



Arizona Farm Bureau Federation

325 S. Higley Rd, Suite 210
Gilbert, AZ 85296

November 29, 2019

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-2014-0778; Registration Reviews Draft Human Health and/or Ecological Risk Assessments for Several Pesticides – Oxyfluorfen

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 assessment of Oxyfluorfen and the critical role this chemistry provides to the success of Arizona's agricultural crops, particularly cole crops and pecans. According to USDA's National Agricultural Statistics Service, Arizona in 2018 produced a combined 20,300 acres of broccoli, cauliflower and cabbage valued at over \$172 million¹. With respect to pecans, there were 17,000 harvested acres in 2018 that generated \$52 million.²

Oxyfluorfen is a contact herbicide that provides pre and early postemergence protection against broadleaf weeds and is used on a number of crops grown in Arizona, with the majority of use in cole crops, particularly cauliflower, cabbage and broccoli. The continued availability of Oxyfluorfen for use in cole crop production is critical because the availability of effective alternatives is limited. While there are number of contact herbicides with the same mode of action as oxyfluorfen, those herbicides are not registered for use in cole crops.³ Additionally, other preemergence herbicides are not as effective at controlling broadleaf weeds.⁴

While it is a critical weed management tool in Arizona, it is also important to note that Oxyfluorfen use is limited to only a percentage of cole crop acres on an annual basis. University of Arizona weed expert

¹ USDA-NASS. 2019. 2018 State Agriculture Overview. United States Department of Agriculture, National Agricultural Statistics Service.

https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=ARIZONA

² Ibid

³ Tickes, Barry. "GoalTender Chemigation." The University of Arizona Vegetable IPM Updates Archive Cooperative Extension. September 4, 2019. Available online at:

<https://cals.arizona.edu/crops/vegetables/advisories/more/weed240.html>

⁴ National Integrated Pest Management Database. "Crop Profile for Broccoli in Arizona." November 2001. Available online at: https://ipmdata.ipmcenters.org/source_report.cfm?view=yes&sourceid=413

and County Agent Barry Tickes estimates that between 30-40% of broccoli, cauliflower and cabbage are treated with Oxyfluorfen each year.

According to Dr. William McCloskey, University of Arizona Extension Weed Scientist, Oxyfluorfen is a very important herbicide in Arizona pecan production, which has increased in recent years. Oxyfluorfen is the primary active ingredient in Pindar GT, a pre-mix herbicide which also contains Penoxsulam. Pindar GT is used by some of our largest growers on at least 10,000 acres of pecans annually, which amounts to about one-third of statewide acres.

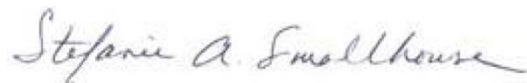
Pindar GT is effective at low rates, 3 pts./ac. (1.474 lbs./ac. Oxyfluorfen), and controls major weeds that impact pecan yields. Applications are made by ground after trees are well established. The spray is applied at the base of the trees. Young trees are protected by a sleeve from absorbing the chemical, although trees are not bearing until they are 4 to 5 years old. Older, nut-bearing trees have already developed a thick bark, and do not absorb the chemical.

Pindar provides much better control than the alternatives, including flumioxazin (Chateau) and pendimethalin (Prowl H2O). Chateau, like Pindar GT, is a PPO inhibitor with soil activity. Chateau is more costly and Prowl H2O doesn't provide sufficient residual control. Pindar GT has a pre-harvest interval of 60-days. It is unlikely any herbicide residues remain on the surface of the ground when workers harvest. Harvesting is conducted by shaking the nuts to the ground in large, mature trees, and in smaller trees by shaking the nuts into catch frames before they hit the ground.

Weeds are an ever-persistent problem in crop production. If weeds are not managed quickly and effectively, they can choke out a crop by competing for light, nutrients, moisture and serve as a refuge for insects and diseases. Both farmers and pest control advisors acknowledge the importance of using Oxyfluorfen to control weeds during the early stages of crop production. They also note that Oxyfluorfen is much more effective than the alternatives available for preemergence protection.

Oxyfluorfen 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. Additionally, with so few preemergence herbicides registered for cole crops, growers who use Oxyfluorfen are likely to experience negative economic impacts 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 use of this important herbicide for Arizona crop production.

Sincerely,

A handwritten signature in cursive script that reads "Stefanie A. Smallhouse". The ink is dark and the signature is fluid.

Stefanie Smallhouse, President
Arizona Farm Bureau Federation