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Mr. Daniel Rosenblatt
Acting Director
Registration Division
Office of Pesticide Programs
Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460-0001

Submitted electronically via Federal eRulemaking Portal

RE: Public Participation for EPA's Draft Endangered Species Act (ESA) Biological Evaluation for Cyantraniliprole (EPA-HQ-OPP-2011-0668-0063)

Dear Mr. Rosenblatt:

On behalf of the American Soybean Association (ASA), I am writing to provide comments on EPA's draft Endangered Species Act (ESA) biological evaluation (BE) for cyantraniliprole (EPA-HQ-OPP-2011-0668-0063). ASA represents more than 500,000 U.S. soybean farmers on domestic and international policy issues important to the soybean industry and has 26 affiliated state associations representing 30 soybean-producing states.

As agricultural producers, we believe it is critical to have the availability of crop protection tools, like cyantraniliprole, to continue the safe, affordable, and sustainable production of food. Having a broad array of tools and the guidance to use them safely will significantly contribute to our need to sustainably feed 9.7 billion Americans and global citizens by 2050.

We rely on EPA to thoroughly review crop protection tools to assess their availability, benefits, and impact on human health and the environment. Any efforts to make this process duplicative and more burdensome without any scientifically demonstrated benefit to human health or the environment should be rejected.

Benefits and Uses of Cyantraniliprole

While cyantraniliprole is a relatively new active ingredient registered for use on soybeans (it has only been approved for use on soybeans since late 2018) ASA is strongly supportive of grower access to this tool. We see the use of products containing cyantraniliprole increasing in the years ahead. Cyantraniliprole is registered for both seed treatments and foliar applications. For foliar applications, it can control numerous destructive insect pests, including green cloverworms, soybean loopers, velvetbean caterpillars, lesser cornstalk borers, Japanese beetles, corn earworm, European corn borer, whiteflies, and soybean aphids. It can help suppress bean leaf beetles, stink bugs, and thrips. Seed

treatment applications can also help control several soilborne insect pest species, including grubs and wireworms.

These insect pests can cause great damage to the crops of U.S. soybean producers. A recent study of 17 soybean producing states found that insect pests inflict more than $283 million in yield losses annually to the domestic soybean industry in these states and cost another $457 million in pest control.[1] These costs would be much higher without access to tools like cyantraniliprole and other effective insecticides. Several of the pests for which cyantraniliprole is registered to control can inflict yield losses up to 40 percent.[2,3] Collectively, the pests for which cyantraniliprole is registered cost U.S. soybean producers more than $435 million annually, or nearly 59 percent of the total cost insect pests inflict to soybeans in these states.[4] Insect pests are significantly damaging to soybean crops and having cyantraniliprole available to help control these pests can reduce costs and damages suffered by U.S. producers.

Having access to cyantraniliprole can also help growers manage challenges facing other insecticides historically used by farmers. It is well documented that certain insect pest populations have developed resistance to classes of insecticides like pyrethroids, which makes this class of insecticides less effective for pest control.[5,6] The loss of chlorpyrifos for the 2022 growing season has removed a significant tool for growers to control several of these pests, making cyantraniliprole even more important to soybean growers. Additionally, while unjustifiable attempts by environmental groups to end agricultural uses of neonicotinoids and organophosphates have not been successful to date, growers worry about future access to these product classes specifically and insecticides generally. There are few insecticidal tools left for grower use and without newer products, like cyantraniliprole, for meaningful agronomical use, growers may be unable to protect their crops from devastating insect pests in the years to come.

Finally, growers need newer tools, such as cyantraniliprole, to manage insect resistance to other pesticides. Cyantraniliprole, a ryanodine receptor modulator, has a group 28 insecticide mode of action (MOA) and is only one of two active ingredients in that class. Having a broad range of insecticides, including cyantraniliprole, with multiple MOAs that growers can rotate, layer, and mix will help prevent insect populations from selecting for resistance to certain pesticides or MOAs. Access to cyantraniliprole for use on soybeans will enable growers another insect control tool with a unique MOA to preserve the efficacy of the few other remaining insecticidal tools growers do have available.

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[1] Musser, Fred, A.L. Catchot, Jr., Sean P. Conley, Jeffrey A. Davis, Christina DiFonzo, et al. April 2020. "2019 Soybean Insect Losses in the United States." *Midsouth Entomologist*. Vol. 13, P. 6. https://www.researchgate.net/publication/340950846_2019_Soybean_Insect_Losses_in_the_United_States

[2] Hunt, Tom E., Keith J. Jarvi, Wayne J. Ohnesorg, and Lanae M. Pierson. University of Nebraska-Lincoln Extension. October 2011. "Soybean Aphid Management in Nebraska." https://extensionpublications.unl.edu/assets/html/g2063/build/g2063.htm

[3] Schultz, Bruce, and Jeff A. Davis. June 5, 2013. "Destructive stink bugs show up in soybeans earlier than expected." *LSU Ag Center*. https://www.lsuagcenter.com/portals/communications/news/news_archive/2013/june/headline_news/destructive-stink-bugs-show-up-in-soybeans-earlier-than-expected

[4] Musser, Catchot, Conley, Davis, DiFonzo, et al. "Soybean Insect Losses." 6.

[5] Valmorbida, Ivair, Jessica Hohenstein, Brad Coates, Joel Coats, Matt O'Neal, and Erin Hodgson. Iowa State University. N.D. "Monitoring soybean aphid resistance to lambda-cyhalothrin and identification of mutation associated with insecticide resistance." Accessed March 24, 2023. https://www.ent.iastate.edu/soybeanresearch/projects/monitoring-soybean%20aphid-resistance-lambda-cyhalothrin-and-identification-mutation

[6] Thompson, Clint. March 26, 2013. University of Georgia Cooperative Extension: College of Agricultural and Environmental Sciences. "Stink bugs costly, harmful to farmers' crops." https://newswire.caes.uga.edu/story/4693/pests-need-to-be-managed.html

Draft Biological Evaluation

We have several comments related to the draft BE. First, while we are supportive of the agency ensuring the registration of cyantraniliprole will not jeopardize species or adversely modify critical habitats, soybean growers want to ensure any mitigations needed to protect species are truly necessary and scientifically justifiable. Implementing conservation practices proposed in the draft BE's potential mitigations list would be costly and can quickly render a farming operation economically unsustainable. A 2016 estimate predicted the cost of implementing the vegetative filter strip already required under the cyantraniliprole registration could cost $233/acre annually.[7] For a grower producing on 5,000 acres, this could cost $1.165 million annually. Further, the draft BE is now suggesting growers in certain areas may need to adopt a *second* practice on top of the vegetative filter strip to mitigate the impacts of pesticide movement from soil erosion for several aquatic species. This is prior to the costs associated with adopting spray drift mitigations. To prevent the use of cyantraniliprole from becoming economically unfeasible for continued use by growers, it is imperative EPA only require the use of mitigations that are clearly demonstrated via the best available scientific and commercial data, as required by law, to be essential for protecting species and their habitats from jeopardy and adverse modification (J/AM).

Related to the implementation of pick list conservation practices, we request EPA in its response to comments to clarify how it anticipates growers to comply who are not landowners and thus may not have authority to implement pick list practices. For example, irrigation water management, contour farming, terrace farming, water and sediment control basins, and other pick list items may require physical modifications to fields to implement. Growers who are only renting farmlands may be contractually prohibited from implementing certain practices, especially those which require field modification. Clarity for growers who would like to use cyantraniliprole products and yet as renters may not have the authority to implement certain practices would be appreciated.

As with other insecticidal active ingredients undergoing ESA analysis, we strongly urge EPA to examine the final – not the draft – biological opinions (BiOp) from Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (hereafter "the Services") for malathion. Both final BiOps reached a finding of no J/AM for the use of malathion, an organophosphate insecticide generally known to have a broader ecological impact than cyantraniliprole. By relying on the expertise of the Services contained in these final BiOps, it will allow EPA to predict J/AM more accurately and efficiently for cyantraniliprole.

We also generally question EPA's J/AM predictions for multiple reasons and request the agency to consider additional scientific and commercial data available to the agency. In the draft BE, EPA predicts jeopardy for Neosho madtom and the Carolina madtom from runoff exposure of cyantraniliprole due to soil erosion associated with use on soybeans and cotton. However, the agency's analysis fails to consider data from existing conservation practices growers are already using that reduce soil erosion and thus would have a protective effect on the aquatic species.

For example, the Carolina madtom is known to exist in the following counties in North Carolina: Durham, Edgecombe, Franklin, Granville, Halifax, Johnston, Jones, Nash, Orange, Vance, Warren and Wilson. In 2021, USDA's Natural Resources Conservation Service (NRCS) records that it contracted with

[7] Tyndall, John C. and Troy Bowman. Iowa State University and Alabama A&M University. December 2016. *Iowa Nutrient Reduction Strategy BMP Cost Decision Tool Overview*. https://www.researchgate.net/publication/315496577_Iowa_Nutrient_Reduction_Strategy_BMP_Cost_Decision_Tool_Overview

producers under the Environmental Qualities Incentive Program (EQIP) to implement cover crops on 3,995 acres in Edgecombe County; 1,676 acres in Halifax County; 1,412 acres in Jones County; 11 acres in Warren County; and 8 acres in Franklin County. NRCS also contracted under EQIP to implement irrigation water management on 1,412 acres in Jones County and contracted under the Conservation Stewardship Program (CSP) to implement an additional 87 acres of cover crops in Jones County.[8]

To contrast, in the 2017 Census of Agriculture, USDA reported 148,917 acres of farmland in Edgecombe County, of which 41,888 acres and 14,236 acres of soybeans and cotton were produced, respectively.[9] This means approximately 2.7 percent of all farmlands in Edgecombe County are under EQIP contracts to implement cover crops. While this is the number of acres under NRCS contract, it is important to note these NRCS programs are oversubscribed and many growers implement these practices even if they are not compensated by NRCS programs for doing so. The 2017 Census of Agriculture reports in Edgecombe County 25 percent of acres are under no-till, 17 percent are under reduced tillage, and 19 percent use cover crops.[10] This data is available for all the counties in which the Carolina madtom is known to be located.

While this data is readily available to the agency (in fact, the draft BE utilizes the Census of Agriculture in several instances), none of these practices and the protective effect they have on species are considered in EPA's effects determination for cyantraniliprole. Furthermore, the BEAD Percent Crop Treated (PCT) prediction anticipates that the upper bound of acres in North Carolina that would be treated with cyantraniliprole is only 35 percent, which means a significant number of the acres anticipated to use cyantraniliprole would already be using these protective conservation practices. Finally, since the existing label already requires a 25-foot vegetative filter strip for use, which the agency predicts would have a 10 percent protective effect in reducing the already-conservative environmental exposure concentration (EEC) estimates, the draft BE proposes the requirement of only one additional soil erosion mitigation to achieve the 20 percent total EEC reduction needed to prevent the jeopardy prediction. We would contend if EPA were to meaningfully consider available scientific and commercial data regarding existing conservation practices, it would find growers are already adopting practices needed to sufficiently reduce cyantraniliprole transport via soil erosion to prevent jeopardy.

EPA should not only consider this available data for the Carolina madtom, but for all the species and habitats for which the agency is currently predicting J/AM. Most of the draft J/AM predictions made for cyantraniliprole resulted from spray drift concerns, but UDSA-NRCS and the National Agriculture Statistics Service (NASS) have data on practices growers are using that can mitigate the impacts of spray drift as well. If the agency were to do its due diligence in considering data on protective practices growers are already using, we anticipate the agency would be able to reasonably predict many of these species and their habits will not experience J/AM from the use of cyantraniliprole.

Finally, while we are confident other commenters will provide greater insights on this matter, we would like to go on record expressing concern with the overly conservative and unrealistic nature of EPA's spray drift and water concentration models. Models currently used by the agency are often orders of

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[8] County-level data used for this analysis was requested of and provided by USDA-NRCS. State-wide data is available on the NRCS website. https://publicdashboards.dl.usda.gov/t/FPAC_PUB/views/RCATopPracticesbyLandUseandState/TopPracticesDashboard?%3Adisplay_count=n&%3Aembed=y&%3AisGuestRedirectFromVizportal=y&%3Aorigin=viz_share_link&%3AshowAppBanner=false&%3AshowVizHome=n

[9] National Agricultural Statistics Service. U.S. Department of Agriculture. *2017 Census of Agriculture County Profile: Edgecombe County, North Carolina*. https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/North_Carolina/cp37065.pdf

[10] Ibid.

magnitude more conservative than empirical data and real-world studies suggest is the actual effect of spray drift and pesticide water concentrations. The result of this overly conservative approach is unscientifically inflating the likelihood of a J/AM prediction, which would then require growers to adopt costly exposure-reducing mitigations that in reality may have little-to-no additional protective benefit for species or their habitats. Where possible, we strongly urge EPA to use real-world studies and empirical data on spray drift and pesticide water concentrations to avoid growers having to adopt costly, unnecessary restrictions that will offer little-to-no additional protective benefit to species or their habitats.

We thank you for your consideration of our thoughts and concerns and appreciate the opportunity to comment.

Sincerely yours,

Daryl Cates
President