



POSITION STATEMENT

CALLING FOR A MORATORIUM ON THE USE OF NEONICOTINOID PESTICIDES

The Ontario Beekeepers' Association has, since 1881, represented the interests of Ontario's beekeepers. Today, our members face excessive and unprecedented losses of colonies from the inappropriate use of neonicotinoid pesticide treated seeds on 50% of Ontario's cropland. Moreover, we are seeing the accumulation of these systemics in our soil and water leading to additional exposure to insects, birds and fish.

The Ontario Ministry of Agriculture and Food (OMAF) Crop Specialists have called attention to the unwarranted prophylactic use of neonicotinoids on Ontario crops and question their benefit on any more than 10% to 20% of corn and soy acreage. If Integrated Pest Management practices are in place, the need for these toxic pesticides may be reduced even more.

Therefore, to break the cycle of overuse and to protect the health of bees, our ecosystems and the viability of Ontario's beekeeping industry, the OBA calls on the Government of Ontario to enact an immediate moratorium on the sale of neonicotinoid treated seeds on field crops in Ontario.

The widespread use of neonicotinoid seed treatments on vast acreages of field crops is not only putting the health of critical pollinators at risk, it is also discouraging farmers from using more pollinator-friendly practices like Integrated Pest Management and contributing to the evolutionary selection of resistant insects.

However, as members of the agricultural community, we recognize that the limited use of pesticides when used with Integrated Pest Management and in a targeted manner may be necessary in some situations. For this reason and in addition to the moratorium on the sale of neonicotinoid treated seed we support the following recommendations of the National Farmers Union.¹

- Allow farmers to apply for one-time use of a neonicotinoid seed treatment only if they can:
 - a) Demonstrate through a soil test or monitoring program that their crop will be threatened by pest pressure and,
 - b) Demonstrate that there are no alternative control options;
- Require that a permit be submitted to purchase neonicotinoid seed treatments, that the seed treatments be purchased separately from seed and that the cost of the seed and the treatment be listed separately when one-time use applications are approved;

- Monitor approved one-time use applications and publish a list of 'hot spots' where a significant number of farmers have applied to use neonicotinoid seed treatments.

Our call for a moratorium follows that of the European Commission, which banned neonicotinoids in 2013 after a thorough scientific review. It represents a viable option for protecting bees and other insect pollinators by restoring space for safe beekeeping, while removing the source of pesticide contamination of our water and food. It is based on a considered position that balances the imperative of bee health with conditional use of neonicotinoids but *only* when Integrated Pest Management principles have been followed, there is proof that a pesticide application is needed and until a viable alternative is found.

In drafting this position we considered a number of factors, research and the best available peer reviewed science.

1. BEE POPULATIONS ARE DECLINING. For the past seven years Ontario beekeepers have experienced serious losses due to acute bee kills, extensive overwintering losses, non-viable queens and weak unproductive colonies. Only through extensive management and costly replacement strategies have Ontario beekeepers been able to maintain colony numbers.
2. NEONICOTINOID PESTICIDES ARE KILLING OUR BEES. PMRA reports confirmed the relationship of bee kills and neonicotinoid pesticide use in both 2012 and 2013. Much additional research from many other jurisdictions has been published that show that neonicotinoid pesticides are the major cause of recent bee population declines from both acute and chronic poisoning.ⁱⁱ
3. NEONICOTINOID PESTICIDES ARE PERSISTENT IN THE ENVIRONMENT, and will remain in soil and water for varying lengths of time, potentially impacting aquatic and other ecosystems. There is strong evidence that the widespread application of neonicotinoids is killing birds, fish and building residue in soils and water. In a March, 2013 report, the American Bird Conservancy stated that "less than one corn seed per day treated with any of the neonicotinoid insecticides is sufficient to cause reproductive abnormalities."ⁱⁱⁱ
4. THE EXTENSIVE PLANTING OF NEONICOTINOID TREATED CORN, SOY AND WINTER WHEAT MAKES ONTARIO'S SITUATION PERILOUS AND UNAVOIDABLE FOR BEES AND BEEKEEPERS. Ontario Ministry of Agriculture and Food (OMAF)'s crop specialists have said that neonicotinoid seed treatments are currently used on almost 100% of Ontario's corn and canola acres, 80% of Ontario soybean acres and 35% of Ontario wheat acres. Based on the above percentages and the number of hectares of corn, soybean, wheat and canola planted in Ontario in 2011, over 50% of Ontario's cropland is being seeded with neonicotinoid treated seed. Much of the remaining crop land (23%) is in hay production, as neonicotinoids are not registered for use in forage crop seed.
5. NEONICOTINOID PESTICIDES ARE BEING USED INDISCRIMINATELY AND INCORRECTLY. Ontario crop specialists report that at most only 10 – 20% of corn and soy acreage actually need neonicotinoids^{iv} and that's before using Integrated Pest Management practices such as cover crops and crop rotation. Pesticides are not designed to be used as preventative treatment and yet they are being applied and sold indiscriminately without monitoring the fields in question.
6. THERE IS STRONG EVIDENCE THAT NEONICOTINOID PESTICIDES DO NOT PROVIDE ANY BENEFIT. IPM, BT and insect resistant seed hybrids can reduce or eliminate the need for neonicotinoid seed treatments. "Not every grower has soil insect pest problems. Even if there were problems in the past, it doesn't mean they are now, especially if insecticide seed treatments have

been used in the same field over multiple years. If the soil pests are not at threshold and impacting yield, a seed insecticide is not necessary."^v

7. THE CENTER FOR FOOD SAFETY recently released a literature review of independent peer-reviewed studies completed in the U.S. and Canada on the use of neonicotinoid seed treatments. They concluded "in many cases, the compounds are not providing a yield or economic benefit to farmers."^{vi}
8. CONTINUED INDISCRIMINATE USE OF NEONICS CAN RESULT IN PEST RESISTANCE. The widespread use of neonicotinoid seed treatment as a prophylactic, regardless of insect pressure, also acts as an evolutionary selection mechanism, killing susceptible insects while promoting the growth of resistant populations. This has already been documented with flea beetle populations in canola where Agriculture and Agri-Food Canada researchers found a shift toward more resistant strains.^{vii}
9. DUST REDUCTION IS MORE OF A DISTRACTION THAN A SOLUTION. While dust from corn seeding is a vector of exposure, recent efforts to contain dust from planting do not present a viable solution to bee health. While the volume of dust exposure has been limited with new lubricants, the toxicity of the dust is 3X greater. Neonicotinoid laden dust continues to drift onto flowering plants, bushes and trees in adjacent fields and be carried back by bees in pollen to poison the hives.
10. GOVERNMENT ACTION IS REQUIRED TO RESTORE FREE MARKET CHOICE. Farmers requesting the latest high production hybrids have been sold a bundled all-in-one product containing BT, fungicide, root worm protection and neonicotinoid pesticide coating. Seed and pesticide companies Monsanto (Dekalb), Dupont (Pioneer), Bayer and Syngenta control the manufacturing and distribution of Ontario corn, soy, wheat and canola seeds and neonicotinoid pesticide treatments. They continue to promote a bundled product containing high producing hybrids with pesticide coating when only a fraction of farm acreage actually requires neonicotinoids for crop protection. The only way to break this practice is to stop the sale of treated seeds while allowing only those farmers with a legitimate pest problem to have their seeds treated.

ⁱ National Farmers Union Submission to Senate Standing Committee on Agriculture and Forestry on The Importance of Bees and Bee Health, May 1, 2014

ⁱⁱ Health Canada, Evaluation of Canadian Bee Mortalities in 2013 Related to Neonicotinoid Pesticides, Interim Report as of September 26, 2013

ⁱⁱⁱ Mineau, Dr. Pierre and Cynthia Palmer, "The Impact of the Nation's Most Widely Used Insecticides on Birds", American Bird Conservancy, March, 2013. p. 66

^{iv} Using Fungicide-Only Treated Seed and Following IPM

<http://www.omafr.gov.on.ca/english/crops/field/news/croptalk/2013/ct-0913a1.htm>

^v Taking Steps towards Reducing the Risk to Pollinators

by Greg Stewart, Corn Specialist, OMAFRA and Tracey Baute, Field Crop Entomologist, OMAF
<http://www.gocorn.net/v2006/Insects/articles/Reducing%20the%20Risk%20to%20Pollinators.html>

^{vi} Stevens, Sarah and Peter Jenkins, "Heavy Costs Weighing the Value of Neonicotinoid Insecticides in Agriculture", Center for Food Safety, March 2014. p. 4.

^{vii} "Earlier seeding dates may lower neonicotinoid effectiveness in flea beetles", Western Producer, May 9, 2013.