

Neonicotinoid

Facts

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ANLA

What are neonicotinoids?

They are a class of insecticides, developed in the 1990s and approved by the Environmental Protection Agency (EPA). When applied appropriately, neonicotinoids are vital in controlling harmful and often invasive insect pests with reduced impact on non-target insects (e.g., bees).

Why are you using pesticides, especially neonicotinoids?

Controlling pest populations is vital to a healthy agriculture system and pesticides are often one of the important tools for that purpose. Neonicotinoids are frequently used in combination with other strategies as part of an integrated pest management (IPM) approach to reduce pest populations while managing against pesticide resistance development. In some cases, neonicotinoids are approved regulatory treatments for certification and interstate movement of nursery and greenhouse crops.

Are neonicotinoids safe for the environment?

It is important to remember their purpose – they do kill insects. However, when used as described on the EPA approved label, as is required by law, they are shown to have reduced impact on non-target insects and represent a significant improvement over older chemistries. Furthermore, they are an important tool in defending our environment against invasive species such as Japanese Beetle, Asian Longhorned Beetle, Emerald Ash Borer and Hemlock Woolly Adelgid.

Are neonicotinoids dangerous to humans?

Neonicotinoid chemistry, first developed in the 1990s, represents a tremendous advancement in insecticides. The chemical is based on the nicotine molecule that has been altered so as not to impact human nerve endings but to retain its ability to impact insects. The chemical's ability to act systemically in the plant means that



applicators do not need to spray broadly but instead can target applications and let the plant move the insecticide around. In addition, the residual control means fewer applications and less applicator exposure. Thus far, all the scientific evidence suggests that when neonicotinoids are used as described on the EPA-approved label they are safer for humans, safer for the environment, and safer for non-target insects – including bees.

Why has there been so much effort to discourage or ban neonicotinoids?

Some people in the conservation movement in the U.S. and European Union embrace what is referred to as the, “Precautionary Principle.” This term has been interpreted by many to mean that any new action or policy should be prohibited unless all of the possible consequences are known in advance. However, the precautionary principle approach actually inhibits research, innovation and incremental improvements. We fear that decisions made without scientific justification to restrict or prohibit use of materials like the neonicotinoids will undermine research and development into other new and reduced-risk materials going forward.

Why were 50,000 bees killed in Oregon?

Initial reports suggest that the accidental killing of bees in Oregon would not have occurred if the label instructions had been carefully followed and the appropriate



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site, plant, pest, and timing considerations properly taken into account. This unfortunate event serves as a sobering reminder of the need to closely follow manufacturer and EPA-approved labeling.

What happens if growers and landscapers can't use neonicotinoids?

Some insects can cause significant damage to crops and their populations must be controlled. If growers and landscapers cannot include neonicotinoids as part of their pest management strategy they will have to turn to other chemicals, which are more likely to interfere with beneficial insects and other IPM options. Neonicotinoids are an important and advanced tool in our toolbox, so long as they are properly used.

What is the difference between Bee Decline and Colony Collapse Disorder (CCD)?

“Bee Decline” is a more general term that reflects the decreasing number of managed honeybee hives over the course of decades due to urbanization, pests, pathogens, beekeeper retirements and other causes – including CCD. Colony Collapse Disorder is a syndrome where worker bees from of a European honeybee colony do not return to their hive after foraging. The cause for this abrupt change in behavior remains unknown but is believed to be associated with a number of interacting factors like – parasites, pathogens, genetics, malnutrition, migratory beekeeping, habitat loss, and environmental stresses, which does include pesticides.