



FERTILIZER CANADA
FERTILISANTS CANADA

907 – 350 Sparks, Ottawa ON K1R 7S8
T (613) 230-2600 | F (613) 230-5142

info@fertilizercanada.ca
fertilizercanada.ca | fertilisantscanada.ca

FOR IMMEDIATE RELEASE
Aug. 2, 2018

**10 Best Management Practices Proven to Help Ontario Growers Improve
Environmental and Economic Goals**

*Key Findings of the Canadian 4R Research Network Demonstrate Canadian Fertilizer
Industry's Role in Sustainable Agriculture*

OTTAWA, ON – A new report published by Fertilizer Canada, *Key Findings of the Canadian 4R Research Network*, highlights 10 scientifically-proven 4R Nutrient Stewardship Best Management Practices (BMPs) across a range of cropping systems from Atlantic Canada through to the Prairies amply demonstrating the universality of the 4R Nutrient Stewardship approach.

Following three years of extensive research engaging nine scientists across the country, the Canadian 4R Research Network quantified the economic, social and environmental benefits resulting from advanced fertilizer management systems under 4R Nutrient Stewardship, using the *Right Source @ Right Rate, Rate Time, Right Place®*. These results enable growers from regions across the country to confidently implement practices that will increase the profitability of their farms while also reducing greenhouse gas emissions, leaching of nutrients through the soil and impacts on surrounding water resources.

“This research initiative strengthens the science behind the 4R principles providing Canadian growers with the information they need to enhance competitiveness, increase productivity and adapt to market needs, while addressing the sustainable intensification of agriculture,” said Clyde Graham, Executive Vice President at Fertilizer Canada.

In Ontario, field research has demonstrated that implementation of 4R BMPs can contribute significantly to reducing nutrient runoff and greenhouse gas emissions, creating solutions for growers in the Lake Erie basin. For example, researchers have proven that subsurface banding of phosphorus fertilizer (**Right Place**) as opposed to broadcasting enables growers to reduce runoff by 60 per cent. Also, combining the use of urea-ammonium nitrate (UAN) (**Right Source**) with nitrification and urease inhibitors at the eighth-leaf growth stage of corn (**Right Time**) reduces greenhouse gas emissions by as much as 75 per cent.

“There is an increased demand for farmers to grow products in an environmentally friendly way,” said Claudia Wagner-Riddle, Professor, School of Environmental Sciences, University of Guelph. “Farmers who are using 4R practices on farm are minimizing their environmental impact. Results should increase the confidence of consumers.”

Research has also demonstrated economic benefits as well: the findings show combining injection (**Right Place**) with UAN fertilizer (**Right Source**) can improve corn yields by 20 per cent when compared to broadcasting.



FERTILIZER CANADA

FERTILISANTS CANADA

907 – 350 Sparks, Ottawa ON K1R 7S8

T (613) 230-2600 | F (613) 230-5142

info@fertilizercanada.ca

fertilizercanada.ca | fertilisantscanada.ca

While improved nutrient management has been shown to increase return on investment for fertilizer inputs and enhance yields and crop quality, on-farm adoption is still limited. “This is where the value of Fertilizer Canada’s 4R Climate-Smart Protocol could play a role,” explains Graham. “These results further support our [national strategy](#) to reduce on-farm emissions of greenhouse gas under the Protocol which creates real reductions and produces a carbon credit, rewarding farmers for their environmental stewardship and incentivising further use of these best management practices.”

Read the [Key Findings of the Canadian 4R Research Network](#) report to discover how research is changing the landscape of sustainable agriculture in your region today.

-30-

Fertilizer Canada represents manufacturers, wholesale and retail distributors of nitrogen, phosphate, potash and sulphur fertilizers. The fertilizer industry plays an essential role in Canada’s economy, contributing \$23 billion annually and over 76,000 jobs. The association is committed to supporting the fertilizer industry with innovative research and programming while advocating sustainability, stewardship, safety and security through standards and Codes of Practice. Please visit fertilizercanada.ca.

Canadian 4R Research Network funding was provided by Agriculture and Agri-Food Canada’s AgriInnovation Program (Growing Forward 2), contributing Fertilizer Canada member companies to the North American 4R Research Fund and Fertilizer Canada’s Science Cluster Program.

MEDIA CONTACT:

Kelly McCarthy
Communications Coordinator
kmccarthy@fertilizercanada.ca
613-786-3035

Claudia Wagner-Riddle
Canadian 4R Researcher
Professor, School of Environmental Sciences, University of Guelph
cwagnerr@uoquelpg.ca
519-824-4120 ext. 52787

Henry Denotter
4R Grower, Ontario
denfarmpic@gmail.com