edu | 515-979-1675

Emily Heaton, Assistant Professor
Department of Agronomy
heaton@iastate.edu | 515-294-1310

This research was supported by funding from the North Central Regional Sun Grant Center at South Dakota State University through a grant provided by the US Department of Energy Office of Biomass Programs under award number DE-FG36-08GO88073.

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