An Assessment of the State of Neonicotinoid Use Relative to Pollinator Health, and of S.B. 231

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The use of neonicotinoid insecticides and their effects on bees has been one of the most controversial scientific questions of our time. The current state of knowledge on the risk to honey bees suggests that the current exposure to neonicotinoids, which is an average of ~2 – 6 ppb in pollen, is about 4 – 10 times less than the established lowest threshold for causing harm to honey bees. Asking growers to adopt the best management practices for planting treated seed will be beneficial. The other provisions that aim to reduce the use of neonicotinoids may not significantly benefit honey bee health. Minimizing the exposure of bumble bees and solitary bees to these insecticides may be beneficial, however the provisions need to be rewritten so that they do not result in unintended consequences that can be predicted to cause greater risks to bees.

An important change will be to redefine neonicotinoids. Not all neonicotinoid insecticides are alike with respect to their toxicity to bees. Acetamiprid is 1,000 to 2,000 times less toxic than the nitroguanidine subclass, and is routinely exempted from pesticide bans targeting other neonicotinoids. I have provided substitute language to your committee that excludes products that are of low concern for pollinator health, yet would include new products that could be toxic to bees and that could skirt your current definition.

The proposed legislation apparently assumes that all uses of neonicotinoids are to plants. However, there are other uses that are unlikely to result in exposure to bees. The language of the legislation needs to be rewritten to prevent these other uses from being impacted.

In our opinion, Section 6 should be deleted. Ornamental nurseries are a major component of Connecticut's agriculture, and these growers have been striving to use pesticides in the most efficient and environmentally conscientious manner. It is unwise to add labeling regulations specific to neonicotinoids that can be expected to be counterproductive. A specific example of a negative impact would be replacement of the neonicotinoid acetamiprid with alternatives such as pyrethroids or organophosphates that are more toxic to bees, more toxic to workers, and result in a great increase in the amount of spraying required to meet phytosanitary standards.

Section 3 would designate neonicotinoids as restricted use products. A more precisely beneficial action to preserve the health of bees would be to target all products that require the bee graphic on the product label to be designated as restricted use pesticides.