



Mixing Up Your Modes

The use of multiple modes of action when planning crop protection strategies has always been beneficial when considering weed control from a resistance management point of view. If you are one of the lucky individuals that have already encountered resistant weed biotypes in your fields, adding multiple modes of action to your herbicide programs to both overcome the resistance already present and prevent the problem from getting bigger may be a conscious practice. There will always be genetic diversity that leads to herbicide resistance in weed populations, by adding additional modes of action we can break the cycle that promotes the development of resistant populations.



The inflated cost of glyphosate has made other crop protection products that may not have been part of your historic herbicide rotation worthwhile considerations in 2022. For example, the traditional price gap between post-emerge and pre-emergent programs has been reduced. The use of pre-emergent herbicide programs not only makes good agronomic sense in terms of 'starting clean, staying clean', and reducing early season weed pressure, as well as adding an additional mode of action to the program but an argument can be made for good economic sense in addition to the agronomics.

The high price of commodities and potential yield loss from in crop weed pressure validates the need for a discussion with your Holmes Agro rep about your crop protection strategy for 2022!

Precision Ag Corner

With rising input costs for 2022, as well as the pressure for more environmentally friendly management of field crops, a clear case is being made for variable management on farms moving forward. It is common knowledge that all areas of a field are not made the same: with different soil types, drainage, topography etc. This in turn means that not all areas will have the same yield potential. By understanding these areas within a field, and creating a VR fertility plan, we can optimize the use of our fertilizer, by applying according to the true potential of these areas. We can use soil samples, as well as historical yield, topography maps, or satellite imagery to separate out these areas of a field and create a prescription, whether it is for seed, pre-plant fertility, in season nitrogen or fall P/K.

Talk to your Holmes Agro Advisor to learn more about how we can help you optimize your fertilizer usage, in 2022 and beyond!

4 R Nutrients Part 3 – Right Placement

When looking at the 3rd R of the 4 R's of nutrient management we are considering the 'Right Placement.' The core principles behind the right placement of fertilizer include

- Consider where the plant roots are growing. Nutrients should be placed in a zone where they will be accessible to the growing roots when there is nutrient demand from the crop.
- Consider soil chemical reactions. The placement of certain nutrients such as phosphorous in a band can help to improve nutrient availability.
- Goals of the tillage system. Aim to conserve nutrients and water where they can be utilized by the roots while maintaining the crop residue cover on the soil.
- Variability between field, soils, and crop production systems. Assess the nutritional needs of the crop based on the specific location and tailor the placement of fertilizer based on the spatial differences.



We are continuously learning about soil to nutrient interactions and these principles will continue to evolve as knowledge of soil interactions grows. 'The Nutrient Stewardship 4R Pocket Guide' can be a great resource when looking to learn more about the 4R principles. <https://nutrientstewardship.org/4r-pocket-guide/>



Planning For Your Cover Crop

Are you considering using a cover crop this fall? It's never too early to start planning! There are government grants available to help with the cost of planting cover crops. But an up-to-date Environmental Farm Plan is typically needed to access this funding.

You can find more information on the Canadian Agricultural Partnership website <https://ontarioprogramguides.net/pc-en-esim-le-b/> or on your local conservation authorities' website.

Gypsy Moths

The gypsy moth has potential to become a problem pest during the spring, with large infestations affecting trees across Southern Ontario in 2021. The pest was originally introduced to North America with the purpose of research but unfortunately, escaped captivity and has had large outbreaks causing significant negative effects on hardwood forests.

The moth overwinters in the egg stage often on the bark of trees. In the spring, eggs hatch and larvae ascend the trees to feed on the new foliage. Gypsy moth infestation detection is typically delayed as the larvae initially feed at night. The larvae can be identified by the double row of five blue spots, followed by a double row of six red spots along the caterpillars back.

Gypsy moth larvae can be controlled using Dipel 2X DF, a biological insecticide (requires a pesticide license to purchase). Dipel 2X DF contains a naturally occurring bacterium (*Bacillus thuringiensis*). The best time to apply is when the larvae are young. After eating a lethal dose of DiPel 2X DF, the pest will stop feeding immediately and die within 1-3 days. Mortality varies with larval size, species and dose consumed.



Dipel 2X DF is also registered for the control of other common pests in landscape plants including tent caterpillars. <https://nufarm.com/ca/product/dipel-2x-df-biological-insecticide-ornamental/>

Rules of the Road

Key Points of the Highway Traffic Act

- ✓ You MUST give up one half of the roadway when being overtaken or passed in the opposite direction. If you cannot fit on only half of the roadway have a plan to either pull over in a laneway or have escorts blocking the road ahead.
- ✓ When traveling always stay on the road, all four tires on the pavement. If you are ½ on the shoulder and ½ on the road and you swerve around a mailbox and someone is hit, the farm operator is deemed at fault.
- ✓ You must be able to see a vehicle approaching from the rear to make safe turns. This can be done with the use of cameras or mirrors
- ✓ You must be able to signal intent to turn. If you are towing anything, these signals MUST be duplicated on the implement. Do a circle check before you leave the field or yard – make sure all the lights are working properly.
- ✓ The use of a cell phone in tractors or any other farm equipment are subject to the same fines and demerit points as cars/trucks. Tractors are defined as a vehicle while on the road.
- ✓ Slow Moving Vehicle Sign
 - MUST be highly reflective. If it is faded, worn or chipped it must be replaced.



You are only legally allowed to go up to 40km/hr. If you are traveling over that you are speeding. If you removed the SMV sign you will need to have proper licensing. <https://www.ontario.ca/page/slow-moving-vehicle-sign-requirements>

Calendar Pictures 2023

It's never too early to start sending in pictures for the 2023 calendar. We are proud to be able to provide a calendar full of grower pictures year after year – all thanks to your great submissions! Please email your photos to calendar@holmesagro.com

Pesticide License Reminder

Grower Pesticide Licenses are required for all chemicals, including common herbicides, insecticides, and fungicides. Please have a look at your existing cards and make plans for renewal. Bookings can be made online at www.opec.ca or by calling 1-800-652-8573. Books are available at our offices for pick up anytime.

We will not be able to sell chemical to those who do not have a current Grower Pesticide License, so please make sure you have this in place for the upcoming year.

***** Please email laura@holmesagro.com to sign up for our e-newsletter *****

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