



Backgrounder

Regulating Neonicotinoids

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Ministry of the Environment and Climate Change

A growing body of scientific evidence shows that neonicotinoid insecticides are highly toxic to honey bees and other beneficial insects.

In addition, neonicotinoid insecticides are persistent, meaning they do not break down quickly in soil. They are water soluble and have the potential to easily run off into local watercourses where they can potentially harm aquatic insects. Neonicotinoid insecticides also make plants potentially harmful to the beneficial insects feeding on them.

In Ontario, there is widespread use of neonicotinoid-coated seeds, in some cases, without evidence of pest problems. Close to 100 per cent of corn seed and 60 per cent of soybean seed sold in the province are treated with neonicotinoid insecticides.

On July 1, 2015, new regulatory requirements for the sale and use of neonicotinoid-treated seeds in Ontario will come into effect and be phased in over a period of time. The requirements will support the province's target to reduce the number of acres planted with neonicotinoid-treated corn and soybean seed by 80 per cent by 2017 and are focused on ensuring that neonicotinoid-treated corn and soybean seeds are used only when there is a demonstrated pest problem. Reducing neonicotinoid use in these two

crops presents the greatest opportunity to decrease pollinator exposure to the neurotoxic insecticide.

Consultation Process

Ontario conducted a comprehensive, two-stage consultation process with the public and stakeholders to develop these new regulatory requirements. In the first stage, a [pollinator health discussion paper](#) was posted online in November 2014 for a 60 day public comment period.

Farmers, members of the public and other stakeholders were invited to attend in-person consultation meetings held across the province or submit comments online or by mail.

In stage two, Ontario released a draft regulation for public comment on March 23, 2015, inviting interested parties to submit feedback on the regulatory proposal. In addition, a series of technical briefings were held with key stakeholders.

A new class of pesticides created under the regulation

The province is responsible for classifying pesticides and regulating their sale, use, transportation, storage and disposal. Treated seeds are seeds that have been coated with a pesticide. The new regulatory requirements will create a new class of pesticides -- Class 12 -- for corn and soybean seeds treated with the following neonicotinoid insecticides:

- imidacloprid
- thiamethoxam
- clothianidin

A new system for regulating neonicotinoid-treated corn and soybean seeds

Ontario is establishing a system for regulating neonicotinoid-treated seeds that:

1. requires training on integrated pest management methods for farmers that will help to protect pollinators
2. establishes methods that farmers can use to assess whether pest problems require the use of neonicotinoid-treated seeds
3. sets out requirements for the sale and use of neonicotinoid-treated seeds
4. tracks the sale of neonicotinoid-treated seeds

The new regulatory amendments will take effect on July 1, 2015, and be phased in over time.

New requirements for purchasing neonicotinoid-treated corn and soybean seeds: Integrated pest management training

Integrated pest management is an approach to managing pests that is environmentally and economically sustainable. Integrated pest management promotes the use of different methods to prevent and reduce the risk of pests and encourages beneficial insects, including pollinators. Under integrated pest management, pesticides are used as a last resort to control pest problems.

The new integrated pest management course will be available for farmers in fall 2015, and will run regularly thereafter. Following successful completion of the course, farmers will receive a certificate number, valid for five years. To encourage participation in the integrated pest management course, training will be offered free of charge for the first year, until September 2016.

As of August 31, 2016, any person (e.g., a farmer or a person that supervises the planting of neonicotinoid-treated seeds) who purchases neonicotinoid-treated seeds will be required to have been certified by

completing the integrated pest management training course. The course includes training on the importance of pollinators for the ecosystem and how to protect them from pesticide exposure.

Individuals will also be trained in identifying pests and pest scouting methods, and using alternative methods to pesticides. Licensed treated-seed vendors will not be required to complete the integrated pest management certification.

New requirements for using neonicotinoid-treated corn and soybean seeds From August 31, 2015 to August 30, 2016

In preparation for the 2016 planting season, farmers will have the option to take one of two courses of action to purchase and use neonicotinoid-treated corn or soybean seed, depending on the amount they intend on planting.

As an incentive to achieve early reductions in the use of neonicotinoid-treated seed, farmers will not have to conduct a pest assessment if they plant neonicotinoid-treated seeds on 50 per cent or less of the total area of where they plant corn or soybeans. They will need to provide written confirmation to the sales representative or seed vendor from which they purchased the seeds.

If farmers want to buy and plant neonicotinoid-treated seeds on more than 50 per cent of the total area of their corn or soybean crop, they will need to complete a pest assessment report and provide it to the sales representative or seed vendor from which they purchased the seeds.

Starting August 31, 2016

In preparation for the 2017 planting season, if farmers want to buy and use any amount of neonicotinoid-treated seeds, they will be required to provide:

1. Proof of certification of integrated pest management training

2. A written declaration that integrated pest management principles were considered
3. A pest assessment report

Farmers will need to submit these pieces of information to the sales representative or seed vendor, including direct-to-farm seed vendors.

Pest assessments assist in identifying pest problems above thresholds. Pest or stand loss thresholds must be met in order to determine that neonicotinoid-treated seed is allowed to be used.

The two pest assessment methods that can be used to determine pest problems are:

- **Soil pest scouting:** a method that confirms the presence of an average of two or more grubs or one wireworm in soil at a farm property. A report must verify that these thresholds have been met or exceeded.
- **Crop damage assessment:** a method that confirms:
 - at least a 15 per cent stand loss in corn caused by pests
 - at least a 30 per cent stand loss in soybean caused by pests

The pests and other details, including population thresholds and averaging for soil pest scouting, are set out in the [Pest Assessment Guideline](#).

New requirements for selling neonicotinoid-treated corn and soybean seeds

In order to sell neonicotinoid-treated seed, seed companies -- vendors of neonicotinoid-treated seed -- will need to obtain a treated seed vendor's licence.

Other requirements for vendors include notifying purchasers that the seed is a neonicotinoid-treated seed, ensuring untreated seeds are available for purchase and reporting the sale of neonicotinoid-treated and untreated seeds to the Ministry of the Environment and Climate Change.

The regulation also includes requirements for treated-seed sales representatives (i.e. those that facilitate the purchase of neonicotinoid-treated seed), custom seed treaters and direct-to-farm vendors. Sales representatives and direct-to-farm vendors must ensure purchasers provide the required documentation to purchase neonicotinoid-treated seed. Sales representatives and direct-to-farm vendors then provide this documentation to seed vendors.

Those who plant neonicotinoid-treated seed will need to read and follow instructions that are required to be set out on the seed tag, such as avoiding equipment maintenance in areas that may affect bee colonies or where bees are foraging.

The regulation does not include requirements for the transport and storage of neonicotinoid-treated seeds.

Tracking the sale of neonicotinoid-treated seeds

Sales and seed treatment data will be submitted annually to the Ministry of the Environment and Climate Change and pest assessments are to be submitted to the Ministry of Agriculture, Food and Rural Affairs. This will ensure an open and transparent system to track progress.

Changes from the draft regulation

Throughout the regulatory consultation process, Ontario received a number of comments on the regulatory discussion paper and the proposed draft regulation. As a result of these comments, a number of additional changes have been made to the regulation, including:

- Allowing additional time for farmers to take integrated pest management training
- Encouraging early participation in integrated pest management training by offering training free of charge for the first year of implementation, until September 2016

- Committing to publicly reporting amalgamated sales and seed treatment data for neonicotinoid-treated corn and soybean seed to track the effectiveness of the regulation
- Establishing more flexible licensing requirements for direct-to-farm vendors
- Allowing vendors to continuously provide updates to the list of neonicotinoid-treated corn and soybean seed to provide additional flexibility as new seeds could come to market
- Extending the expiration date of a pest assessment report by two months
- Allowing professional pest advisors to supervise other people in conducting pest assessments
- Phasing in requirements for professional pest advisors on a geographic basis to best target regions with greatest pollinator mortality rates