

Agri-Environment Bulletin

May/June 2013

A newsletter from Manitoba Agriculture, Food and Rural Initiatives

Rotational Fertilization:

Feeding Next Year's Crop with this Year's P Fertilizer

Farmers face a challenge when they need to provide enough phosphorus (P) to a hungry crop when that crop can actually be hurt by fertilizing it. Using the 4Rs of sound nutrient management is a solid solution to the dilemma.

**The four Rs are: the right source
at the right rate and the right
time in the right place.**

It is well understood that banding is more efficient than broadcast application and reduces the risk of losses from the field. This superior practice is good for economics and environmental stewardship and many Manitoba farmers have adopted seed-placement of P fertilizer.

There is a catch, though: canola and soybean have high sensitivity to seed-placed fertilizer and are increasingly dominating crop rotations in Manitoba. Table 12 in MAFRI's [Soil Fertility Guide](#) contains maximum safe rates at which P fertilizer can be delivered with the seed. In the alphabet of nutrient management, **Right** rate becomes **Wrong** if a grower tries too hard to meet a crop's requirement for phosphorus in the short term. The result can be a decimated stand.

One way for growers to deal with this is to switch focus to one of the other R-factors – the right time. The right time isn't always the ideal or the simplest one. Instead of thinking year to year, plan a farm's fertility program for the whole rotation and use the



proper timing of fertilization in the seed row.

In collaboration with the Crops Knowledge Centre, staff with the Agri-Environment Knowledge Centre have developed and are promoting the concept of **rotational fertilization**.

This practice, fertilizing more early in the year of a rotation to supply subsequent crops, relies on long term planning. It allows farmers to take advantage of an opportunity to fertilize when circumstances are favourable and takes the pressure off when circumstances are not.

That means targeting years with less sensitive crops, such as cereals, for more aggressive application rates. As P is a relatively stable nutrient in soil (compared to N, for example), a portion of this surplus will be there for the subsequent, more sensitive crop(s) in the rotation.

Rotational fertilization can help maintain soil P at comfortably sufficient levels, granting growers the greatest flexibility and eliminating the urgent need for fertilization now. Farmers are encouraged to test their fields and follow 4R Nutrient Stewardship to meet the fertility needs of their crops throughout the rotation.

For more information about long term soil fertility management through rotational fertilization, make sure you attend the [Crop Diagnostic School](#) at the University of Manitoba's Carman Research Station in July. For details or to register, visit the [website](#).

What agri-environmental news is important to you?
Email agrienv@gov.mb.ca with your ideas and suggestions for future articles.

Growing Forward 2 Agricultural Programs Launched

On April 23, *Growing Forward 2 (GF2)* agriculture program details for Manitoba were announced. The **Growing Assurance** program is a strategic initiative helping to build strong foundations by advancing assessment, adoption and implementation of environmental, food safety, animal welfare, plant and animal health, biosecurity and traceability systems and activities as well as conserve and enhance ecological goods and services on the agricultural landscape.



Growing Assurance – Environment is one component where producers have the opportunity to continue to develop and update Environmental Farm Plans (EFP). In addition, funding is available to producers to help implement specific beneficial management practices (BMP) identified in their EFP action plans.

This funding helps farmers improve the environmental sustainability of their operations with funds for specific BMPs that help reduce the risk of nutrient loss to water. Producers may be eligible to apply for the following BMPs to:

- increase manure storage capacity
- repair a manure storage
- provide manure treatment
- control farmyard run-off
- relocate livestock confinement facilities
- adopt extensive wintering of livestock

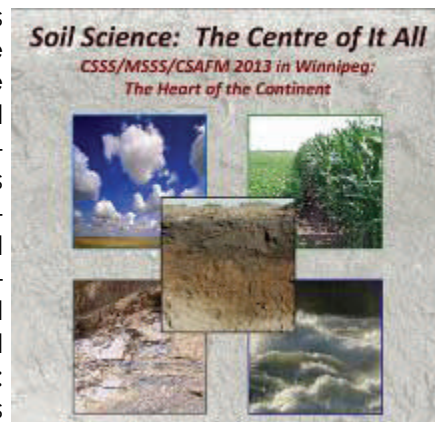
EFPs must be renewed every five years to remain valid and for producers to be eligible for BMP financial assistance. Producers should contact a local [MAFRI GO Office](#) to register for an EFP workshop.

The deadline to apply for financial assistance to adopt BMPs is **May 15, 2013**. For more program information or to get a program application form, visit our [website](#).

Annual Soil Science Meeting in Winnipeg in July, 2013

The joint annual meeting of the Canadian Society of Soil Science, the Manitoba Soil Science Society and the Canadian Society of Agricultural and Forest Meteorology will be held at the Fort Garry Hotel in downtown Winnipeg July 22 to 25, 2013. About 200 of Canada's leading soil and atmospheric scientists, agronomists, extension staff and graduate students are expected to participate.

This year's theme is **Soil Science: The Centre of it All**. The plenary session will include internationally-known scientists drawing links between soil and water management practices and atmospheric and aquatic issues (ex: greenhouse gases and water quality).



For details and registration information on the annual meeting, go to the [conference website](#) or email: marla.riekman@gov.mb.ca

Important Dates

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| May 14 | CWRA Presentation: Keeping Water on the Land |
| May 15 | Application deadline for Growing Assurance—Environment |
| July 10 | Application deadline for Fall Manure Management Plan |