



ONTARIO BEEKEEPERS'
ASSOCIATION

IMPORTANT: How to identify & report suspected bee poisoning

May 17, 2016

We are quickly coming up to planting season. While we are hoping that the first year of regulations to control neonicotinoid use, coupled with the measures grain farmers have put into place will have significant impact, we want beekeepers in Ontario to understand the signs of poisoning and the process for reporting in the event of exposure.

Symptoms of acute pesticide poisoning of honey bees are more easier to recognize than chronic symptoms. Provincial Apiarist Paul Kozak provides the following list of symptoms for most types of insecticides, although he cautions that some particular classes of insecticides may have distinct symptoms.

Pesticide damage may take place at an individual or colony level. The impact of pesticide poisoning to a colony may be short-lived or longer lasting. Longer lasting may result from multiple pesticide applications to the same or different fields or when contaminated pollen is brought back to the colony into the food stores.

Symptoms of acute poisoning in individual honey bees:

Paralysis, trembling, stupefaction, disorientation and jerky, erratic behaviours by worker bees.

Honey bees regurgitating, sometimes where many dead and dying bees form a wet, sticky mass.

Loss of hairs: bees appear dark.

The presence of only young (fuzzy looking) bees, indicating a major loss of older foragers.

Symptoms of acute poisoning at the colony level:

Excessive numbers of dying and dead bees in front of the hive, on the bottom board or on top bars. This can take place within 24 hours or over days or weeks. Dead bees at the entrance may represent only 10-20% of the total number being killed as most bees are in the field.

Sudden pronounced decrease in colony population (thousands of bees) in a previously strong colony in the middle of the spring or summer season. The colony may stop growing in population during a time of the season where they should be normally increasing.

Brood may become chilled within 4 to 8 weeks due to insufficient workers to maintain and care for the brood.

Dying larvae crawling out of the cells.

Sudden aggressive behaviour in the colony.

Queen supercedes, particularly multiple supercedes.

Subtle effects at the colony level

Decrease in population, lack of colony development.

Queen health issues, such as a spotty brood pattern.

Dead larvae are dry.

We encourage all beekeepers to report even suspected chronic or acute bee poisonings as soon as possible. Please let [OBA know](#) if you report a beekill.

Contact information for PMRA: 519-826-2895. If you get an answering machine, please leave:

Your name

Contact information where you can be reached

Number of colonies affected

Where the suspected poisoning took place

Approximate number of dead bees