



OREGON
ASSOCIATION OF
NURSERIES

**Testimony before the U.S. House of Representatives, Committee on Agriculture
Subcommittee on Horticulture, Research, Biotechnology and Foreign Agriculture**

Relating to Pollinator Health

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Chairman Scott, Ranking Member Schrader, members of the subcommittee, I am Jeff Stone and I serve as the Executive Director of the Oregon Association of Nurseries. I welcome the opportunity this morning to provide comments for your consideration relating to pollinator health.

This morning I will discuss the merits of a discussion on pollinator health and its importance to the agricultural community as well as our environment. I will address how Oregon's nursery and greenhouse industry uses neonicotinoids. I will also talk about the potential impacts to agriculture if this chemical class is restricted or banned without proper science-based facts. Lastly, I will give a little insight on how Oregon brought together stakeholders to chart out a reasoned path on this important issue.

Oregon nursery industry background

The nursery and greenhouse industry is the largest agricultural sector in Oregon. Oregon represents the nation's second largest nursery state with more than \$744 million in sales annually. The industry is a traded sector, much like you would see in high technology or other cluster businesses. Nearly 75-percent of the nursery stock grown in our state leaves our borders – with more than half reaching markets east of the Mississippi River. Our reach extends to international markets as well. Nursery association members represent wholesale and Christmas tree growers, retailers and greenhouse operations. Nationally the horticultural industry's production, wholesale, retail, and landscape service components have annual sales of \$163 billion and sustain over 1,150,000 full and part-time jobs.

As a proud part of U.S. agriculture, we certainly understand the importance of pollinators to the agricultural industry and our natural environment. We also recognize the importance of having effective pesticides with low environmental impact. Much of the debate today will be over Neonicotinoids. This chemical class, when used properly, is vital to the success of our industry.

They are important tools in defending trees, shrubs, and plants against destructive invasive species like the Japanese Beetle, Hemlock Woolly Adelgid and Asian Longhorned Beetle and employed as part of a management strategy to control chemical-resistant whitefly species.

Pollinator health is critical to the nursery and greenhouse industry

In the summer of 2013, a misapplication of pesticides on Linden trees in Wilsonville resulted in the death of 50,000 bees due to acute toxicity, or their direct contact with the insecticide. Oregon's Department of Agriculture (ODA) conducted an investigation and instituted a temporary rule restricting the use of pesticides containing the active ingredient dinotefuran. The investigation was completed and the restriction lifted in December 2013. Effective at the start of 2014 the department has imposed label language prohibiting the use of products containing dinotefuran and imidacloprid for use on trees in the *Tilia* genus, which include linden and basswood trees – these trees are highly attractive to pollinators when in flower.

The concerns around pesticide use and potential effects on bees are very important to all pesticide users, but especially those involved in agriculture. Oregon farmers depend on bees to pollinate many of their crops. They also depend on pesticides as tools to control destructive pests. Similarly, commercial beekeepers rely on healthy crops to optimize their pollination services. This means that Oregon growers and beekeepers have a lot at stake in this conversation. Both of us want to make sure that protecting bee health, and retaining pesticides as an effective tool, are not mutually exclusive.

The association conducted extensive outreach to our members – including retailers, greenhouse operators and wholesale growers - to increase awareness of the pollinator issue. We also wanted to assess the use of neonicotinoids and understand the number of licensed pesticide applicators. Beyond the dramatic headlines, the nursery industry expressed its support of the ODA action and the industry's reservations regarding an outright ban of neonicotinoids. This chemical class, first developed in the 1990s, represents advancement over other chemical classes making them safer to both human and pollinators and are used as part of pest mitigation strategies by our greenhouse and nursery members. In some cases, neonicotinoids are approved regulatory treatments for certification and interstate movement of nursery and greenhouse crops.

While seven states have made efforts to pass anti-neonicotinoid legislation, it is critical that the federal government's efforts be science-based. Congress should listen to stakeholders from the green industry, the environment community and academia. This is what we did in Oregon and we believe it could serve as a national model to give voice to disparate views while working toward a common goal – improving pollinator health. The Environmental Protection Agency's labeling program is intended to create a unified national regulatory program that prevents patchwork lawmaking by states. One standard is critical for commerce between the states.

Science and reason should go hand in hand

Bee health is important to all of us. Nobody wants to see adverse incidents that add to the decline of bee populations. That being said, it is easy to let emotion drive the conversation. Instead, we should let science be our guide.

Based on current science, the Environmental Protection Agency (EPA) continues to allow application of neonicotinoids with appropriate guidelines. These chemistries are among the safest available to combat many pests. We encourage Congress to direct the research community to pursue its work on this issue without bias and identify the appropriate steps to alleviate environmental and pest pressures on pollinator health.

It is important to note that neonicotinoids represent a tremendous advancement over older pesticide treatment options. When used properly, neonicotinoids effectively control problem insects, while exhibiting less impact on non-target insects (including bees). Their ability to provide residual control means fewer applications and less applicator exposure. The OAN and other nursery industry leaders fear that decisions made to restrict or prohibit use of such materials, without scientific merit, will undermine research and development into new and reduced-risk materials going forward.

These calls to ban neonicotinoids continue despite a cadre of reports that suggest their role in declining bee health is small. The USDA's 2013 report on Honey Bee Health put pesticides, in general, near the bottom of the list of factors impacting bee health. The report highlighted other issues like colony management, viruses, bacteria, poor nutrition, lack of genetic diversity, and habitat loss as more impactful. The report continued to stress that, "the single most detrimental pest of honeybees" is the parasitic Varroa mite, first discovered in the U.S. in 1987." Recent reports from the Australian Government's Pesticides and Veterinary Medicines Authority (equivalent to our EPA) supported the conclusions of the USDA report. The Australian report said that even though neonicotinoid pesticides are used there, Australia has not suffered from honey bee colony declines, like those seen in Europe and the U.S.

Since reports of significant losses to bee colonies were publicized in 2006, researchers and regulators have been looking for possible causes. A Colony Collapse Disorder (CCD) Steering Committee was formed at the national level to address the concerns over bee losses. Several individuals from the Steering Committee along with Pennsylvania State University met in October 2012 for a National Stakeholders Conference on Honey Bee Health to discuss future actions to promote health and mitigate risks to managed honey bees in the U.S. In May 2013 the U.S. Department of Agriculture (USDA) and EPA released a comprehensive scientific report on honey bee health. The report concludes that there are multiple factors that play a role in honey bee colony declines. Findings from the report include:

- There are multiple diseases associated with CCD, many of which are amplified by the Varroa mite.
- Stakeholders should adopt Best Management Practices (BMPs) to enhance bee health.
- There is need to significantly improve genetic diversity in U.S. bee populations.
- Bees require increased nutritional options (forage) to lessen susceptibility to stressors.
- There should be continued research on pesticide impacts at field-relevant exposures.
- Stakeholders need greater collaboration and information sharing among stakeholders to facilitate adoption of BMPs that are critical to improving bee health.

While the current research does not point to neonicotinoids as a primary factor in bee health decline, we know that it may be tempting to restrict use for precautionary reasons. Unfortunately this approach ignores the important role these products play in managing pests that can have

devastating effects on the environment. Neonicotinoids provide unique environmental, economic and public health benefits, such as:

- Effective protection against invasive species which can harm important urban landscapes, including the Emerald Ash Borer which can devastate urban forests.
- Systemic insect control not provided by other chemical classes.
- Lower impact on many non-target organisms than older chemistries, protecting natural enemies, which allows for greater use of IPM strategies.
- Effective control of disease carrying vectors.
- Extended control, which limits the needed number of applications, and therefore limits the exposure to workers.
- Control of pests that are resistant to other chemical classes

The Environmental Protection Agency (EPA) has not followed Europe's lead by suspending or banning the use of neonicotinoid pesticides. Instead, the EPA has been active on the pollinator issue by increasing the level of funding for research into integrated pest management, which has resulted in a reduction in the use of pesticides. Several studies, including a National Academy of Sciences study on the loss of pollinators, chaired by University of Illinois entomologist May Berenbaum, indicated that there is little evidence to indicate that banning this class of chemicals would have any positive effect.

The Congress and Obama Administration should focus on solving the problem

There is legislation pending before the House Agriculture Committee (H.R. 2692, the Saving America's Pollinators Act) introduced by Oregon Congressman Earl Blumenauer (D-OR) in response to the bee incident in the summer of 2013. The bill would effectively put a national moratorium on most neonicotinoid applications until an array of studies, including multi-year "residue build-up" evaluations can be completed. The bill's proposed moratorium could be lifted only if a final determination is made that the pesticides "will not cause unreasonable adverse effects on pollinators."

On February 24, 2014 the Pollinator Protection Caucus of the U.S. House of Representatives, chaired by Congressmen Denham (R-CA) and Hastings (D-FL), held a briefing on pollinator health and invited four groups to participate. AmericanHort's regulatory and legislative affairs director, Joe Bischoff, was asked to present the horticulture industry's perspective on the issue. During the briefing, Dr. Bischoff emphasized the importance of a holistic approach to research on the issue. He stressed that, "no concerned communities, including the bees themselves, would be served if we chase a red-herring and point fingers at an easy target like pesticides, for the purpose of political expediency."

When considering regulations surrounding pesticides, we feel it is important to look at what regulations are already in place. All pesticides used in Oregon must go through registration processes mandated by the U.S. Environmental Protection Agency (EPA) and Oregon Department of Agriculture (ODA). At the federal level this happens under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Initial and ongoing re-registration is subject to a substantial review process. Registered products must meet the high standard of

having “no unreasonable adverse effect on health or the environment.” This means that the pesticides of concern in these cases have had extensive safety testing including:

- Honeybee acute contact toxicity (all outdoor use products)
- Honey bee toxicity of residues on foliage (if high acute toxicity and exposure likely)
- Field testing for pollinators (specific conditions)

While we can understand the concerns of beekeepers, and the public at large, the issue of declining bee populations unfortunately has no simple answer. In fact, research on Colony Collapse Disorder (CCD) has highlighted a complex interaction of factors that play a role in bee health. No singular cause of the problem has been found. While pesticides are often noted as one factor, they are not considered the primary one.

The Nursery industry wishes to work with the EPA to stress the message of stewardship and compliance with label instruction. However, in the meantime we have growing concerns over the EPA taking further steps on pollinator protection through administrative action which would substantially affect turf and ornamental applications. The use of “advisory label language” is understandable when faced with unforeseen circumstances. However, we are receiving signals from a variety of stakeholders that the administration is considering extending the label changes to other products that are used for foliar sprays. It is critical that Congress and the administration understand that moving the industry toward specific application methods for systemic products (such as liquid solution or the use of dry broadcast formulations) without consideration of the efficacy and available alternatives will not solve the problem of declines in pollinator health.

Oregon can serve as a model in collaboration

While the furor over the death of bees received national notoriety, the discussion in Oregon was engaged by beekeepers, environmental groups and farm organizations. The initial bill mirrored the federal bill introduced by Congressman Earl Blumenauer and would have moved neonicotinoids to a restricted use pesticide and substantially ban the use of the product in the state. Oregon House Bill 4139 could have taken a negative approach and pitting interest group against interest group - but that did not happen. Instead, stakeholders listened to one another and determined that a science-based approach to pollinator health would lead to a better solution. Over the next two years, stakeholders will roll up their sleeves and work with our land grant university (Oregon State University), legislators, and state agencies to determine the most appropriate path forward. It is critical we work with interested parties to examine how to study this issue further and create a communication effort for the general public and industry. We all benefit when we move in a reasoned manner to evaluate trends in pollinator health, including the use of best management practices.

We must acknowledge our stewardship role in using these chemistries. When we use them, we must deploy them as part of a larger management strategy, and always remember to use them only as directed by the EPA-approved label. It is important that consequences and tradeoffs be discussed and that a decision on neonicotinoids not lead to economic harm, erosion of pollinator health, or increased human safety concerns during the application of pesticides at the nursery operation.

The nursery and greenhouse industry is working through our national association,

AmericanHort, to engage with various chemical and registrant associations on the neonicotinoid issue and to conduct a survey of use at a national level. We believe an expanded look at pollinator health should be conducted and the nursery and greenhouse industry should be a reasoned voice in the discussion.

The public, environmental groups and agriculture have an opportunity to set aside short-term political points and work together on pollinator health. It is my sincere hope that Congress engages in the same spirit. Perhaps by working alongside one another, we can do what is right for pollinator health, environmental stewardship and economic prosperity of our agricultural sector.

Thank you for your time and attention.