



EPA Announcements of Interest to ESA Members

Registration review of insecticides

Final Biological Evaluation for the Effects of Sulfoxaflor on Federally Listed Endangered and Threatened Species and Designated Critical Habitats has been released.

- The 437-page document includes the final biological evaluation, and the comments can be accessed at <https://www.regulations.gov/document/EPA-HQ-OPP-2010-0889-0675>.
- Sulfoxaflor is an insecticide first registered in 2013. The target pests include aphids, flea hoppers, plant bugs, stink bugs, whiteflies, and certain psyllids, scales, and thrips. The insecticide has been adopted as an alternative to carbamates, neonicotinoids, organophosphates, and pyrethroids. This insecticide typically requires fewer applications resulting in less exposure to non-target pests and plants.
- The biological evaluation considered more than 1,700 species listed as endangered species and more than 800 critical habitats in the United States. On July 15, 2022, EPA released a draft of the biological evaluation and on November 16, 2022, Corteva, which is the registrant of the insecticide, submitted proposed labels for the formulated products with sulfoxaflor, which included new mitigations.
- The potential effect of this insecticide is summarized in the table below, considering the current mitigations in the revised proposed labels. The previous evaluation of the effects without mitigations submitted by the registrant is included in parentheses:

	No Effect (%)	May affect but is not likely (%)	likely to adversely affect (%)	Is likely to adversely affect (%)
Endangered species	47 (36)	22 (30)	27 (27)	4 (7)
Critical habitats	54 (52)	37 (35)	6 (9)	3 (4)

- The use patterns proposed for sulfoxaflor are presented in Table 2-2 of the final EPA biological evaluation document and below:

Table 2-2. Sulfoxaflor use patterns proposed on 11-16-2022 draft labels.

Use Site/ Location (Variety and/or Crop Group)	Application Type	Max Single Rate lbs. ai/A ¹	Max # App/yr ¹	Max Annual Rate lbs ai/A/yr ¹	MRI (d)
Alfalfa: Alfalfa and other non-grass animal feeds (Crop Group 18)	Ground	0.090	4	0.266	7
	Aerial	0.070			
Artichoke (globe)	Ground only	0.090	3	0.266	7
Asparagus	Ground only	0.090	3	0.266	7
Avocado	Ground/Air blast	0.090	3	0.266	7
Barley, Oats, Rye, Teff, Triticale and Wheat	Ground	0.047	2	0.094	14
	Aerial				
Beans: Beans (Succulent, Edible Podded, and Dry)	Ground	0.070	4	0.266	14
	Aerial	0.047	4	0.188	14
Berries (Dry conditions): Bushberry (Subgroup 13-07B) and Caneberry (Subgroup 13-07A) and cranberry	Ground only	0.090	3	0.266	7
Brassica Vegetables.: Brassica (Cole) Leafy Vegetables (Crop Group 5)	Ground only	0.090	3	0.266	7
Bulb Vegetables.: Bulb Vegetables (Crop Group 3-07)	Ground only	0.090	4	0.266	7
Cacao	Ground only (Airblast)	0.038	4	0.152	28
Canola: Canola (Rapeseed) (Subgroup 20A)	Ground only	0.023	2	0.046	14
Christmas Tree Plantations	Ground only (Airblast)	0.090	3	0.266	14
Citrus (Crop Group 10)	Ground only (Airblast)	0.090	3	0.266	14
Corn (Field, Sweet, Seed, and Popcorn), Millet, Sorghum and Teosinte	Ground	0.047	2	0.094	14
	Aerial				
Cotton	Ground	0.070	4	0.266	5
	Aerial				
Cranberry (included in Subgroup 13-07G)	Ground only	0.090	3	0.266	7
Cucurbits: Cucurbit Vegetables (Crop Group 9)	Ground only	0.070	4	0.266	7
Fruiting Vegetables.: Fruiting Vegetables (Crop Group 8) and Okra	Ground only	0.070	4	0.266	7
Leafy Vegetables.: Leafy Vegetables (Except <i>Brassica</i>) (Crop Group 4)	Ground only	0.090	3	0.266	7
Ornamentals in Nurseries: Ornamentals (Herbaceous and Woody) Growing in Greenhouses, Residential and Commercial Landscapes and Nurseries (Including Conifer Seedling Nurseries and Conifer Seed Orchards)	Ground only	0.090	3	0.266	14
Pineapple	Ground only	0.090	2	0.18	14
Pome Fruits (Crop Group 11)	Ground only (Airblast)	0.090	3	0.266	7

Potatoes (included in Tuberous and corm vegetables, Crop Groups 1C)	Ground only	0.070	4	0.266	14
	Aerial				
Rice	Ground only	0.090	4	0.266	14
Leaves of Root and Tuber Vegetables (Crop Group 2) and Root and Tuber Vegetables (SG 1A)	Ground	0.090	3	0.266	7
	Aerial	0.047	4	0.188	7
Small Fruits: Small Fruit Vine Climbing (Except Fuzzy Kiwifruit) (Subgroup 13-07F)1 and Low Growing Berry (Except Strawberry) (Subgroup 13-07G)	Ground only	0.090	3	0.266	7
Soybean	Ground	0.070	4	0.266	14
	Aerial	0.031	4	0.124	
Stone Fruits (Crop Group 12)	Ground only (Airblast)	0.090	3	0.266	7
Strawberry	Ground only	0.070	3	0.266	7
Tree Nuts (Crop Group 14) and Pistachio	Ground only (Airblast)	0.090	3	0.266	7
Turfgrass (Commercial Sod Farms Only)	Ground only	0.090	3	0.266	7
Watercress (included in Crop group 4)	Ground only	0.090	3	0.266	7

App= Application; **MRI** = Minimum retreatment interval; **ai**= active ingredient; **d**= day.

¹**Max Single Rate (lbs. ai/A); Max # App/yr; and Max Annual Rate lbs ai/A/yr**

- The proposed changes by Corteva in the use include limiting the application to ground only for several use patterns (e.g., rice) and for applications in Hawaii, and modifications to application rates for several use patterns. For all labels, a 30 ft downwind in-field buffer is required. The proposed labels prohibit sulfoxaflor use in Alaska and the territories. Other important label in the commercial products with sulfoxaflor include:

For Closer[®] SC or Sequoia[®], Transform[®] WG, Ridgeback[™], and XXpire[®]

- ✓ Not for use in Alaska, California, Puerto Rico, the U.S. Virgin Islands, and the territories of Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.
- ✓ Do not apply by air in Hawaii
- ✓ Not for residential use; and
- ✓ Include the 30 ft. buffer down-wind buffer

For Sequoia[®] CA and Transform[®] CA labels

- ✓ No use on the following crops: Bushberries (subgroup 13=07B), Cranberry (subgroup 13- 07A), Soybean, and Strawberries
- ✓ Include the 30 ft. buffer down-wind buffer; and

For Ridgeback[™] label:

- ✓ No use on the following crops: Alfalfa, Artichoke, Asparagus, Avocado, Barley, Oats, Rye, Teff, Triticale, Wheat, Berries, Bulb vegetables, Cacao, Citrus, Leafy greens, Ornamentals, pineapple, Pome fruits, Root and tuber vegetables, small fruits, Strawberries, and Sunflower.
- ✓ Include the 30 ft. buffer down-wind buffer

- Based on the adverse effects determined by EPA, the agency has initiated formal consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service and the discussion will continue with the Corteva to determine what additional mitigation measures should be considered.

EPA and FDA are considering updating their respective oversight responsibilities for specific products.

- Both agencies understand that the technology of pesticides has evolved since the changes in the definition of “pesticides” in the mid-1970s, which did not include new animal drugs from regulation as pesticides under FIFRA. EPA and FDA have identified two complementary components of a modernized approach with an overall goal to align regulation with expertise and mission and reduction of duplicative resources and efforts. According to both agencies, the first component is for the agencies to have more flexibility to update and align their regulatory mission for relevant products in an efficient and transparent manner. The second component is transferring from EPA to FDA the oversight of topically administered products for external parasites of animals.
- On March 22, 2023, EPA and FDA hosted a public meeting and more information about the goal of modernizing the current approach can be assessed in the “WHITEPAPER: A Modern Approach to EPA and FDA Product Oversight” at <https://www.epa.gov/system/files/documents/2023-02/whitepaper-a-modern-approach-epa-fda-product-oversight.pdf>.
- One concern about these changes is related to moving the regulating pesticides used to pests associated with beekeeping. Honey bees face a variety of pests and diseases that require registered treatments, such as *Varroa* mite. Several segments of this industry have already indicated that EPA has the expertise, experience, and long-standing honey bee ecotoxicology guideline requirements. The concerns of change of this jurisdiction moving from EPA are related to the potential increase in length and cost of product registration for future products in a system with a high demand for management tools.
- Public comments are open and can be submitted at <https://www.regulations.gov/docket/EPA-HQ-OPP-2023-0103/comments>.

Upcoming/Future Activities:

- On April 10, 2023, EPA publishes the **updated registration review schedule** for the next three years, with expected deadline completion on October 1, 2026. The review schedule includes many of the herbicides, insecticides, and fungicides that are in-line with the EPA’s Endangered Species Act strategies. The overall goal is the adoption of mitigation measures and improves the registration review process.
- More information about the registration review process can be accessed at <https://www.epa.gov/pesticide-reevaluation/registration-review-process>.
- The list of upcoming registration review actions for 350 pesticides can be accessed at <https://www.epa.gov/pesticide-reevaluation/upcoming-registration-review-actions> and the schedule should be expected to be updated on a quarterly basis, generally in the following

timeframes: Quarter 1 (Q1): October – December; Quarter 2 (Q2): January – March; Quarter 3 (Q3): April – Jun; Quarter 4 (Q4): July – September.