

Management Guide for Giant Ragweed

Monsanto is committed to providing the information and product recommendations necessary to minimize the risk of developing weed resistance. The information below is targeted at increasing awareness of important weeds and helping preserve glyphosate efficacy.

Giant Ragweed Biology

- Giant ragweed is also known as horseweed.
- Giant ragweed averages 5 feet in height, but can grow as large as 10 feet, making it one of the largest annuals to plague farmers.¹
- The weed has a relatively short taproot, hairy stem and large lobed leaves.
- Giant ragweed can produce over 11,000 seeds per plant without competition. Soybeans face competition from giant ragweed that can produce over 4,700 seeds per plant.²
- Flowers are produced in greenish heads. Each flower head contains either only female or only male flowers.
- Giant ragweed is considered one of the most competitive weed species to crops in the Midwest, and can reduce corn yield up to 37 percent and reduce soybean yield up to 52 percent.³ Stalk-boring insects can impact control tactics.

Weed Environment

- ✓ Giant ragweed is found mostly on fertile, moist soils, especially bottomlands and waste areas, but also in corn, soybeans and other cultivated crops.
- ✓ Giant ragweed is often the dominant weed adapting to production practices throughout the growing season. Giant ragweed emerges later and over a more extended period in the eastern Corn Belt. Iowa giant ragweed emerges early and in a generally contiguous flush.
- ✓ Timing of herbicide applications is very important. If giant ragweed gets too large, prior to application, control will also be reduced.
- ✓ Giant ragweed seeds can be very hardy in the soil. ALS resistance is widespread.
- ✓ No known cases of resistance to glyphosate herbicides have been confirmed.⁴ However, giant ragweed is often difficult to control because of its size at the time of the application.

¹ www.wssa.net

² www.cropsci.uiuc.edu

³ www.agronomyday.cropsci.uiuc.edu

Note: Yield reduction based on one giant ragweed plant per m² (Harrison, et. al, 2001 and Baysinger and Sims, et. al.)

⁴ Heap, I. The International Survey of Herbicide Resistant Weeds. Online. Internet. July 06, 2005. Available www.weedscience.com

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Treatment Recommendations¹

Scout fields and control weeds throughout the season. Proper application timing protects yields, ensures correct use rate for weed size and considers the impact of environmental conditions on performance.

Roundup Ready[®] Corn 2

- ✓ Start clean with a burndown herbicide or tillage. Early season weed control is critical in corn to maximize yield potential.
- ✓ Apply a preemergence residual herbicide containing atrazine such as Harness[®] Xtra, Degree Xtra[®], or other residual herbicides at the recommended rate. Atrazine is an effective preemergence product – consider adding more atrazine to giant ragweed premixes for heavy infestations.
- ✓ Or apply a preemergence residual herbicide containing atrazine at the recommended rate tank mixed with Roundup WeatherMAX[®] at a minimum of 22 oz/A in-crop before giant ragweed exceeds 4 inches in height.
- ✓ Follow with a postemergence in-crop application of Roundup WeatherMAX at a minimum of 22 oz/A for additional giant ragweed flushes before they exceed 4 inches in height.
- ✓ Tank mix other herbicides such as 2,4-D or dicamba (Clarity[®], Banvel[®] or Distinct[®]) with Roundup WeatherMAX if necessary for postemergence giant ragweed control.

Roundup Ready Soybeans

- ✓ Scout fields before and after each burndown and in-crop application.
- ✓ Start clean with a burndown herbicide or tillage. Tank mix with 2,4-D to control existing weeds and other prevalent weeds such as emerged giant ragweed.
- ✓ If you have dense stands of giant ragweed, use a residual herbicide such as cloransulam (FirstRate[®]) preemergence where ALS resistance is not an issue.
- ✓ In-crop, apply Roundup WeatherMAX at a minimum of 22 oz/A before giant ragweed exceeds 8 inches in height.
- ✓ If an additional flush of giant ragweed occurs, observe maximum annual application rates.
- ✓ Roundup WeatherMAX may be tank mixed with other herbicides, including cloransulam (FirstRate), lactofen (Cobra[®]) or fomesafen (Flexstar[®]) if additional postemergence giant ragweed control is needed.

Minimize the Risk of Weed Resistance

- Start clean and control weeds early.
- Use Roundup Ready Technology as your foundation.
- Add other herbicides and cultural practices where appropriate as part of the Roundup Ready Cropping System.
- Use the right rate at the right time.
- Control weeds throughout the season and reduce the weed seed bank.

Report incidences of repeated non-performance of any Monsanto branded herbicide to your local Monsanto retailer or call 1-800-ROUNDUP.

This is not a product label. Always read and follow label directions for all products used in tank mixtures. Always predetermine the compatibility of tank mixtures by mixing small proportional quantities in advance. Monsanto has not tested all recommended tank mix product formulations for compatibility or performance.

¹This fact sheet is issued to clearly describe use recommendations permitted under FIFRA Section 2(ee) as not being inconsistent with product labeling, or is issued to highlight an approved use from the product labeling. It is a violation of federal law to use any registered pesticide product in a manner inconsistent with its labeling. Read and follow all precautions and use instructions contained within the labeling. The applicable labeling for all products must be in the possession of the user at the time of application. Some recommended pesticide products are not registered in all states. Check with the product manufacturer or your dealer for products registered in your state. The distribution, sale or use of an unregistered pesticide is a violation of federal and/or state law and is strictly prohibited.

These recommendations are for all states except Texas.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS: Roundup Ready[®] crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup[®] agricultural herbicides. Roundup agricultural herbicides will kill crops that are not tolerant to glyphosate. Harness[®] brands and Degree Xtra[®] are restricted use pesticides and are not registered in all states. The distribution, sale or use of an unregistered pesticide is a violation of federal and/or state law and is strictly prohibited. Check with your local Monsanto dealer or Monsanto representative for the product registration in your state. Harness[®], Degree Xtra[®], Roundup[®], Roundup Ready[®] and Roundup WeatherMAX[®] are registered trademarks of Monsanto Technology LLC. All other trademarks are the property of their respective owners.