Frequently Asked Questions

Bee health is a complex issue, and people have questions about pollinators and pesticide use. The questions below represent common themes in discussions about bee health, and for answering frequent questions in a simple, relatable way.

Pollinator Health

What is a pollinator?

A pollinator is an animal that causes plants to make fruit or seeds by moving pollen from one part of the flower of a plant to another part. Bees, hummingbirds, and some kinds of butterflies are among the best pollinators.

Why is the pollinator health a concern?

Bees pollinate more than 16 percent of flowering plant species. Providing habitat and forage in the urban and suburban landscape is one important step toward improving the health of bees.

What factors affect bee health?

Bee health is a complex issue that dates back to the 1800s. Research points to multiple factors affecting pollinators, including pests and parasites, microbial diseases, nutrition problems, bee management practices, and climate change.

One of the most important threats to bee health is the Varroa mite. This mite feeds by sucking the blood of honey bees, and it reproduces on the developed bee brood. Across the northern hemisphere, poor bee health correlates with the presence of the Varroa mite. More information about the Varroa mite can be found at http://beecare.bayer.com/home.

The complexity of the issue requires the need for a collaborative effort to work toward our shared goal of improving the health of bees.

What can I do to protect bee health?

Everyone – from expert researchers to home gardeners – can contribute to promoting pollinator health. Homeowners and gardeners can select plants to create pollinator-friendly landscapes, and carefully read and follow all pesticide label instructions before applying products outdoors. Researchers are working on solutions to protect bees from the Varroa mite, while scientists and beekeepers work on best management practices to ensure proper nutrition and care for bee hives.

Pollinators and Pesticide Use

Do pesticides harm bee health?

Recently, pesticides have been part of bee health discussions. This is due to unfortunate, isolated incidents of pesticide misapplication. Pesticides and their effect on pollinators are part of the bigger discussion on bee health, which is a complex issue attributed to multiple factors.

It's important to remember that before any pesticide product – including neonicotinoids – can be used or sold, the U.S. Environmental Protection Agency rigorously reviews the products' scientific and health data, ensuring the product can be used in a safe manner. Once a pesticide is registered, the EPA continues to study and evaluate its safety and effect on people and the environment to make sure it meets the most current scientific and safety standards.

What are neonicotinoids?
Neonicotinoids are a newer class of pesticides developed in the '90s to replace older products. They are registered through the EPA's Reduced Risk Pesticide program, which is designed for products that pose less risk to human health and the environment.

Neonicotinoids are the most widely used type of insecticide in the world. They are used to protect trees and plants from damaging insects like aphids. They also protect homes from termites and control fleas on pets, and protect beneficial and highly-valued ornamental plants and landscapes from damaging pests.

Does the use of these products harm the environment and our pollinators?
No scientific evidence suggests that properly applied neonicotinoids harm bees. Registered under the EPA's Reduced Risk Program, neonicotinoids have replaced previously used products due to their favorable environmental profile, convenience, and effectiveness. We have confidence in EPA's rigorous regulatory process and risk assessment, which ensures properly applied insecticides can be used safely without harming pollinators.

Do plants treated with neonicotinoid insecticides harm pollinators?
The proper use of pesticide products – including neonicotinoid insecticides – on plants, trees, turf grass, and ornamental shrubs will not harm pollinators when applicators read and follow all label directions. This includes plants that are sold at garden centers and national retailers. When it's time to use pesticides, always select the correct product, and read and follow all label directions.

Are neonicotinoids safe to use?
Yes. As with all pesticides, the neonicotinoid-containing products can be used in a safe manner, when all label directions are followed. In addition, before any pesticide product – including neonicotinoids – can be used or sold, the U.S. Environmental Protection Agency (EPA) rigorously reviews the products' scientific and health data, ensuring the product can be used in a safe manner. Once a pesticide is registered, the EPA continues to study and evaluate its safety and effect on people and the environment to make sure it meets the most current scientific and safety standards.

Are there alternatives to neonicotinoids?
Neonicotinoids are one tool in the toolbox for managing harmful insects and protecting homeowners' investment in their plants and landscapes. Pesticides should be used as part of an integrated pest management (IPM) program, which protects us from harmful pests by following a plan to identify, monitor and, as much as possible, prevent pest problems. An IPM approach includes proactive steps such as keeping your lawn cut and healthy, trimming trees, and actively monitoring pest problems to strategically treat as needed.

Neonicotinoids have replaced other products because they have a favorable environmental profile, which is why they are registered under EPA's Reduced Risk Program.

What are the negative consequences to restricting the use of these products?
Pesticide products are an important tool for preventing and eradicating pest populations that cause disease and harm. Pesticides help in controlling the insects that cause diseases such as Lyme disease and West Nile virus.

What happened to cause the bee deaths in Oregon 2013?
The 2013 incidents in Oregon were isolated misapplications of neonicotinoid products by one landscape company, which led to multiple bee deaths. The Oregon Department of Agriculture conducted a thorough investigation of the incidents; placed a temporary restriction of neonicotinoid use during the investigation, which has since been removed; and issued civil penalties in accordance with Oregon Pesticide Control Law.

Additional Resources

More information about bee health and pesticide use is available through the following channels:

- U.S. Department of Agriculture, Report on the National Stakeholders Conference on Honey Bee Health: http://www.usda.gov/documents/ReportHoneyBeeHealth.pdf.
- Pollinator Partnership – Bee Issues: http://www.pollinator.org/beeissues.htm
- Bayer CropScience Bee Care: http://www.bayercropscience.us/our-commitment/bee-health
- Syngenta Plight of the Bees: http://www.syngenta.com/eame/plightofthebees/en/Pages/home.aspx
- Monsanto Honey Bee Health: http://www.monsanto.com/improvingagriculture/pages/honey-bee-health.aspx