



## *Arizona Farm Bureau Federation*

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Gilbert, AZ 85296

July 24, 2017

U.S. Environmental Protection Agency  
EPA Docket Center (EPA/DC), 28221T  
1300 Pennsylvania Avenue, NW  
Washington, DC 20460-0001

RE: Docket Nos. EPA-HQ-OPP-2011-0865 (Clothianidin), EPA-HQ-OPP-2011-0581 (Thiamethoxam), and EPA-HQ-OPP-2011-0920 (Dinotefuran)

Dear Sir or Madam:

As a general farm organization, the Arizona Farm Bureau represents all sectors of agriculture including farmers, ranchers, and beekeepers. We recognize the fundamental importance of bees to crop production, as some of our major crops rely on bees for pollination. We appreciate the opportunity to file comments in response to the EPA's notice of availability of the draft pollinator-only ecological risk assessment for the registration review of clothianidin, dinotefuran, and thiamethoxam.

Although much of Arizona is a desert environment, this is where a vast majority of Arizona's crop production takes place. Our abundant sunshine and access to good soil and water has provided our farmers the ability to grow an extensive variety of crops. The productive yields of many of these crops is a direct result of the use of neonicotinoids, which provide protection against a number of pests including Bagrada bug, flea beetles and whitefly.

Each of the neonicotinoids referenced in this letter are important to several of Arizona's staple crops, including cotton, leafy greens, vegetables (cole crops) and melons. In cotton, for instance, in field treatment of clothianidin is particularly important to deal with sucking pests. Even more significantly, Arizona is responsible for nearly 95% of the leafy vegetables consumed in the U.S. from November to March. These are high value crops with strict quality standards that allow for little to no damage or contamination of the harvested product. Therefore, controlling various pests from infesting and contaminating leafy vegetables is critical.

Clothianidin, dinotefuran, and thiamethoxam offer flexibility for producers, as they are applied through various modes either as a soil application, foliar application or seed treatment. The production of cole crops provides a useful example of the use of these different applications that can be used to control damaging pests, such as the Bagrada bug. The Bagrada bug became a major pest in cole crops starting in the fall of 2010, causing economically significant stand losses and yield quality reductions to broccoli,

cauliflower, and cabbage.<sup>1</sup> Foliar applied dinotefuran has been effective in controlling adult Bagrada bugs in mature plants, while clothianidin has been used as a seed treatment in broccoli to provide control against Bagrada adults during stand establishment. Although neonicotinoids are not the only chemistry available to deal with this particular pest, they are an important component, especially to ensure effective resistance management programs. Furthermore, not having these products would result in the use of older, more broadly toxic insecticides.

Dinotefuran has also been an important product for addressing whitefly damage in melon production. Whitefly is a vector for cucurbit yellow stunting disorder virus (CYSDV) which causes a yellowing of leaves, reduced plant growth, and smaller, less desirable fruit. Melons grown in Arizona make up a significant portion of the melons produced in the United States. According to 2014 United States Department of Agriculture National Agricultural Statistics Service, Arizona ranks second to California in the production of cantaloupes and honeydews. Therefore ensuring growers have access to products such as dinotefuran to combat pest and disease that reduce production and yield levels is vitally important.

Thiamethoxam is a product used in Arizona to tackle aphid infestations in lettuce and vegetables crops. Aphids are one of the most significant problems facing the lettuce industry, causing economic damage to lettuce through direct injury, virus transmission, and contamination of heads.<sup>2</sup> Consequently, having as many options as possible to tackle these pests is critical to preserving both quality and yield.

In addition to crop producers, our grassroots organization also represents beekeepers and commercial honey producers. We also rely on bees and other pollinators to harvest healthy crops. Therefore, we understand the ongoing concern regarding bee health, and fully support efforts to assist that sector of agriculture in meeting those challenges. This includes increased research into the causes of honey bee declines and support of state managed pollinator protection plans (MP3s). MP3s bring stakeholders together to work on pollinator issues while representing the mutual interest of both growers and beekeepers. Arizona's current MP3 outlines a number of best management practices and resources to assist growers and beekeepers in their mutual efforts to protect bees and pollinators.<sup>3</sup> These practices help our producers protect essential pollinator populations while still offering them a full range of tools for dealing with detrimental insects that cause significant damage to crops.

Clothianidin, dinotefuran, and thiamethoxam are important pest management tools for many growers in our state and we do not believe that these products, which have been used for a number of years, pose any unreasonable risk to health or the environment. All crops grown in Arizona on which clothianidin, dinotefuran, and thiamethoxam are used would be negatively impacted if they were no longer available

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<sup>1</sup> Palumbo, John C., "Impact of Bagrada Bug on Desert Cole Crops: Seven Years After the Outbreak." Veg IPM Update, Vol. 8, No. 10, May 17, 2017. Available online at: [https://cals.arizona.edu/crops/vegetables/advisories/docs/170517%20Bagrada%20Bug%20Survey\\_2016\\_%20Seven%20years%20after%20outbreak\\_report.pdf](https://cals.arizona.edu/crops/vegetables/advisories/docs/170517%20Bagrada%20Bug%20Survey_2016_%20Seven%20years%20after%20outbreak_report.pdf). Accessed on July 14, 2017.

<sup>2</sup> Palumbo, John C., "Impact of Planting Date on Aphid Infestations and Compensation in Head Lettuce." Veg IPM Update, Vol. 7, No. 23, November 11, 2015. Available online at : [https://cals.arizona.edu/crop/vegetables/advisories/docs/111115\\_Lettuce\\_Planting\\_Date\\_Impact\\_on\\_Aphid\\_Species.pdf](https://cals.arizona.edu/crop/vegetables/advisories/docs/111115_Lettuce_Planting_Date_Impact_on_Aphid_Species.pdf). Accessed on July 18, 2017.

<sup>3</sup> Arizona Department of Agriculture, Arizona Management Plan for the Protection of Pollinators, Accessed online 7/18/17. Available at: <https://agriculture.az.gov/sites/default/files/AZ%20MP3%20Jan%202016.pdf>

as crop protection tools. Furthermore, farmers and beekeepers in Arizona have a long history of working together to minimize the exposure of bees to pesticides. For those reasons, we urge the EPA to continue to allow their use.

Sincerely,

A handwritten signature in black ink, reading "Kevin Rogers". The signature is fluid and cursive, with the first name "Kevin" and last name "Rogers" clearly distinguishable.

Kevin Rogers, President  
Arizona Farm Bureau Federation