What You’ll Learn...

- Integrated weed management guidelines have been designed to address potential weed resistance and sustain high yield management practices.
- Alfalfa has several characteristics that can hinder the development of weed shifts or resistance.
- Herbicides with different sites of action and soil residual activity should be part of a weed management plan.

Weed Control in Alfalfa

Weed control is critical for the production of high quality alfalfa. Genuity® Roundup Ready® Alfalfa gives alfalfa producers the advantage of broad spectrum weed control and application flexibility with Roundup® brand glyphosate only agricultural herbicides without crop injury or rotational concerns. New alfalfa seedlings are vulnerable to weed competition. A poor or variable stand after seeding can result in weeds occupying open gaps in the alfalfa stand. Throughout the three- to five-year crop life, weeds can compete with alfalfa to reduce yield and quality. Roundup brand glyphosate only agricultural herbicides can be used on newly seeded and established Genuity Roundup Ready Alfalfa.

Alfalfa has several characteristics that can hinder the development of weed shifts or resistance. Alfalfa is a perennial crop that competes aggressively to prevent weed establishment. The frequent cutting of alfalfa interferes with weed seed production, and the lack of tillage and soil disturbance in alfalfa creates a poor environment for weed seed germination. However, there are alfalfa production practices that can contribute to weed shifts or resistance. The absence of tillage, cultivation, or crop rotation during the multi-year alfalfa cycle reduces opportunities to control weeds that do emerge and develop. As alfalfa stands decline, pockets between plants can open up for weeds to invade. In these situations, it may be difficult to remove weeds until another crop is planted to replace alfalfa in the rotation.

Weed Management Options

Establishing a vigorous, full stand of alfalfa in the seeding year is crucial to maintaining optimal alfalfa yield throughout the life of the crop. Genuity Roundup Ready Alfalfa provides the opportunity to manage weeds without crop injury. During the seedling alfalfa year, Roundup brand agricultural herbicides offer greater broad spectrum control, more flexible application timing, and improved crop safety than some herbicide options. One or more herbicides with different modes of action other than glyphosate should be used at least once during the middle years of an alfalfa stand. Tank mixing Roundup PowerMAX® or Roundup WeatherMAX® with an effective, alternative site of action herbicide can help minimize the risk of weed shifts or resistance.

Herbicide applications should be made based on the weeds present in the field. During the early years of an established alfalfa stand, a soil residual herbicide should be used to help manage winter and summer annual weeds, weed shifts, or resistance across the weed spectrum in a field. Using a soil residual herbicide early in the alfalfa rotation promotes good integrated weed management and avoids rotational restrictions. The weed spectrum and presence of weed escapes will determine how often an alternate site of action herbicide should be used over the life of an alfalfa stand. Consult local Extension recommendations for more specific information.

Weed Management Guidelines

Follow these guidelines to help minimize the risk of developing glyphosate-resistant weed populations in Genuity Roundup Ready Alfalfa:

- Scout fields before and after each herbicide application.
- To help control weed flushes in established alfalfa, make applications of Roundup WeatherMAX® or Roundup PowerMAX® herbicide of at least 32 fl oz/acre before weeds exceed four inches in height, up to five days before cutting.
• Use other effective herbicide products tank-mixed or in sequence with Roundup® brand glyphosate only agricultural herbicides as part of a Genuity® Roundup Ready® Alfalfa weed control program, if appropriate for the weed spectrum present.

• Report any incidence of repeated non-performance of Roundup agricultural herbicides or other glyphosate products on a particular weed to the appropriate company representative, local retailer, or county extension agent.

Apply Roundup WeatherMAX® after weeds have emerged but before alfalfa re-growth interferes with application spray coverage of the target weeds. Follow all pesticide label requirements and recommendations in the current Monsanto Technology Use Guide.

Sources:
Web sources verified 12/22/2016.

This document is intended to provide information about this weed and guidelines for control. As a tough-to-control weed, knowledge about the biology and weed control programs will help in their management. For additional information, contact your local seed representative. Developed in partnership with technology, Development & Agronomy by Monsanto.

Do not export Genuity® Roundup Ready® Alfalfa seed or crop, including hay or hay products, to China pending import approval. In addition, due to the unique cropping practices do not plant Genuity® Roundup Ready® Alfalfa in Imperial County, California, pending import approvals and until Monsanto grants express permission for such planting. Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto’s Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. This product has been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Biotechnology Industry Organization. Roundup Technology® includes Monsanto’s glyphosate-based herbicide technologies. 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 talk to their grain handler or product purchaser to confirm their buying position for this product. Roundup® is a trademark of Monsanto Company. All other trademarks are the property of their respective owners. ©2016 Monsanto Company.