

BEE PROTECTION PRESENTING CROP PROTECTION CHALLENGE

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Abstract

The National Cotton Council has been closely monitoring all events related to bee protection for the past five years. Activity on this issue has increased rapidly over the last two years. Consequently, the NCC continues to be closely involved in pollinator protection activities that challenge the use of crop protection products. The NCC has remained actively engaged in numerous forums focused on honey bee health and pollinator protection. NCC staff serves on a pollinator work group focused on pesticide labeling to protect pollinators. The work group was created by EPA at the recommendation of the Pesticide Policy Dialogue Committee, a formal advisory committee to EPA. The NCC has consistently argued the need for maintaining flexibility in the labeling of crop protection tools and has urged EPA to maintain its focus on sound science before further restricting pesticide use as a means of protecting pollinators. In addition, NCC continues to maintain the importance and effectiveness of voluntary efforts between producers and bee keepers to maintain the vitality of honey bee populations, which are critical to production agriculture.

The NCC has participated in numerous conferences held by USDA, the North American Pollinator Protection Campaign, and Project Apis m. in an effort to ensure crop producer representation. Staff also has met with EPA to express concerns that crop protection products were receiving undue blame for overwintering losses of honey bees and to emphasize local voluntary solutions as the most effective resolutions on a regional basis. In meetings with USDA-ARS, the NCC urged the research agency to balance all factors contributing to honey bee mortality and not concentrate studies solely on crop protection products.

The Cotton Foundation recently provided funding to a multi-state, multi-crop research project studying seed treatment residues in crops. NCC staff has briefed its Environmental Task Force and the American Cotton Producers on pollinator issues to increase awareness of the significance of the issue. NCC staff recently participated in a conference sponsored by the Clinton Global Initiative which focused on creating collaborative efforts to improve honey bee health. Funding for the conference was provided by Monsanto Company as part of its Clinton Global Initiative commitment on honey bee health. The NCC has initiated a "Cooperative Management Practices" survey in an attempt to identify beekeepers and producers with a cooperative history that should identify successful management practices to improve honey bee health on farms.

The NCC also has coordinated support for a request by the American Honey Producers Association asking USDA to host a "Varroa Summit." The support letters to USDA-ARS, EPA, and USDA-OPMP were signed by 16 other commodity/association. The invitation-only summit will be held on February 18-19, 2014. The objective of the summit is "to bring together a range of scientists and stakeholders with significant knowledge about this pest, to share insights and research progress, determine the gaps in our knowledge and to discuss ideas for developing and implementing an effective Varroa mite management program." The NCC continues to seek additional opportunities to demonstrate that the coexistence of honey bees and crop production based on sound science is achievable and to emphasize that local solutions developed by producers and beekeepers are preferred over federal regulations.

The increased overwintering mortality of managed honey bees is receiving much attention while scientists acknowledge there is no "smoking gun" to indicate a greater importance of any one causal factor. The USDA's "Report of the National Stakeholders Conference on Honey Bee Health" reviewed research identifying multiple factors contributing to the decline in honey bee health including nutrition, pesticides, parasites/pathogens, and genetics/breeding. The report noted that "the parasitic mite *Varroa destructor* remains the most detrimental pest of honey bees, and is closely associated with overwintering colony declines." However, certain advocacy groups and beekeeper organizations have intensified the political focus on crop protection products.

It is important for the U.S. cotton industry to understand that the debate over pollinator protection and the use of crop protection products is at the forefront of discussions among lawmakers and regulatory officials. The European Union's recent ban on several neonicotinoid seed treatment uses has intensified the call by advocacy groups for

greater restrictions in the US. The Sierra Club recently launched a campaign in Canada asking that country's Pest Management Regulatory Agency to ban the use of all neonicotinoid insecticides for all uses in all areas of Canada.

With the primary goal of improving pollinator protection, the U.S. EPA recently announced new label requirements for foliar uses of neonicotinoids products. The label language affecting cotton reads: "For food crops and commercially grown ornamentals not under contract for pollination services but are attractive to pollinators. Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying."

EPA also announced its intent to change the pollinator risk assessment process to a more robust tiered assessment requiring multiple studies for evaluating product impacts on adult and immature honey bees and the resulting effects on colony survival. In a recent meeting with the Pesticide Policy Dialogue Committee (PPDC), the director of EPA's Office of Pesticide Programs' Environmental Fate and Effects Division said the agency was looking at possibly expanding bee protection language to products other than neonicotinoids and requested input from the PPDC. The PPDC's Pollinator Work Group for Labeling is reviewing proposed language that would specify that products identified as toxic by a risk assessment could not be applied to plants while blooming, shedding pollen, or producing nectar. Additional language is being considered for products with residual activity to prevent their use if bees *may* forage while residual activity persists.

Meanwhile, a lawsuit was filed against EPA on December 6, 2013, by the Pollinator Stewardship Council (formerly the National Pollinator Defense Fund), American Honey Producers Association, National Honey Bee Advisory Board, American Beekeeping Federation, along with a number of individuals. The lawsuit challenges EPA's registration of DOW's new insecticide with a unique mode of action, sulfoxaflor, a foliar product that is effective in control of plant bugs and similar pests. Earth Justice is serving as the counsel for the petitioners. The suit claims that EPA: 1) lacked required scientific information regarding the risk to bees; 2) improperly relied on voluntary, arbitrary or otherwise inadequate measures to reduce risk to bees; and 3) skewed its analysis of sulfoxaflor's adverse impact on the beekeeping industry and crops that are dependent upon bees for pollination. A separate suit has been filed by the Center for Food Safety seeking cancellation of two neonicotinoid insecticides, clothianidin and thiamethoxam, which are being used as both seed treatments and foliar treatments in cotton.

CropLife Foundation released a report on December 6, 2013 titled "The Role of Seed Treatments in Modern U.S. Crop Production, A Review of Benefits." The report highlights the benefits of fungicide and insecticide seed treatments for producers, consumers, and the environment. The Center for Food Safety followed with a response which called the CropLife Foundation's report misleading and inadequate, adding "The report's discussion of both fungicide and insecticide treatments of seeds ignores the fact that fungicide treatments are scientifically documented to harm honey bee colonies."

The Florida Department of Agriculture and Consumer Services hosted a meeting of beekeepers, citrus growers, and other interested stakeholders in mid-December, 2013, in an effort to facilitate the coexistence of the citrus industry and honey bee industry. The meeting occurred after one of the largest citrus growers was fined for a label violation that resulted in a bee kill incident. The insecticide application was targeting an insect that is linked to "Citrus Greening", a major disease affecting the citrus industry. Oranges, like many other crops, do not require honey bees for pollination, but beekeepers utilize the crop to produce a specialty honey, "orange honey." The meeting sought to identify voluntary ways to reduce pesticide risks to bees while maintaining the grower's crop protection ability. Resulting meeting documents have not been released at this time, but the Florida Department of Agriculture and

Consumer Services web site has posted information for citrus growers and beekeepers in order to enhance awareness of both industry's needs.

Similar action also took place in North Dakota during July 2013. The North Dakota Department of Agriculture (NDDA) Commissioner held a Pollinator Summit at which beekeepers, producers/land owners, pesticide applicators, and other interested stakeholders discussed issues. The outcome resulted in a state plan for pollinator protection (<http://www.nd.gov/ndda/general-resource/other/pollinator-plan>) released on December 10, 2013. The North Dakota Pollinator Plan identifies Best Management Practices for producers/land owners, pesticide applicators, and beekeepers. It encourages frequent and open communication between all parties to provide best results. The NDDA notes the plan is considered a "work in progress" and will be revisited and updated annually.

In California, beekeepers, producers, and other stakeholders met to discuss ways to improve honey bee access to diverse forage by improving access to public and private managed lands. Example locations were identified as state and national forests, Bureau of Land Management lands, other public lands, and private lands.

Efforts are underway in Mississippi to develop a "Mississippi Honey Bee Stewardship Program" which would provide cooperative standards that should exist between producers and beekeepers. The program resulted from dialogue between beekeepers and row crop producers and will be presented for adoption by Mississippi Beekeepers Association, Mississippi Farm Bureau Federation, Mississippi Agricultural Consultants Association, Mississippi Agricultural Aviation Association, Mississippi Department of Agriculture and Commerce, and Mississippi State University Extension Service.

These examples of local efforts to improve understanding by all parties and to seek written cooperative strategies acceptable by all parties demonstrate the type of local solutions the NCC supports. The NCC has repeatedly stated that local solutions are needed and hold the best opportunity for success in protecting pollinators while preserving producer rights to utilize crop protection tools. Open communication among commodity producers and beekeepers allows all parties to better understand each group's positions leading to successful coexistence of pollinators with crops.

The NCC recognizes the importance of honey bees to agriculture and understands the necessity of crop protection tools to control disease, insect, and weed pests in crop production. The NCC encourages producers to closely examine labels regarding pollinator protection guidelines. The NCC continues to work with beekeepers and other interested stakeholders to enhance the health of honey bees while preserving crop protection capabilities.