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March 27, 2023

Mary Elissa Reaves, Director  
Pesticide Re-evaluation Division (7508P)  
Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460-0001

RE: EPA Docket EPA-HQ-OPP-2010-0889

Dear Ms. Reaves,

The National Cotton Council (NCC) appreciates the opportunity to provide comments to EPA's docket for the registration of sulfoxaflor. Sulfoxaflor is a critical tool used in cotton Integrated Pest Management (IPM) programs.

The NCC is the central organization of the United States cotton industry. Its members include producers, ginner, cottonseed processors and merchandizers, merchants, cooperatives, warehousemen and textile manufacturers. A majority of the industry is concentrated in 17 cotton-producing states stretching from California to Virginia. U.S. cotton producers cultivate between 10 and 14 million acres of cotton with production averaging 12 to 20 million 480-lb bales annually. The downstream manufacturers of cotton apparel and home furnishings are located in virtually every state. Farms and businesses directly involved in the production, distribution and processing of cotton employ more than 115,000 workers and produce direct business revenue of more than \$22 billion. Annual cotton production is valued at more than \$5.5 billion at the farm gate, the point at which the producer markets the crop. Accounting for the ripple effect of cotton through the broader economy, direct and indirect employment surpasses 265,000 workers with economic activity of almost \$75 billion. In addition to the cotton fiber, cottonseed products are used for livestock feed and cottonseed oil is used as an ingredient in food products as well as being a premium cooking oil.

Sulfoxaflor is the first member of the sulfoximines insecticide class, the Insecticide Resistance Action Committee (IRAC) Group's 4C mode of action (MOA). With sulfoxaflor, farmers can use reduced rates of active ingredients on their fields, reduce their number of applications and help minimize resistance issues. Growers rely on tools like sulfoxaflor to effectively control costly pests and protect the quality, health, and economic viability of their crops.

Cotton producers only use pesticides to the extent necessary to protect the crop as each pesticide application represents an additional cost against a producer's potential

profitability. Unfortunately, damaging pest populations exceeding economic thresholds require intervention to reduce the populations below the economic threshold. The development and delivery of newer, safer, and effective chemistries like sulfoxaflor provides growers with the tools they need to provide our nation with food security.

As stated previously, sulfoxaflor is a sulfoxamine insecticide, classified by IRAC as a Group 4C nicotinic acetylcholine receptor competitive modulator. It is a critical alternate MOA necessary to manage season-long pests such as aphids and plant bugs. Producers are faced with few MOAs to address certain pest populations across the cotton growing season. Losing a MOA would be detrimental to the longevity of other MOAs, which are already part of the IPM and resistance management rotation plans.

The NCC contacted several university extension experts across the Cotton Belt with regards to sulfoxaflor's importance and use in their respective states. NCC has previously provided that data to EPA. The data clearly show the importance of sulfoxaflor to IPM programs for all states, with greater critical need in the Mid-south to manage tarnished plant bug populations. Additionally, the data show the dependence on aerial application to effectively address pest populations exceeding economic thresholds. Rapid action is critical when high populations of damaging pests exceeding economic thresholds are identified. To prevent losses on large acreages, aerial applications are the only solution. The expert opinions show that areas with high pest populations like the Mid-south (high populations of Tarnished Plant Bugs (TPB), *Lygus lineolaris*) and the West (high populations of Plant Bugs, *Lygus hesperus* and cotton aphid spp. in CA and AZ) depend on aerial application (MS reported 80% by air, AL reported 90% by air, CA at 79% and AZ at 80%). States with lower pest populations depended more on ground applications (GA reported 85%, SC reported 99%, TN reported 80%, NC reported 95%).

Cotton producers in Alabama, Arkansas, Mississippi, and Louisiana face high TPB populations annually. Portions of the TPB population have evolved to be resistant to multiple insecticide MOAs. The data have shown that under high TPB populations, the entire crop can be lost without treatment. More importantly, the data have shown that without neonicotinoids AND sulfoxaflor in the treatment rotation, growers can lose more than \$90.00 per acre (Dr. Jeff Gore, Entomologist, Mississippi State University, 2016). Extrapolated across the Cotton Belt, the production loss would exceed \$1 billion annually, not including the downstream losses.

The NCC reminds EPA of studies shared with EPA that show honeybees do not collect cotton pollen due to the long spines on the pollen grain. Additionally, NCC reminds EPA that the agency-required tunnel studies represent a no-choice experiment, essentially force-feeding bee colonies rather than allowing bees to choose other diet material that would likely dilute, if not eliminate, any contamination concerns of cotton treatments.

Sulfoxaflor provides a relatively low-risk option for insect pest control near bloom while offering high efficacy against a number of sap-feeding pests. Few if any insecticides pose zero risks to bees, but sulfoxaflor has a comparatively safe bee profile. Producers desire more alternatives that provide adequate pest control while preserving safety for bees.

The NCC appreciates the opportunity to share these comments with EPA. If the agency has additional questions, the NCC is available to assist as possible. Thank you for your time and for your commitment to assuring pesticide products meet legal requirements, including no harm to humans (especially children), prior to U.S. registration approval.

Respectfully,

A handwritten signature in black ink, reading "Steve Hensley". The signature is written in a cursive, flowing style.

Steve Hensley  
National Cotton Council