



Our Commitment to Bee Health

Providing Solutions for Urban Landscapes Today and Tomorrow

At Bayer, we are committed to prudent pest, disease and weed control that helps ensure a healthy managed urban ecosystem and landscapes that can:

- Protect trees, which can help reduce household energy costs.
- Prevent soil erosion.
- Provide habitat for wildlife.
- Help remove carbon dioxide & produce oxygen.
- Protect our families from pests that can be vectors of potential disease and other health concerns such as asthma, West Nile virus and Lyme disease.
- Add beauty to lawns and gardens.

WE MUST PROTECT BEES

Honey bees and other pollinators are critically important to urban landscapes and backyards, helping many flowering plants transfer pollen needed to produce the seeds, fruit and vegetables that feed humans, birds and other wildlife.

For more than 25 years, Bayer has been committed to environmental stewardship and the protection of beneficial insects and bees. We firmly support further research into the role of various potential pressures – including insecticides – on bee health.

Today, researchers are seeking answers to general honey bee colony declines. While the specific cause of honey bee colony losses remains undetermined, it may be the result of multiple stressors or factors, such as introduced pests and parasites,

microbial diseases, inadequate diet, bee management practices and climate change, acting together.

For this reason, Bayer is exploring new bee health solutions, including a new product designed to control the Varroa mite. This relatively new parasite of the honey bee is considered a significant factor in the decreasing number of honey bee colonies in Europe and North America. At the same time, these mites are rapidly becoming resistant to available treatments.



POLLINATOR-FRIENDLY PEST CONTROL FOR MANAGED URBAN LANDSCAPES

As advocates for pollinator-friendly pest control, we support an Integrated Pest Management (IPM) approach that combines chemical, cultural, mechanical and other suitable practices.

We routinely advise professional applicators to:

- Use plant culturing practices that discourage pests from using a landscape as habitat.
- Carefully diagnose pest problems.
- Monitor and assess pest populations to determine if levels warrant pesticide treatment.
- Determine the best combination of pest control options for your situation.
- Choose product only after identifying pests and confirming application site listed on the label.



Product Application and Stewardship Tips for Professional Applicators in the Turf and Ornamental and Pest Management Industry

- Read and follow ALL label directions and precautions carefully.
- Avoid drift and runoff.
- Use spray nozzles that produce larger droplets to reduce drift potential.
- Do not spray when it is windy to ensure that pesticide does not drift into unintended areas.
- Use deflector shield guards on granular spreaders.
- Do not spray when rain is in the forecast to ensure that pesticide does not wash off the landscape or driveway into streams or storm drains.
- When product requires watering in, never flood an area causing runoff into storm drains or waterways.
- Avoid hard surfaces such as sidewalks and driveways unless directions for use allow for “spot” or “crack and crevice” treatments. Limit spray to targeted areas.

Bayer will continue to develop, fund and support promising research projects specifically targeted at ensuring bee health.



NEONICOTINOIDS NOT LINKED TO BEE HEALTH ISSUE

Some media reports have suggested bee health may be affected by a class of chemicals known as neonicotinoids. Because some Bayer products contain neonicotinoid active ingredients (e.g., clothianidin and imidacloprid), we believe it is important to comment on their use. Here are the facts:

- Neonicotinoids have replaced many older products because of their effectiveness and more favorable environmental profile.
- There has been no demonstrated effect on bee colony health associated with the use of neonicotinoid-based insecticides.
- All Bayer neonicotinoid products undergo extensive lab and field studies to investigate any potential effects on honey bees, including conducting risk assessments and implementing appropriate safeguards, as needed. Applicators should always read and follow the label directions when applying any pesticides.
- The EPA recently stated it “is not aware of any data indicating that honey bee declines...in the U.S. [are] correlated with the use of pesticides in general or with the use of neonicotinoids in particular.” (EPA response memo, 07/17/12)

OUR COMMITMENT TO BEES CONTINUES

Bees are an indispensable part of ecological systems. The overall health of bees, their “performance” and the development of bee colonies are major indicators of the condition of ecological systems.

Bayer strongly supports the responsible use of neonicotinoids and is committed to product stewardship and research activities to promote and protect bee health. As part of this commitment, we launched our Bee Care Program – including two dedicated Bayer Bee Care Centers in the U.S. and Europe – to bring our

extensive experience and knowledge in bee health under one coordinated initiative.

Looking ahead, Bayer will continue to practice sound product development and stewardship that recognizes and respects the important role of bees in our backyards, our communities, in our crop fields and on our planet.

For more information on Bayer’s commitment to bee health, please contact the Customer Interaction Center at 1-866-99-BAYER or visit www.bayercropscience.us/our-commitment/bee-health.