Neonicotinoids Update

May 8-9, 2019 Pesticide Program Dialogue Committee Meeting

Background:

- The nitroguanidine neonicotinoid insecticides are broad-spectrum, second generation neonicotinoid insecticides that are currently registered for use on many agricultural crops, in non-crop areas, in residential areas, to pets and pet premises, and in commercial settings.
- EPA initiated registration review for imidacloprid in 2010 followed by thiamethoxam, clothianidin, and dinotefuran in 2011.
- In 2014, EPA published a benefits assessment on the treatment of soybean seeds with neonicotinoids.
- In January 2016, EPA published the imidacloprid preliminary pollinator assessment. This was followed by the publication of the thiamethoxam, clothianidin, and dinotefuran preliminary pollinator assessments in May 2017.
- The draft human health risk assessment for imidacloprid was published in September of 2017, followed shortly in December with the publication of thiamethoxam, clothianidin, and dinotefuran's draft human health risk assessments.
- In total, over 1.3 million comments were received on all the neonicotinoid assessments, of which approximately 700 were unique/substantive.
- EPA published additional benefits assessments on cotton and citrus in December of 2017, along with a revised seed treatment assessment.
- EPA received new pollinator toxicity and exposure data in 2017 and 2018 that will be incorporated into the revised final pollinator assessments.

Key Points:

- EPA's preliminary pollinator assessments noted the potential for on-field risk from some uses. However, risk was considered to be low for other uses such as seed treatments.
- Additionally, EPA's draft ecological risk assessments noted potential risk to aquatic invertebrates from drift and run-off, as well as to birds and mammals from potential exposure to treated seed.
- Potential human health risk varied by chemical, but overall identified potential risks were limited.
- In 2019, EPA anticipates publishing the Proposed Interim Decisions for imidacloprid, thiamethoxam, clothianidin, and dinotefuran. Supporting documents that will also be published along with the proposed decisions include: final pollinator risk assessments, additional benefits assessments, and a response to comments documents.