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FOR IMMEDIATE RELEASE

Glyphosate Resistant Weed Cases Likely to Accelerate

Guelph, ON (November 3, 2011) – There is growing concern about the effects glyphosate resistance will have on eastern Canadian farmers as the number of cases found continues to rise. The first case of glyphosate resistant giant ragweed was identified in southwestern Ontario from seed collections in the fall of 2008. By the end of 2010, there were 48 sites identified with resistant giant ragweed and an additional eight sites identified with resistant Canada fleabane.

“I think the number of sites is going to increase,” said Peter Sikkema, Department of Plant Agriculture, University of Guelph, Ridgetown Campus.

“The increasing appearances of plant biotypes resistant to glyphosate will impact the productivity and sustainability of agriculture in eastern Canada if we don’t deal with this issue effectively,” said Al McFadden, Product Registration Manager, Dow AgroSciences.

Glyphosate is an extremely important herbicide to Canadian crop production systems. “There is a very good reason why it is the number one herbicide used in the world. It’s very efficacious and it controls a wide range of weeds,” said Sikkema.

More frequent occurrences will impact a much greater number of farmers. “Given that glyphosate has been around since 1974, and that its use has risen dramatically, it’s inevitable that we’ll start seeing more cases in Canada and that they will continue to increase at an accelerated rate,” said Hugh Beckie, Research Scientist, Herbicide Resistant Plants, Agriculture and Agri-Food Canada.

In a three year period the number of sites where glyphosate resistant giant ragweed was identified went from one to 19 to 48. “I think we’ll see more rapid spread of Canada fleabane since it has windblown seed,” Sikkema said.

In the US, the number of glyphosate resistant weed species rose from eight in 2009 to 11 in 2011. There are 21 worldwide, according to the International Survey of Herbicide Resistant weeds.

If resistant weed populations are not managed effectively, there is a risk that farmers could lose the environmental and economic benefits of the current herbicide tolerant cropping system. “The herbicide resistant cropping systems used by growers now are decreasing soil erosion, reducing greenhouse gas emissions and reducing chemical, fuel, labour and management costs,” said McFadden.

Weeds resistant to a variety of herbicides are a developing problem for growers across Canada. If the current weed control systems continue to decrease in effectiveness, it could challenge the industry's ability to meet global food demands.

"The appearance of a glyphosate resistant population can complicate management for growers," said Sikkema. "It's difficult to convince farmers to increase input costs for a problem they may get in the future."

But, he added, the reality is glyphosate resistance has been present in Ontario since 2008.

To slow the development of glyphosate resistance, Beckie suggests limiting glyphosate use to once a year. "If growers apply glyphosate in a field more than once a year, year after year, they're going to quickly run into a high risk situation," said Beckie.

Sikkema recommends crop rotation as essential. "My number one recommendation is to have a diverse crop rotation. If you have two, three, four or even five crops in rotation it gives you a lot of options to use different herbicides to manage your fields," he said.

Dow AgroSciences continues to work on the development of solutions that will help growers manage weeds sustainably and achieve higher performance. In the future, the company plans to introduce a new weed control system called Enlist™ to help combat herbicide resistance.

"There is a need for new chemistry or weed control systems to help growers address the development of resistant weeds," said McFadden. "The most important thing growers can do now is be diligent in rotating crops and using herbicides that act on weeds through multiple modes of action."

Growers can slow the spread of glyphosate resistant biotypes in their fields by increasing the use of the following strategies:

- Rotate crops.
- Use multiple modes of action to manage weeds (tank mix products that control the same weed species with different modes of action or use a multi-mode of action product).
- Include non-chemical control techniques in your crop rotation (cultivation).
- Avoid multiple glyphosate applications in the same year.

To learn more about how growers are responding to this growing problem, visit: www.advancefarming.com

For further research on glyphosate resistant weeds, visit:

- http://www.uoguelph.ca/news/2009/05/u_of_g_research_19.html
- http://www.ontariofarmer.com/sitepages/?aid=3726&cn=TO+SUBSCRIBE+TO+ONTARIO+FARMER&an=Benefits_of_residual_soy_herbicides_outweigh_costs
- http://www.topcropmanager.com/index.php?option=com_content&task=view&id=4831&Itemid=182
- http://www.topcropmanager.com/index.php?option=com_content&task=view&id=5760&Itemid=182
- <http://www.dowagro.com/newsroom/corporate/2011/20111020a.htm>

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