

Agricultural Innovation Board (AIB)  
Agency of Agriculture, Food, and Markets  
State of Vermont  
116 State Street  
Montpelier, Vt 05620-2901

January 2, 2024

**Re: AIB Recommendations to AAFM Regarding BMPs for Neonic Treated Seeds**

To the Agricultural Innovation Board:

The Xerces Society for Invertebrate Conservation respectfully submits these comments to the Agricultural Innovation Board as a follow up to [our previous comments](#), which were submitted prior to the Board's [December 2023 draft recommendations](#) to the Agency of Agriculture, Food, and Markets.

Neonicotinoid treated seeds cause widespread contamination of air, soil, water, and plants, posing harm to pollinators, aquatic ecosystems, and other wildlife across Vermont. We urge the Board to review the intent and scope of their mandate under 6 V.S.A. § 1105a (c) (1)-(2). Best management practices for insecticide coated seeds should reduce potential harm by moving farmers towards more sustainable, economically justified pest management practices (i.e., [surveillance and monitoring to establish a field history of pest incidence prior to use of treated article seeds](#)).

We recognize that there remains uncertainty about pest incidence and the potential yield impacts across the state, and that there are many questions left to answer, including how best to monitor and predict pest damage in order to decide where and when coated seeds may be a useful tool. Increasing locally-relevant research and education on these topics are important outcomes from the Board's efforts.

However, **we do not believe that this uncertainty is enough reason to abandon basic recommendations that aim to reduce known harm from these coated seeds.** [This decision guide](#) provides an example framework for how scouting and past field records can provide justification for use of seed treatments the following year. We also refer the Board back to our previous comments for suggestions on mitigation of off-site movement and improved disposal practices that could help to reduce the insecticide load from coated seeds entering Vermont's air, soil, plants, and waterways.

Neonicotinoid seed coatings are **the largest single contributor to insecticide use in the State of Vermont**, even at the low-end estimate of their use (~1,480 lbs). In 2021, around 6,191 pounds of insecticides were applied in Vermont by certified commercial, non-commercial and government applicators (VT AAFM, 2021), which means **the upper estimate for neonicotinoids applied by seed treatment (~7,410 lbs) is higher than all other insecticides applied in the state combined** (VT AAFM, 2023). The vast majority of this use is in corn, and steps to reduce use in this cropping system would make the most substantive difference in statewide neonicotinoid use and

risks posed to pollinators and other wildlife by coated seed. Every year that action is delayed, the continued widespread use of these seeds results in additional harm to pollinators, soil life, and aquatic life.

We applaud the Board for bringing in expert testimony from a wide variety of researchers, agronomists, and Extension educators, and for centering farmers and Vermont-relevant research in their outputs. However, we believe that the Board's summary of research on risks to the environment and human health inadequately captures input provided to the board by experts and stakeholders. It is clear, given the scale of use and known potential for harm, that action must be taken and that we know enough to take meaningful steps right now. It is worth highlighting that the risks posed to our state's natural resources may be entirely unnecessary, given the lack of evidence that seed-applied neonicotinoids are addressing a specific, well-documented pest threat. Importantly, **research from our neighbors in Quebec indicates that [neonicotinoid seed treatments are useful in less than 5% of fields](#)**, given the low incidence of pest pressure and damage in the region (Labrie et al., 2020). Since the Board last met, [New York has passed legislation to phase out neonicotinoid treated seeds in several row crops](#), which may open up greater access to alternative seeds for Vermont farmers.

**We encourage the Board to revisit providing recommendations to the Secretary, and to think more broadly: recommendations do not need to be constrained by existing practices or perception of market forces.** Recommendations to the Secretary can be straightforward, science-based, and provide a vision for moving farmers to more sustainable approaches that target coated seeds to fields where their use is justified based on a documented history of seed corn maggot or wireworms, in addition to providing guidance on how to minimize off-site movement of these chemicals where they are used and otherwise encourage pollinators on their property.

Sincerely,

Emily May and Rosemary Malfi

The Xerces Society for Invertebrate Conservation

#### References:

- Heidel-Baker, T., M. Vaughan, K. Kuhn, and M. Adkins. 2018. Making Decisions About Neonicotinoid Seed Treatment Use in Iowa: Scouting and Field History Reports for Early Season Corn and Soybean IPM. The Xerces Society for Invertebrate Conservation and USDA Natural Resources Conservation Service. 8 pp. Available: <https://www.xerces.org/publications/guidelines/making-decisions-about-neonicotinoid-seed-treatment-use-in-iowa>
- Labrie, G., Gagnon, A.-È., Vanasse, A., Latraverse, A., and Tremblay, G. 2020. Impacts of neonicotinoid seed treatments on soil-dwelling pest populations and agronomic parameters in corn and soybean in Quebec (Canada). *PLoS One*, 15(2), e0229136. <https://doi.org/10.1371/journal.pone.0229136>
- VT AAFM. 2021. Statewide Pesticide Usage Report. Available: <https://agriculture.vermont.gov/public-health-agricultural-resource-management-division/pesticide-programs/pesticide-usage-reported>
- VT AAFM. 2023. Neonicotinoid Use in Vermont. Presented to the Agricultural Innovation Board by the Agency of Agriculture, Food and Markets, December 1, 2023. Available: [https://agriculture.vermont.gov/sites/agriculture/files/doc\\_library/2023\\_1211%20Vermont%20neonicotinoid%20use.pdf](https://agriculture.vermont.gov/sites/agriculture/files/doc_library/2023_1211%20Vermont%20neonicotinoid%20use.pdf)