

[ICM Home](#)[ISU Extension Calendar](#)[Publications](#)[Extension News](#)[County Offices](#)[Contact Us](#)
[Subscribe to Crop News](#)

Archives

[2014](#)[2013](#)[2012](#)[2011](#)[2010](#)[2009](#)[2008](#)[Previous Years](#)

ISU Crop Resources

[Extension Field Agronomists](#)[Crop & Soils Info](#)[Pesticide Applicator Training](#)[Agronomy Extension](#)[Entomology Extension](#)[Plant Pathology Extension](#)[Ag and Biosystems Engineering Extension](#)[Agribusiness Education Program](#)[Iowa Grain Quality Initiative](#)[College of Agriculture and Life Sciences](#)[ISU Extension](#)

Integrated Crop Management NEWS

[PRINT STORY](#)
[EMAIL STORY](#)
[ADD TO DELICIOUS](#)
[ATOM FEED](#)
[FOLLOW ON TWITTER](#)

Farmer Awareness of Herbicide-resistant Weeds

By Mike Owen and Bob Hartzler, Department of Agronomy, and Brent Pringnitz, ISU Extension and Outreach

One of the key concerns about managing pests, and specifically weeds, is time requirements. This reflects not only agricultural demographics such as farm size, but also whether individuals have off-farm job responsibilities. The distribution of farm sizes represented in the survey responses approached a normal distribution (Table 1) and is representative of the farm size distribution in Iowa based on recent information from the National Agricultural Statistics Service.

Table 1. Grower awareness of herbicide resistance in weeds and modifications in weed management programs based on a survey administered at the 2014 Crop Advantage Series.

Farm size (acres)	% respondents (n = 482)	% respondents aware of herbicide-resistant weeds	% respondents who modified weed management practices
<250	13	60	72
250 -1000	49	69	83
1001-2500	30	78	85
2501-5000	6	71	90
>5000	2	70	60

When asked about whether they were aware of herbicide-resistant weeds on their farm, 70 percent indicated yes. This statistic is similar to information gathered in a project sponsored by the Iowa Soybean Association. The distribution of growers who responded positively about awareness of herbicide-resistant weeds was interesting in that the growers who farmed less than 250 acres were the least aware of this problem (Table 1). Similarly, they reported that they were less likely to change their management practices to address the evolution of herbicide-resistant weeds.

Farmers' willingness to modify weed management was generally directly related to their awareness of herbicide resistance; greater awareness of the problem resulted in adjustments to weed management. However, only 60 percent of the growers who farmed greater than 5,000 acres reported that they modified weed management programs despite a 70 percent awareness. This could mean that the larger growers had already modified the weed management programs or that they did not see the problem as a major threat.

The question that must be considered is how growers chose to modify their weed management programs. Comments by participating farmers indicated that the most common changes were inclusion of residual herbicides and use of multiple herbicide groups. Whether these adjustments address the

complexity of the multiple herbicide resistances present in waterhemp remains to be seen. The fact that most of the changes are herbicide-based may not provide the necessary diversity of tactics needed to address the increasing issues of herbicide resistance in Iowa crop production.

Mike Owen is an Iowa State University professor of agronomy and weed science extension specialist with responsibilities in weed management and herbicide use. He can be reached at (515) 294-5936 or e-mail mdowen@iastate.edu. Bob Hartzler is an Iowa State University professor of agronomy and weed science extension specialist with responsibilities in weed management and herbicide use. He can be reached at hartzler@iastate.edu or 515-294-1923. Brent Pringnitz is a program services coordinator with ANR Extension. He can be reached at (515) 294-6429 or e-mail bpring@iastate.edu.

This article was published originally on 4/25/2014. The information contained within the article may or may not be up to date depending on when you are accessing the information.

Links to this material are strongly encouraged. This article may be republished without further permission if it is published as written and includes credit to the author, Integrated Crop Management News and Iowa State University Extension. Prior permission from the author is required if this article is republished in any other manner.