The Big Buzzzzz Pesticides and Pollinators, What is the Issue?

By Joe Bischoff, ANLA

Recent media reports and commentary have focused on neonicotinoid insecticides and their potential impact on bees. Many of these stories provide important information for the green industry to consider and reflect upon, while others represent sensationalized perspectives with the intention of driving a political agenda.

Growing plants, tending crops, and managing greenhouses and landscapes are roles for responsible stewards, and our industry's access to and use of insecticides must be approached with the same level of respect. Neonicotinoids are insecticides, capable of killing various insects, and, when used appropriately and as directed by the approved EPA labels, they are useful tools in the fight against invasive insect species and in ongoing efforts to manage pests.

Some recent reports suggest that plants treated with neonicotinoid pesticides are directly connected to Colony Collapse Disorder (CCD)

of bees – a phenomenon in which worker bees do not return to their hive after foraging. Another frequently associated term is Bee Decline, a more general term meant to reflect the decreasing number of managed honeybee hives over the course of decades due to a multitude of issues – including urbanization and fewer beekeepers in the workforce, as well as environmental and pest stresses.

However, research and peer-reviewed publications, including those from the United States Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) strongly contradict the finger-pointing at neonicotinoids. Rather, the research suggests that CCD of managed hives is likely caused by a combination of factors, including the 1987 introduction of the destructive Varroa mite, bee pathogens and the constant stress of transporting hives to new locations by beekeepers. Fortunately, our native bees do not appear to be impacted by CCD despite dealing with many of the same parasites and pathogens and

similar exposure to pesticides. This is not to say that pesticides play no role in CCD or Bee Decline in general – the truth is we don't have all of the answers at this point.

Based on current science, EPA continues to allow application of neonicotinoids with appropriate guidelines because they are among the safer chemicals available to combat many pests. ANLA is encouraging the research community to pursue its work on this issue without bias and identify the necessary steps to alleviate Bee Decline.

As a proud part of U.S. agriculture, the green industry understands 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. Neonicotinoids, when used properly, are 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, in dealing with invasive and often chemical-resistant whitefly species, and preventing the spread of these and other pests. In some cases, neonicotinoids are approved regulatory treatments for certification and interstate movement of nursery and greenhouse crops. In others, they are critical to managing the development of pesticide resistance to other modes of action.

The 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 applicant exposure. We 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.

We must acknowledge our stewardship role in using these chemistries, deploy them as part of a management strategy, and always remember to use them only as directed by the EPA-approved label. ANLA, OFA and SAF have collaborated on a "Frequently Asked Questions" which may be helpful in answering questions that you may receive on this volatile issue.

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