

# MANAGEMENT GUIDE FOR COMMON LAMBSQUARTERS

**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 management.**

## Common Lambsquarters Biology

- ▶ Common lambsquarters was likely introduced from Europe, and is well adapted to and widely dispersed throughout North American agriculture.
- ▶ Common lambsquarters is a summer annual weed that can produce as many as 150,400 seeds per plant when growing without a crop. Seeds can germinate in the soil for a number of seasons, thus increasing the occurrence of common lambsquarters as an economically important weed.
- ▶ Common lambsquarters is highly competitive in crops. Just over 75 lambsquarters per square yard can reduce soybean yield by 50 percent.<sup>1</sup>
- ▶ Common lambsquarters can grow to more than 5 feet tall. The leaves and stems have an epicuticular wax and pubescence. As the leaves mature, the epicuticular wax changes and the hairs become more apparent.

<sup>1</sup> University of Wisconsin, 2000, [www.news.wisc.edu/3858.html](http://www.news.wisc.edu/3858.html)

<sup>2</sup> Heap, I. The International Survey of Herbicide Resistant Weeds. Online. Internet. May 15, 2008. Available [www.weedscience.com](http://www.weedscience.com)



## Weed Environment

- ▶ Common lambsquarters is best controlled when it is small.
- ▶ Environmental conditions that reduce crop growth can have a significant impact on control of common lambsquarters with glyphosate.
- ▶ Common lambsquarters can be extremely difficult to control with postemergence herbicides. The wax on the leaf surface slows herbicide movement into the leaf and can affect subsequent control.
- ▶ This weed is found in cultivated crops in every state.
- ▶ No known cases of resistance to glyphosate herbicides have been confirmed.<sup>2</sup> Common lambsquarters has been confirmed resistant to many herbicide families (triazines, ALS inhibitors, etc.) and some lambsquarters populations are being investigated for resistance to glyphosate.

## Treatment Recommendations<sup>1</sup>

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<sup>®</sup> 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 tough-to-control broadleaf weeds such as emerged common lambsquarters.
- ▶ If you have dense stands of common lambsquarters or are in a continuous Roundup Ready Soybean rotation, use one of many available residual herbicides applied preemergence such as pendimethalin (Prowl<sup>®</sup>), flumioxazin (Valor<sup>®</sup>, Valor XLT, Gangster<sup>®</sup>) or alachlor (INTRRO<sup>®</sup>).
- ▶ In-crop, apply Roundup WeatherMAX<sup>®</sup> at a minimum of 22 oz/A before common lambsquarters exceed 6 inches.
- ▶ If an additional flush of common lambsquarters occurs, observe maximum annual application rates.
- ▶ Roundup WeatherMAX may be tank mixed with other herbicides, including imazamox (Raptor<sup>®</sup>) or thifensulfuron (Harmony<sup>®</sup> GT) if additional postemergence common lambsquarters control is needed.

### 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 such as Harness<sup>®</sup> Xtra, Degree Xtra<sup>®</sup>, or other residual herbicides at the recommended rate.
- ▶ Or apply a preemergence residual herbicide at the recommended rate tank mixed with Roundup WeatherMAX at a minimum of 22 oz/A in-crop before common lambsquarters exceed 4 inches in height.
- ▶ Follow both programs with a postemergence in-crop application of Roundup WeatherMAX at a minimum of 22 oz/A for additional common lambsquarters flushes before they exceed 4 inches in height.
- ▶ Tank mix other herbicides such as 2,4-D, dicamba (Clarity<sup>®</sup>, Banvel<sup>®</sup> or Distinct<sup>®</sup>) or Impact<sup>®</sup> with Roundup WeatherMAX if necessary for postemergence common lambsquarters control.

\*Includes corn with Roundup Ready 2 Technology.

## 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.

## Rate Your Risk, Know Your Options. [www.weedtool.com](http://www.weedtool.com)

- ▶ Answer 10 field-related questions
- ▶ Get your risk rating score
- ▶ Discover how to lower your risk
- ▶ Learn best practices for reducing general weed resistance risks

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

<sup>1</sup>This 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 the 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<sup>®</sup> crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup<sup>®</sup> agricultural herbicides. Roundup agricultural herbicides will kill crops that are not tolerant to glyphosate. INTRRO<sup>®</sup>, Harness<sup>®</sup> brands and Degree Xtra<sup>®</sup> 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<sup>®</sup>, Degree Xtra<sup>®</sup>, Roundup<sup>®</sup>, Roundup Ready<sup>®</sup> and Roundup WeatherMAX<sup>®</sup> are registered trademarks of Monsanto Technology LLC. All other trademarks are the property of their respective owners.