



Horticulture Tips - Pesticide Alert, Neonics

Sandra Lawson

Pesticides of all classifications are intended to kill some pest. For instance, insecticides kill insects and herbicides kill herbaceous plants. Some pesticides are problem specific. Other pesticides, such as neonicotinoids, exert a general systemic effect that does not discriminate against what is to be killed.

There is a relatively new practice of incorporating neonicotinoids, or more easily remembered and pronounced, Neonics, into potting soils to prevent disease as seeds grow prior to sale. This product is taken up by the roots and distributed throughout the plant's leaves, flowers, pollen, and nectar. Neonics work with amazing effectiveness, in a pathway similar to that of nicotine in humans, to suppress the nervous system of any insect that eats the leaves, collects the pollen, or sucks up the nectar of treated plants. The chemicals first disables the insect, then renders them paralyzed, and finally kills them. While the resulting pristine plant benefits the nursery's sales, it is not exactly what we desire when planting a pollinator garden or wanting to bring beneficial insects to our beds.

The major pesticides that include neonics in their formulas are imidacloprid, acetamiprid, and clothianidin. Due to their effects on the bee population much of Europe has already banned these chemicals; however, they are still in wide spread, and growing, use in the US. Start saving bees and other pollinators today by choosing not to use or buy products containing these chemicals. Read the package labels to ascertain whether any of these neonics are

in the products you are considering for purchase or have in storage:

- Imidacloprid, the most popular product, can be found in the ingredients of everything from agriculture/lawn/garden products to pet pest control products (think flea/tick collars).
- Clothianidin is highly toxic to insects.
- Acetamiprid affects honeybees at a sub-acute level of toxicity. It impedes flying, reproduction, foraging, and temperature regulation in honeybees. All of these contribute to the problem of honeybee colony collapse.
- Also be on the look out for: thiacloprid, thiamethoxam, and fipronil.



What Can You Do?

- Don't purchase products containing these chemicals. When you buy your plants, ask if neonics have been used. If the store manager doesn't know or won't say; don't purchase that product. Try going to a nursery that specializes in native plants. For easy customer identification, Home Depot has committed to label all plants that are pre-treated with neonics
- Go through your garden shed and safely dispose of any products you have now that contain these chemicals. These are hazardous chemicals please use every precaution and contact your [Board of Health](#) for correct disposal procedures
- A full list of products containing these toxic chemicals can be found online at [Beyond Pesticides](#).