

REPORT REGARDING BMPs FOR NON-NEONICOTINOID TREATED
ARTICLE SEEDS

Act No. 145 of 2022

Submitted to the:

House Committee on Agriculture, Food Resiliency, and Forestry

Senate Committee on Agriculture

By the:

Agricultural Innovation Board and the Vermont Agency of Agriculture, Food &
Markets

February 15, 2023

Act No. 145 of 2022, Section 5, *Review and Report on BMPs for Treated Article Seeds*:

“On or before February 15, 2023, the Agricultural Innovation Board shall submit to the Senate Committee on Agriculture and the House Committee on Agriculture and Forestry a written report regarding whether best management practices (BMPs) should be adopted for the use of treated article seeds that are not neonicotinoid treated article seeds. The report shall include:

(1) a summary of the Agricultural Innovation Board’s review of treated article seeds that are not neonicotinoid treated article seeds, including identification of treated article seeds that may have adverse effects on human health or the environment;

(2) a recommendation of whether BMPs for treated article seeds that are not neonicotinoid treated article seeds should be adopted and whether they should be adopted by rule; and

(3) proposed BMPs for treated article seeds that are not neonicotinoid treated article seeds. (An Act Relating to the Sale, Use, or Application of Neonicotinoid Pesticides of 2022, No. 145 § 5 (2022))”

Contents

Agricultural Innovation Board Recommendation.....	4
Review of Non-Neonicotinoid Treated Article Seeds	4
Existing Requirements for Treated Article Seeds.....	4
Review of Voluntary BMPs Available to Growers	6
Appendix: Board Members.....	6

Agricultural Innovation Board Recommendation

The Agricultural Innovation Board (the Board or AIB) unanimously voted to delay issuance of recommended BMPs for non-neonicotinoid treated article seeds. The Board plans to gather more information about the sale of treated seed in Vermont, including what products and active ingredients are used as treatments and the availability of untreated seeds and treated seed that are not neonicotinoid treated article seed, for example biological seed treatment like rhizobia and fungicide-only treated seeds. The Board will focus their efforts on providing recommendations to the Agency of Agriculture, Food & Markets (Agency) on the required BMPs for the use in the State of neonicotinoid treated article seeds, that may also address other types of pesticide treatments and/or non-seed protection treatments, such as inoculants, by March 1, 2024 (*see* 6 V.S.A. § 1105).

Review of Non-Neonicotinoid Treated Article Seeds

The Board has discussed treated article seeds at multiple meetings to date. On January 23, 2023, the Board specifically reviewed information from the Agency Feed, Seed and Fertilizer Program about [seed sales data to date](#). Registered distributors of agricultural seed must report to the Agency by February 15 the quantity of untreated and treated agricultural seed sold in Vermont.

“For agricultural seeds sold in Vermont, the manufacturer or processor distributing the seed in Vermont shall report annually on or before February 15 to the Secretary on forms supplied by the Secretary regarding the quantity of treated article seed and the quantity of untreated seed sold in Vermont during the previous calendar year.” (6 V.S.A. § 648 (h)).

The Agency attempted to collect seed sale information ahead of that schedule from distributors that reported tonnage in 2021, including information about treatments applied to seeds. Tonnage reporting is required of those distributors that sold seeds “in containers of more than ten pounds.” There were 48 distributors that fall into this category and as of the January 23rd AIB meeting, the Agency had received 13 responses. Within those responses, sales of treated seeds not treated with neonicotinoid insecticides were reported for specialty and turf seeds, but no sales of other types of treated agricultural seed without neonicotinoids were reported to date. Because of the limited responses, the Board did not review literature related to any known or potential impacts of non-neonicotinoid treated seeds to the environment and human health, and felt more time and information was necessary for full understanding of the sales data for agricultural seed in Vermont and literature review of seed treatments relevant to Vermont.

Additionally, the Agency informed the Board on January 23, 2023 that it had not received any public health or environmental concerns, complaints or other incidents regarding non-neonicotinoid treated article seeds to date.

Existing Requirements for Treated Article Seeds

The Federal Seed Act ([7 CFR § 201.31a](#) and [USDA Labeling Requirements for Chemically Treated Seed](#)) requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with (insert name of active ingredient of pesticide)
- Do not use for food, feed, or oil purposes

Vermont law also requires labeling to the same effect:

“For all seeds that have been treated, the label shall include a word or statement indicating that the seed has been treated with the commonly accepted chemical or abbreviated chemical name of the applied substance. A caution statement shall be set forth if the substance in the amount present is harmful to human or other vertebrate animals. The caution for toxic substances shall be a poison statement or symbol.” (6 V.S.A. § 644(a)(2))

The corresponding pesticide EPA approved label for the pesticide used as treatment on the treated article seeds is required to have information and instructions concerning first aid, personal protective equipment (PPE), environmental and human/animal health hazards, precautionary statements, directions for use, storage and disposal, and worker protection labeling. The label provides critical information about how to handle and safely use the pesticide product and avoid harm to human health and the environment. Pesticide labels are legally enforceable and are required to have the statement: “It is a violation of Federal Law to use this product in a manner inconsistent with its labeling”.

The product label for the pesticide used in seed treatment contains seed bag label requirements specific to the pesticide and can include statements concerning required PPE, proper disposal, planting instructions and precautionary statements to reduce nontarget environmental and human health exposures such as:

- This seed has been treated with [INSERT PRODUCT NAME(s) (EPA REG. NO(s))] containing [INSERT NAME(S) OF ACTIVE INGREDIENT(S)].
- Store away from food and feedstuffs.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Dispose of all excess treated seed. Leftover treated seed may be buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Do not allow children, pets, or livestock to have access to treated seed.
- Treated seed must be adequately covered with soil at planting.

The Board does not make recommendations above and beyond the current Vermont law, Federal Seed Act or EPA labeling requirements for the pesticides and the treated article seeds at this time for non-neonicotinoid treated article seeds.

Review of Voluntary BMPs Available to Growers

The Board has collected and reviewed resources and BMPs from other states and seed industry associations. These resources are accessible and available to growers in Vermont on the Agency's [Seed Program website](#).

American Seed Trade Association (ASTA) – Crop Life America (CLA) The Guide to Seed Treatment Stewardship. [ASTA_SeedGuide_Farmers_Update2021.pdf \(seed-treatment-guide.com\)](#)

Health Canada, Pollinator Protection and Responsible Use of Insecticide Treated Seed. March 2015. [treated_seed-semences_traitees-eng.pdf \(canada.ca\)](#)

Honey Bee Health Coalition, Best Management Practices (BMPs) for Pollinator Protection in Field Corn. February 2020. [HBHC_Corn_022020.pdf \(honeybeehealthcoalition.org\)](#)

Honey Bee Health Coalition, Best Management Practices (BMPs) to Protect Honey Bees and Other Pollinators in Soybean Fields. February 2020. [HBHC_Soybean_022020.pdf \(honeybeehealthcoalition.org\)](#)

Minnesota Department of Agriculture, Stewardship Guidelines and Best Management Practices for Neonicotinoid Insecticide-Treated Seed. May 2019. [Stewardship Guidelines and Best Management Practices for Neonicotinoid Insecticide-Treated Seed \(state.mn.us\)](#)

Minnesota Pollution Control Agency, Disposal of Treated Seeds. April 2022. [Treated Seeds \(state.mn.us\)](#)

Stoner, K. Connecticut Agricultural Experiment Station. Best Management Practices for Farmers Using Seeds Treated with Neonicotinoid Insecticides. [BMPHandlingNeonicotinoidTreatedSeeds.pdf \(ct.gov\)](#)

Appendix: Board Members

Wendy Sue Harper, Ph.D.

Soil Scientist, Associate Faculty, Prescott College

AIB Role Fulfillment: Soil Biologist

Clara Ayer

Dairy Farmer, Fairmont Farm

AIB Role Fulfillment: an active farmer who is a member of an organization representing the conventional dairy industry in Vermont

Fitzroy “Roy” Beckford, Ph.D.

Associate Dean and Director of UVM Extension in the College of Agriculture and Life

Sciences

AIB Role Fulfillment: a member from the University of Vermont Center for Sustainable Agriculture

Terence “Terry” Bradshaw, Ph.D.

Assistant Professor, Department of Plant and Soil Science / Director, Horticultural Research and Education Center, University of Vermont

AIB Role Fulfillment: an active farmer who is a member of an organization representing fruit and vegetable farmers in Vermont

Jonathan Chamberlin

Ag Retail/Crop Consultant, Bourdeau Brothers

AIB Role Fulfillment: a certified crop consultant

Clarice Cutler

Environmental Analyst, Department of Environmental Conservation, Agency of Natural Resources

AIB Role Fulfillment: the Secretary of Natural Resources or designee

Earl Ransom

Organic Dairy Farmer, Rockbottom Farm

AIB Role Fulfillment: an active farmer who is a member of an organization representing the organic farming community

Ryan Rebozo, Ph.D.

Director of Conservation Science, Vermont Center for Ecostudies

AIB Role Fulfillment: a member of an environmental organization that advocates for policy regarding the management or reduction of toxic substances in the State

Steven Schubart

Grass-fed beef operation owner, Grass Cattle Company

AIB Role Fulfillment: an active farmer who is a member of an organization representing grass-based, non-dairy livestock farming in Vermont

Sarah Owen, Ph.D.

State Toxicologist, Department of Health, Agency of Human Services

AIB Role Fulfillment: the Commissioner of Health or a designee with expertise in the effects of pesticides on human health

Laura DiPietro

Director, Water Quality Division, Agency of Agriculture, Food & Markets

AIB Role Fulfillment: the Director of the Agency of Agriculture, Food and Markets, Water Quality Program or designee

Morgan Griffith

Agrichemical Program Manager, Public Health and Agricultural Resource Management Division, Agency of Agriculture, Food & Markets

AIB Role Fulfillment: the Director of the Agency of Agriculture, Food and Markets, Agrichemical Program or designee

Steven Dwinell

Director, Public Health and Agricultural Resource Management Division, Agency of Agriculture, Food & Markets

AIB Role Fulfillment: the Secretary of the Agency of Agriculture, Food and Markets or designee

For more information about the AIB please contact

AGR.AgriculturalInnovationBoard@vermont.gov or visit [Agricultural Innovation Board | Agency of Agriculture Food and Markets \(vermont.gov\)](http://AgriculturalInnovationBoard|AgencyofAgricultureFoodandMarkets.vermont.gov)