



Arizona Farm Bureau Federation

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

September 16, 2022

OPP Docket
Environmental Protection Agency
Docket Center (EPA/DC)
(28221T)
1200 Pennsylvania Ave. NW.,
Washington, DC 20460-0001

RE: Docket No. EPA-HQ-OPP-2010-0889; EPA's Draft Endangered Species Act (ESA) Biological Evaluation for Sulfoxaflor

To Whom It May Concern:

The Arizona Farm Bureau represents farmers and ranchers from across Arizona. Our members produce an array of crops and livestock that contribute over \$23.3 billion in economic impact to the state. Many of our members rely on sulfoxaflor as a crop protection tool to produce high quality crops and sustain their operations. Our comments below address the Environmental Protection Agency's (EPA) draft Endangered Species Act (ESA) Biological Evaluation (BE) for sulfoxaflor.

Sulfoxaflor is a selective insecticide used on a broad and diverse range of agricultural crops grown in Arizona. According to the Arizona Pest Management Center (APMC) and the pesticide usage data they have access to sulfoxaflor has significant uses in cotton, alfalfa, spinach, lettuce and other leafy greens, diverse cole crops, celery, cilantro, and melons. Additional uses include beans, chilies, peas, wheat, potatoes, pecans and citrus. A key benefit to sulfoxaflor is that is considered an excellent alternative to broad spectrum insecticides for the control of aphids, whiteflies, Lygus, and other pests in the listed crops.

Economic significance of Arizona crop production

Cotton remains an important agricultural commodity in Arizona. Arizona cotton yields are consistently twice the national average and contribute \$140 to \$180 million annually to the state's economy. Two insects of concern in cotton production are Lygus bugs and whiteflies. Lygus bugs have been the primary yield-limiting pest in cotton, while whiteflies are the primary quality-limiting pest and together account for 89% of arthropod related yield losses in 2021, which was 5%.¹ According to APMC, sulfoxaflor is

¹ Ellsworth, P.C. and A. J. Fournier. Sulfoxaflor Use in Arizona Cotton. June 29, 2022.

considered one of the most effective insecticides to control Lygus bugs in cotton and provides collateral suppression of whiteflies and potentially delays or eliminates additional sprays.²

Arizona is extremely productive and unique when it comes to alfalfa production. According to the USDA, Arizona farmers produce, on average, 8.5 tons of alfalfa per acre per year while the nationwide average yield for the same crop is only 3.2 tons per acre. In 2021 305,000 acres of alfalfa was harvested producing 2.42 million tons valued at \$494.3 million. In alfalfa, sulfoxaflor addresses aphid infestations. Aphids can cause a wide variety of damage including stunting the plant and reducing yield and quality.

Vegetable production in Arizona is also important to the state's economy and the nation's food supply. With respect to lettuce and other leafy greens, of the leafy vegetables consumed in the U.S. from November to March are produced in Arizona, primarily in the Yuma area. In 2021 Arizona's lettuce production was valued at \$651 million. Other vegetable crops with significant value include cole crops (i.e., broccoli, cauliflower, and cabbage) valued at \$220 million; spinach valued at \$13 million. Melons are also grown in the same regions as Arizona's vegetable production. In 2021 the melon harvest was valued at 123 million. In lettuce, leafy greens, cole crops and melons Sequoia is an effective product to control aphids and whiteflies. Both pests can damage plants and reduce yields. In vegetables and melons blemishes and scarring diminish the quality expectation demanded by consumers.

Sulfoxaflor also helps sustain the production of pecans in Arizona. In 2021 nearly 41 million pounds of pecans were harvested and valued at \$93 million. In pecan and pistachio production sulfoxaflor is effective against aphids that through their feeding actions results in damage to young tree nuts leading to reduced yields and potential crop destruction.

Other Arizona crops benefiting from the use of sulfoxaflor are not tracked by USDA NASS on annual basis but are an important component of the total value of Arizona's agriculture production.

Sulfoxaflor BE

In reviewing the draft BE for sulfoxaflor it appears that Arizona is impacted to an extent by the identification of the Southwestern willow flycatcher and the Yellow-billed Cuckoo critical habitats as predicted to likely be adversely modified due to currently registered uses of sulfoxaflor. Furthermore, for both critical habitats the uses potentially causing drift onto critical habitat from aerial applications are identified as field nurseries and other orchards. It does not appear that any other listed or threatened species with a likely to adversely affect and likelihood of jeopardy (LAA/J) determination was identified in Arizona.

As a member of the American Farm Bureau Federation, we support their comments to this docket which raise concerns regarding EPA's use of 30- and 90- meter spray drift distances in its evaluation of sulfoxaflor. Their comments also recommend that EPA review the final biological opinion from the U.S. Fish and Wildlife Service and U.S. Marine Fisheries Service on malathion, a broader spectrum insecticide, which resulted in no jeopardy/adverse modification for any species or critical habitats.

² Arizona Pest Management Center. "Sulfoxaflor Impacts on Arizona Agriculture." Prepared by Peter C. Ellsworth. Feb. 12, 2013. Available at https://acis.cals.arizona.edu/docs/default-source/ipm-assessment-documents/arid-swpmc-info-requests/sulfoxaflor_apmc_2-12-13.pdf?sfvrsn=59b6cf0e_0.

Corteva Agriscience, LLC Proposed Label Amendments

We appreciate the opportunity to also provide comments on Corteva Agrisciences' proposed label amendments for their products which contain the active ingredient sulfoxaflor. Our primary concern is with the proposed mitigation measure to remove aerial applications for a number of crops including Brassica Head and Stem Vegetables (Crop Group 5-16); Leafy Greens (Subgroup 4-16A), Brassica Leafy Greens (Subgroup 4-16B), Leafy Petiole Vegetables (Subgroup 22B), Celtnce and Florence Fennel; and Tree Nuts (Crop Group 14-12) and Fruiting Vegetables (Crop Group 8).

According to a number of pest control advisors (PCAs) who work closely with growers, sulfoxaflor in fact works best when applied by ground application. However, the sentiment among a number of PCAs regarding the proposed aerial application restriction is that it would essentially "tie their hands" when certain conditions arise, including:

- When pest thresholds reach levels that could result in significant yield loss and treatment needs to be applied quickly.
- When cole crops and most lettuce types reach a certain point in their growth cycle, they could be damaged by applications made using ground application equipment.
- When wet ground conditions exist preventing a ground application and timeliness is of application is critical, which can make a big difference in control effectiveness in particular with aphids.
- In tree nut orchards some of which are "narrow" plantings, such that wet soil may persist after a rain event due to the tree canopy. In these cases, an air application is needed. Similarly, as nuts mature later in the season tree branches begin to "drop" such that a ground rig cannot make it through.

The one crop where aerial applications were noted as the primary application method is chiles. A PCA who works closely with this crop noted that depending on the time of year applications by ground would knock the fruit off and increase the risk of spreading phytophthora within the field. Furthermore, chile fields are kept wet during certain parts of the growing season, which again makes aerial application necessary.

Because the species and critical habitats identified in the BE are limited to certain states and regions and/or areas within a state, we recommend any mitigations measures proposed by the EPA and Corteva's label modification be limited in scope and to the immediate areas where species or critical habitat are identified as LAA/J or adversely modified. The evaluation of additional mitigation measures that are economically and agronomically feasible should also be considered in areas where species or critical habitat are of concern are identified as LAA/J or adversely modified to allow for continue use of sulfoxaflor.

In Arizona the critical habitat identified in the BE as likely to be adversely modified was attributed to drift from field nurseries and other orchards. Because vegetable and ground fruit production were not identified as an attributable source, we urge EPA to continue allowing aerial application of sulfoxaflor in these crop groups in Arizona.³ In cases where orchards in Arizona are in proximity to either the Yellow-

³ The BE identifies Vegetables and Ground Fruits in Table 7-3 (pgs. 152-154) as including: Beans (Succulent, Edible Podded, and Dry); Brassica Veg.: Brassica (Cole) Leafy Vegetables (Crop Group 5); Bulb Veg.: Bulb Vegetables (Crop

billed Cuckoo or Southwestern willow flycatcher critical habitats, any limitations to the use or application methods of sulfoxaflor for those crops should be limited to those immediate areas and not entire growing regions or counties.

Corteva's proposed label amendments also include reducing single maximum aerial application rates for several uses important in Arizona including alfalfa; leaves of root and tuber vegetables; root and tuber vegetables; and succulent, edible podded, and dry beans. These proposed rate reductions are also meant to reduce potential exposure to listed species and their designated habitats. As with aerial application restrictions, we urge EPA to limit implementing rate reductions in aerial applications to only those areas where listed species and critical habitat have been identified as LAA/J.

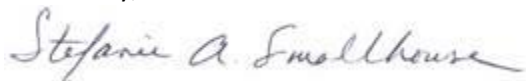
Furthermore, Arizona requires that all aerial application be reported to the state and can be tracked on a section basis. Thus, refining the mitigation measure to limit aerial applications to where habitats of concern are known to occur is feasible and provides additional safety and stewardship for Arizona's sulfoxaflor use.

As a fully selective pesticide, sulfoxaflor is also referred to as a "soft" product/technology as it is considered a safer alternative with respect beneficial insects and other arthropods, as well as to those applying the pesticide. This makes it a valuable tool in Integrated Pest Management programs that seek to reduce risks to human health and the environment. Limiting application methods and reducing rates of application for sulfoxaflor in some cases may result in the use of broad-spectrum products that are harsher and less selective.

We urge EPA to consider our comments, as well as the more technical comments submitted to this docket by the Arizona Pest Management Center as it moves forward in finalizing the sulfoxaflor BE and Corteva's proposed label amendments.

Thank you for your consideration.

Sincerely,



Stefanie Smallhouse, President
Arizona Farm Bureau Federation

Group 3-07); Cucurbits: Cucurbit Vegetables (Crop Group 9); Fruiting Veg.: Fruiting Vegetables (Crop Group 8) and Okra; Leafy Veg.: Leafy Vegetables (Except Brassica) (Crop Group 4) and Watercress; Root and Tuber Veg. (2; 1A and 1B); Root and Tuber Veg.: Leaves of Root and Tuber Vegetables (Crop Group 2); Potatoes (Crop Groups 1C and 1D); Strawberry