

2023 AIB WORK PLAN

Legislative Charge:

Act No. 145 of 2022, Section 2, amended 6 V.S.A. §1105a:

(c)(1) Under subsection (a) of this section, the Secretary of Agriculture, Food and Markets, after consultation with the Agricultural Innovation Board, shall adopt by rule BMPs for the use in the State of neonicotinoid treated article seeds. In developing the rules with the Agricultural Innovation Board, the Secretary shall address:

(A) establishment of threshold levels of pest pressure required prior to use of neonicotinoid treated article seeds;

(B) availability of nontreated article seeds that are not neonicotinoid treated article seeds;

(C) economic impact from crop loss as compared to crop yield when neonicotinoid treated article seeds are used;

(D) relative toxicities of different neonicotinoid treated article seeds and the effects of neonicotinoid treated article seeds on human health and the environment;

(E) surveillance and monitoring techniques for in-field pest pressure;

(F) ways to reduce pest harborage from conservation tillage practices; and

(G) criteria for a system of approval of neonicotinoid treated article seeds.

A copy of the proposed rules shall be submitted to House Committee on Agriculture and Forestry and Senate Committee on Agriculture on or before March 1, 2024

OVERALL GOAL:

Draft proposed rule for the use of neonicotinoid treated seeds in VT

OBJECTIVES:

Develop rules for use of neonicotinoid treated seeds in collaboration with the Agency including all outlined items in Act No. 145

TIMELINE:

Friday, March 1, 2024

RESOURCES - What info does AIB need?

RESOURCES - What info does AIB have?

BOARD MEMBERS/STAFF RESPONSIBILITIES

[Detail each team member's roles and responsibilities on the project. Be specific to avoid confusion during the project.]

STRATEGY:

[List the sub-tasks required to achieve the objectives for this goal.]

Does AIB have enough information to make a recommendation?

SUMMARY OF FINDINGS & RECOMMENDATION

Required Topic A:

Establish threshold levels of pest pressure required prior to use of neonicotinoid treated seeds

OBJECTIVES:

List economic threshold levels for identified pests

TIMELINE:

Monday, March 27, 2023

RESOURCES - What info does AIB need?

*Identification of target pests for treated seeds
*Are studies needed to determine economic threshold levels for identified pests? Or do they already exist (Ontario, UMD Extension)?
*Discuss grower decision making around IPM practices vs weighing treatment cost & crop value.

RESOURCES - What info does AIB have?

3/27/23 VT Corn and Soybean Pest Pressures, IPM and Neonic Treated Seed Research and Availability (Heather Darby, UVM)
7/24/23 Neonic Treated Seed and IPM in PA (John Tooker, Penn State)

BOARD MEMBERS/STAFF RESPONSIBILITIES

[Detail each team member's roles and responsibilities on the project. Be specific to avoid confusion during the project.]

STRATEGY:

*Heather Darby, UVM 3/27/23
*entomologists where thresholds developed (J. Tooker, Ontario)

Does AIB have enough information to make a recommendation?

SUMMARY OF FINDINGS & RECOMMENDATION

Required Topic B:

Determine availability of nontreated article seeds that are not neonicotinoid treated article seeds

OBJECTIVES:

TIMELINE:

RESOURCES - What info does AIB need?

RESOURCES - What info does AIB have?

BOARD MEMBERS/STAFF RESPONSIBILITIES

STRATEGY:

Does AIB have enough information to make a recommendation?

SUMMARY OF FINDINGS & RECOMMENDATION

Identify nontreated seeds (non-neonic treated seeds) that are available to VT farmers	Monday, April 24, 2023	<p>*survey seed distributors in VT for what seeds are available for sale</p> <p>*List of non-treated seeds available for specific crops</p> <p>*List of non-neonic treated seeds available for specific crops</p> <p>*Availability from distributors not just what being sold (what is criteria for having non-neonic treated available? How is industry going to change to accommodate potential restrictions in VT?)</p> <p>*what are constraints for getting non-neonic treated seed? What would it take to get non-neonic treated seed in VT?</p>	<p>1/23/23 Seed Sales in VT (VAAFAM)</p> <p>2/27/23 Update on 2022 Treated and Untreated Seed Reporting (VAAFAM)</p> <p>3/27/23 VT Corn and Soybean Pest Pressures, IPM and Neonic Treated Seed Research and Availability (Heather Darby, UVM)</p> <p>4/24/23 2022 Seed Report Update (VAAFAM)</p> <p>6/26/23 Treated Seed Availability and Sales Logistics (Corteva Agriscience)</p>	AAFAM	<p>*VT Seed Data report (Stephanie Smith & Jill Goss)</p> <p>*seed company logistics/availability presentation</p>		
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Required Topic C:							
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Determine economic impact from crop loss as compared to crop yield when neonicotinoid treated article seeds are used							
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OBJECTIVES:	TIMELINE:	RESOURCES - What info does AIB need?	RESOURCES - What info does AIB have?	BOARD MEMBERS/STAFF RESPONSIBILITIES	STRATEGY:	Does AIB have enough information to make a recommendation?	SUMMARY OF FINDINGS & RECOMMENDATION
Economic analysis of using neonicotinoid treated seeds		<p>*Literature review of relevant research</p> <p>*Identify people with expertise we want to reach out to</p> <p>*Are more relevant studies needed?</p>	<p>6/26/23 Efficacy and Economic Benefits of Neonic Seed Treatments (Corteva Agriscience)</p> <p>6/26/23 Seed Corn Maggot, Stand Losses and the Need for Insecticide Seed Treatments (Elson Shields, Cornell)</p> <p>8/28/23 Neonicotinoid Insecticides in New York State: Economic benefits and risk to pollinators (Scott McArt, Cornell University)</p>	[Detail each team member's roles and responsibilities on the project. Be specific to avoid confusion during the project.]	<p>*Elson Shields Cornell ?</p> <p>*Travis Grout Cornell ?</p>		

Required Topic D:							
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Research relative toxicities of different neonicotinoid treated article seeds and the effects of neonicotinoid treated article seeds on human health and the environment							
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OBJECTIVES:	TIMELINE:	RESOURCES - What info does AIB need?	RESOURCES - What info does AIB have?	BOARD MEMBERS/STAFF RESPONSIBILITIES	STRATEGY:	Does AIB have enough information to make a recommendation?	SUMMARY OF FINDINGS & RECOMMENDATION
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Literature review/Risk assessment of neonicotinoid treated seeds on human health and the environment (water, pollinators, etc broadly interpreted)	Start here because accounting for more than treatment cost vs crop value so get bigger picture * Human Health Lit review update March 27, 2023 *Environment lit review update March 27, 2023	*Literature review of relevant research (neonics used as seed treatment) *Identify neonicotinoid treated seeds available in VT *Human health and environmental risk assessment of each active ingredient with lens of use on treated seed *Do EPA eco/health risk assessments cover treated seed use (pathway for exposure)? *EPA ecological impact for chemicals covers broadly (all living organisms)	3/27/23 Environmental Impact of Neonic Treated Seed Lit Review (VAAFAM) 3/27/23 Environmental Impact of Neonic Treated Seed Annotated Bibliography (VAAFAM) 4/24/23 Impact of Neonic Treated Seed on Pollinator Health (Andrew Munkres, VBA) 4/24/23 Summary EPA Neonic Ecological Risk Assessment (VAAFAM) 5/22/23 Review of Treated Seed Dust-off Research (VAAFAM) 5/22/23 Dr. Schaafsma Planter Modifications Resources and Summary (VAAFAM) 8/28/23 Neonicotinoid Insecticides in New York State: Economic benefits and risk to pollinators (Scott McArt, Cornell University)	Sarah Owen - Human Health Impact AAFAM - Environmental Impact Terry Bradshaw - provide citations environmental lit	*contract with someone/utilize AAFM resource to complete in depth literature review ? *UVM's Vermont Legislative Resource Service ? *EPA Office of Pesticide Programs, Environmental Fate and Effects Division - find someone to give synopsis of relevance/timeliness of data that is available *Sarah Owen can look into human health using EPA resources/Chemical Managers *AAFAM can summarize environmental impact literature		
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Required Topic E:							
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Required Topic E:	Outline surveillance and monitoring techniques for in-field pest pressure						
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OBJECTIVES:	TIMELINE:	RESOURCES - What info does AIB need?	RESOURCES - What info does AIB have?	BOARD MEMBERS/STAFF RESPONSIBILITIES	STRATEGY:	Does AIB have enough information to make a recommendation?	SUMMARY OF FINDINGS & RECOMMENDATION
Identify and outline pest pressure surveillance and monitoring techniques that farmers can use to inform seed purchasing decisions	Monday, March 27, 2023	*Are there practical in-field scouting techniques that can be aligned with seed purchasing schedule? *Do we try and get Ontario Regulators to come talk to AIB? *Do we use their pest risk assessment guideline as resource for scouting techniques?	3/27/23 VT Corn and Soybean Pest Pressures, IPM and Neonic Treated Seed Research and Availability (Heather Darby, UVM) 6/26/23 Seed Corn Maggot, Stand Losses and the Need for Insecticide Seed Treatments (Elson Shields, Cornell) 7/24/23 Neonic Treated Seed and IPM in PA (John Tooker, Penn State)	[Detail each team member's roles and responsibilities on the project. Be specific to avoid confusion during the project.]	*Heather Darby, UVM 3/27/23 *entomologist neighboring states NY and PA (J. tooker, Ontario)		

Required Topic F:							
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Required Topic F:	Outline ways to reduce pest harborage from conservation tillage practices						
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OBJECTIVES:	TIMELINE:	RESOURCES - What info does AIB need?	RESOURCES - What info does AIB have?	BOARD MEMBERS/STAFF RESPONSIBILITIES	STRATEGY:	Does AIB have enough information to make a recommendation?	SUMMARY OF FINDINGS & RECOMMENDATION
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Identify ways to reduce pest harborage from conservation tillage practices	Monday, March 27, 2023	*What are the pest pressures from conservation tillage practices? Different pests? *How can pest harborage be reduced? How can you reduce your pest populations to below economic threshold levels?	3/27/23 Meeting Minutes (Heather Darby, UVM) 7/24/23 Neonic Treated Seed and IPM in PA (John Tooker, Penn State)	[Detail each team member's roles and responsibilities on the project. Be specific to avoid confusion during the project.]	*Heather Darby, UVM 3/27/23 *Entomologists NY PA		
Required Topic G:	Establish criteria for a system of approval of neonicotinoid treated article seeds						
OBJECTIVES:	TIMELINE:	RESOURCES - What info does AIB need?	RESOURCES - What info does AIB have?	BOARD MEMBERS/STAFF RESPONSIBILITIES	STRATEGY:	Does AIB have enough information to make a recommendation?	SUMMARY OF FINDINGS & RECOMMENDATION
Establish criteria for approval of neonicotinoid treated seeds (criteria for when you can use neonic seeds?) [AAFM General Counsel will be consulted for interpretation of this topic]	June/July?	*Ask AAFM General Counsel interpretation of this Topic *Is this approval for use of neonic seeds? *The Agency currently doesn't register seed products just dealers. This would require a change in the law, registration fees, database development, human resources to conduct label review and enforcement.	5/22/23 Review of State Neonic Use Laws and Regulations (Gene Harrington) State Neonic Laws & Regs Summary Table (VAAF) 6/26/23 Ontario Neonic Treated Seed Regulations (Tracey Baute, OMAFA) 7/24/23 Neonic seed treatment requirements Ontario & Quebec: Impact, Benefits, Alternatives (Emilie Bergeron, CropLife Canada) 7/24/23 Health Canada PMRA Neonic Regulations (VAAF)	[Detail each team member's roles and responsibilities on the project. Be specific to avoid confusion during the project.]	*AAFM General Counsel legal opinion of meaning of this topic		