



Arizona Farm Bureau Federation

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July 19, 2021

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

RE: Docket No. EPA-HQ-OPP-2015-0378; Registration Reviews Draft Human Health and/or Ecological Risk Assessments for Several Pesticides – Tebuconazole

To Whom It May Concern:

The Arizona Farm Bureau Federation represents farmers and ranchers from across Arizona. Our members produce an array of crops and livestock that contribute over \$23.3 billion of economic impact to the state. Our comments below address the Environmental Protection Agency's (EPA) draft human health and ecological risk assessments of tebuconazole and the important role this chemistry provides to the success of Arizona's agricultural crops.

According to the Arizona Pest Management Center Pesticide Use Database the most significant and consistent agricultural use of tebuconazole in Arizona is on cotton with an average of 4,300 acres treated annually between 2015 and 2019. Occasional uses of tebuconazole are reported in melons, barley, wheat, and garlic. In some years there is a high number of acres treated for these crops, a trend likely related to wet weather conditions and/or fungal disease persistence. In fact, the relationship between fungal diseases and wet weather (or lack thereof) was noticeable in the 2020 reported use of tebuconazole, which dropped off significantly across all crops due to extremely dry weather conditions and a monsoon season that produced little to no moisture.

Tebuconazole is an important fungicide used to address fungal diseases impacting various crops. In cotton, where tebuconazole is used most consistently over a significant number of acres, it is an effective treatment against cotton rust, which can damage plants by causing early defoliation and dwarfing bolls. It is also used to treat rust in garlic, wheat and barley, and to treat a variety of different powdery mildews that can occur in melons. Although Arizona's environment is generally dry, wet weather creates the ideal environment for growth of fungal disease that can result in significant yield and quality losses. Arizona is likely to have very low use of tebuconazole compared with other states, only on a few crops, and only when weather conditions warrant it. But nonetheless, it is critical to production of these crops, particularly cotton, grains and garlic, when it is needed. Without it, growers would likely experience significant economic losses.

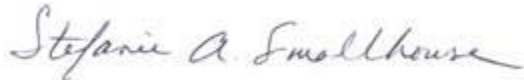
With respect to cotton and garlic production, pest control advisors (PCAs), who work with growers to make pest management decisions, reported tebuconazole as a "go to" product due to its efficacy against

disease and its cost-effectiveness. PCAs reported typically using the full product rate and making applications by air (in cotton and garlic) or ground (in garlic). One to two applications of tebuconazole are used. Aerial application is generally the more common application method due to wet weather and its impact on field conditions. Additionally, some PCAs reported using tebuconazole as a preventative, while others (primarily those working with grain crops) made applications once wet weather conditions prevailed.

Because fungi are adaptable organisms and can become resistant to fungicides, ensuring tebuconazole continues to be available is important for maintaining a robust fungicide resistance management program. According to Mike Matheron, former University of Arizona Extension Plant pathologist, such a program should rotate among products with different modes of action to delay development of resistance to active ingredients within a pathogen population.¹ PCAs reported rotating the use of tebuconazole with the product Quadris (azoxystrobin) with the primary purpose of addressing resistance management.

Tebuconazole is an important crop protection tool for many growers in our state and has been used for many years without evidence of an unreasonable risk to human or environmental health. All crops grown in Arizona on which tebuconazole is used would be negatively impacted if it were no longer available or if major restrictions were put on its use as a crop protection tool. For those reasons, we urge the EPA to continue to allow its use.

Sincerely,

A handwritten signature in cursive script that reads "Stefanie A. Smallhouse".

Stefanie Smallhouse, President
Arizona Farm Bureau Federation

¹Matheron, Michael. "Biology and Management of Downy Mildew of Lettuce." College of Agriculture and Life Sciences Cooperative Extension, az1682, September 2015. Available online at https://desertagsolutions.org/sites/desertagsolutions.org/files/az1682-2015%20downy%20mildew%20of%20lettuce%20Cooperative%20Extension%20Publication_MM.pdf