

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-2011-0840; Registration Reviews Draft Human Health and/or Ecological Risk Assessments for Several Pesticides – Chlorothalonil

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 chlorothalonil 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 chlorothalonil in Arizona is on onions, including onions grown for seed. Additional agricultural uses on celery and cole crops, including broccoli and cauliflower grown for seed are reported, but less common, on a small percent of annual acres, and not every year.

Chlorothalonil is an important fungicide used to address fungal diseases impacting various crops. In onions, where chlorothalonil is used most consistently over a significant number of acres, it is an effective treatment against downy mildew (Peronospora spp.) and purple blotch (Alternaria porri). In cole crops chlorothalonil is effective against downy mildew and Alternaria leaf spot (Alternaria spp.) It is used to treat similar fungal diseases in celery including late blight (Spetoria blight). Although Arizona's environment is generally dry, wet weather creates the ideal environment for growth of the disease that can result in significant yield and quality losses. In fact, in extreme cases downy mildew has been known to destroy entire onion fields and more commonly can result in 60 to 70% yield loss in a single field.

The chlorothalonil product with the most common reported usage is Ridomil Gold Bravo SC (RGBSC) and is made up of both chlorothalonil and mefenoxam. Pest control advisors (PCAs), who work with growers to make pest management decisions, noted the importance of this product's use as a preventative when weather conditions begin to create an environment for fungal growth, or surrounding fields become infected. However, the product is also effective as a curative. PCAs noted that several fungicide applications may take place in a typical growing season, consequently RGBSC is used in rotation with other fungicides. Onion seed crops, which have a longer growing season (8 to 9 months), also tend to have more applications.

With respect to seed crops, PCAs are mindful not use chlorothalonil within a specified time frame prior to the arrival of the bees. They also noted, that if a fungicide application is necessary once the bees are placed, beekeepers are contacted so that the hives can be moved.

PCAs from different growing regions of state reported using at or near the full label rate for the noted crops. Applications were done either by ground or aerial application. The decision regarding application method is determined either by weather, field conditions, or proximity to sensitive nearby crops.

An additional consideration for growers and PCAs is an awareness of the crops in the proximity of a chlorothalonil application. Lettuce and other leafy greens are predominant crops in the Yuma area and RGBSC is not registered for use on these crops. PCAs noted the extreme care that must be employed to ensure no contamination issues arise from chlorothalonil applications in nearby fields. In other instances, PCAs who help manage celery crops in the Yuma area have opted not to use chlorothalonil [to avoid potential contamination], which helps explain the drop off in reported usage beginning in 2015.

Because fungi are adaptable organisms and can become resistant to fungicides, ensuring chlorothalonil 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 Chlorothalonil is often either included in prepackaged materials and rotated with other fungicides to address resistance management.

Chlorothalonil 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 chlorothalonil 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.

In addition to our comments, we also note our support of the more detailed comments submitted by the Arizona Pest Management Center which further highlights the use and importance of chlorothalonil in Arizona.

Thank you for your consideration.

Sincerely,

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 <u>https://desertagsolutions.org/sites/desertagsolutions.org/files/az1682-</u> 2015%20downy%20mildew%20of%20lettuce%20Cooperative%20Extension%20Publication_MM.pdf