



**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 Prairie 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 the Canadian Prairies, research has demonstrated significant efficacy in reducing greenhouse gas emissions and nutrient leaching to water bodies. For example, in Alberta, field research showed that using sulphur (**Right Source**) as part of long term balanced nutrient treatment is effective at increasing nitrogen intake and lowering greenhouse gas emissions per unit of crop by as much as 50 per cent.

Similarly, in Manitoba, applying enhanced efficiency fertilizers (**Right Source**) in a mid-row band (**Right Place**) can help growers reduce greenhouse gas emissions by up to 55 per cent.

In Saskatchewan, using in-soil placement (**Right Place**) to apply phosphorus fertilizer (**Right Source**) can significantly reduce phosphorus runoff into surface and subsurface water bodies by as much as 75 per cent, while also increasing economic efficiencies for growers.

“Research on 4R Nutrient Stewardship is extremely important and a critical first step in improving the agriculture future of Canada,” said Dr. Mario Tenuta, Chair of the Canadian 4R Research Network and Professor of Applied Soil Ecology at the University of Manitoba. “A common set of models and indicators supports on-farm planning, research and monitoring programs. In addition, the focus on social, environmental and economic outcomes provides new evidence to support the implementation of the 4Rs, which is important to decision makers and society.”



**FERTILIZER CANADA**

**FERTILISANTS CANADA**

907 – 350 Sparks, Ottawa ON K1R 7S8

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

[info@fertilizercanada.ca](mailto:info@fertilizercanada.ca)

[fertilizercanada.ca](http://fertilizercanada.ca) | [fertilisantscanada.ca](http://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](http://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](mailto:kmccarthy@fertilizercanada.ca)

613-786-3035

Dr. Mario Tenuta

Chair, Canadian 4R Research Network

Professor of Applied Soil Ecology, University of Manitoba

[mario.tenuta@umanitoba.ca](mailto:mario.tenuta@umanitoba.ca)

204-474-7827

Don McLean

4R Grower, Manitoba

[donmcl1@mymts.net](mailto:donmcl1@mymts.net)