

PESTICIDE BOARD SUBCOMMITTEE MEETING

MINUTES OF MEETING

April 21, 2017

The Department of Agricultural Resources, 251 Causeway St, FL #5 Conference RM 1 Boston, MA

MEMBERS PRESENT

- Hotze Wijnja, Alternate Designee for Commissioner John Lebeaux
 - o Department of Agricultural Resources
- Marc Nascarella, Designee for Commissioner Monica Bharel
 - o Department of Public Health
- Kenneth Gooch, Designee for Commissioner Leo Roy
 - o Department of Conservation and Recreation
- Richard Berman
 - o Commercial Applicator

ALSO PRESENT:

- Susie Reed, Department of Agricultural Resources
- Dr. Hillary Sandler, UMass Cranberry Station

I. MINUTES

VOTED

That the Pesticide Board Subcommittee approves the summary notes for March 17, 2017 meetings.

Moved: Berman

Second: Wijnja

Approved: 4-0

II. PRODUCT REGISTRATIONS

a. Packet number 170428-170430

VOTED

That the Pesticide Board Subcommittee registers the pesticide products in packets numbers 170428-170430 with the exception of the following products:

1. Helmet, EPA Reg. No. 74530-74 (SRU)
2. Moccasin Herbicide, EPA Reg. No. 70506-323 (SRU)
3. Shutdown Herbicide, EPA Reg. No. 70506-326 (SRU)
4. Chlorothalonil 720, EPA Reg. No. 19713-690 (SRU)

Moved: Berman

Second: Gooch

Approved: 4-0

STATE RESTRICTED USE MOTIONS

RESTRICTED USE AS DEFINED UNDER THE GROUNDWATER REGULATIONS

Move: that the Pesticide Board Subcommittee has determined that the use of the following products:

1. Helmet, EPA Reg. No. 74530-74, and Moccasin Herbicide, EPA Reg. No. 70506-323 containing ***metolachlor***
2. Shutdown Herbicide, EPA Reg. No. 70506-326 containing ***sulfentrazone***
3. Chlorothalonil 720, EPA Reg. No. 19713-690 containing ***chlorothalonil***

may cause an unreasonable risk to man or the environment, taking into account the economic, social and environmental costs and benefits of use. This determination is based upon the leaching potential and toxicological concern of this substance as defined in the "Protection of Groundwater Supplies from Non-Point Source Pesticide Contamination" Regulations. Therefore, the Subcommittee hereby modifies the registration classification of agricultural/commercial pesticide products containing ***metolachlor***, ***sulfentrazon*** and ***chorothalonil*** from general to restricted use for groundwater concerns.

Moved: Berman

Second: Nascarella

Approved: 4-0

III. CONSIDERATION OF A SPECIAL LOCAL NEED REGISTRATION TO ALLOW THE CHEMIGATION APPLICATION METHOD FOR TWO CLETHODIM-BASED HERBICIDE PRODUCT FOR WEED CONTROL IN CRANBERRY

The Special Local Need applications are for herbicide products containing the active ingredient clethodim: Intensity Post Emergence Grass Herbicide containing 26.4% clethodim and Intensity Post One Emergence Grass Herbicide containing 12.6% clethodim.

The Special Local Need is to allow and provide guidelines for the use of the product through the chemigation application method for weed control in cranberries. Other application requirements, including application rates, will be the same as provided on the Section 3 product label.

Wijnja summarized the information provided in SLN application materials. Crop safety and yield effects were evaluated in an UMass Extension study and showed no issues. In new cranberry plantings this method poses lower risk to cranberry plants. Dr. Hillary Sandler provided additional information on the importance of ability to apply these herbicides on cranberry through chemigation. The chemigation method is the preferred application method in modern cranberry growing operations for economical and operational efficiency reasons.

Both products are very effective against perennial grasses, but the labels only allow for spot spraying or aerial application. Aerial application are very expensive and very limited to use in proximity of cranberry bogs to homes, spot spraying is effective but time consuming for grower.

Move: That the Pesticide Board Subcommittee hereby grants a Special Local Needs (24C) registration for Intensity Post Emergence Grass Herbicide, EPA Reg. No. 34704-864, and Intensity one Post Emergence Grass Herbicide, EPA Reg. No. 34704-976

Moved: Berman
Second: Wijnja
Approved: 4-0

CONSIDERATIONS OF A SPECIAL LOCAL NEED REGISTRATION FOR WEED CONTROL ON NEW PLANTINGS OF CRANBERRY: Devrinol 2-XT Selective Herbicide (a.i. napropamide)

The Special Local Need (SLN) application is to allow multiple applications of Devrinol 2-XT on new planting of non-fruit-bearing cranberries at the same rates as allowed under an existing SLN for the dry formulation of Devrinol Herbicide. The existing SLN (MA-050001) allows a dry formulation of Devrinol to be applied up to 3 times in a given growing season not to exceed a total seasonal maximum of 9 lbs napropamide/acre.

Hillary Sandler provided a brief description of Devrinol products and the importance of Devrinol 2-XT as a liquid formulation that has enhanced properties for application by chemigation, which is the preferred application method for most cranberry growers in Massachusetts. The ability to make multiple applications of the 2-XT formulation of Devrinol will give growers more flexibility to obtain good weed management on their commercial farms. As with the dry formulation, the SLN label for Devrinol 2-XT allows the application of up to 4.5 lbs napropamide per acre on new plantings of cranberries. Multiple applications may be made, but not to exceed 9 lbs napropamide per acre per year.

Move: That the Pesticide Board Subcommittee hereby grants a Special Local Needs (24C) registration for Devrinol 2-XT Selective Herbicide, EPA Reg. No. 70506-301

Moved: Berman
Second: Nascarella
Approved: 4-0

IV. NEW ACTIVE INGREDIENTS

- Discussion of the active ingredient ***Bacillus thuringiensis ssp. Kurstaki strain EVB-113-19***, Bioprotec Plus, EPA Reg. No. 89046-12

Bioprotec Plus, EPA Reg. No. 89046-12, labeled for trees, ornamentals, shrubs (both food and non-food) to control certain species of lepidopteran larvae by foliar application while larvae are feeding. Application is by ground application at rates ranging from 0.5 to 3.5 pints per acre depending on target pest, repeat application as needed. Personal Protection Equipment (PPE) requirements are baseline; Restricted Entry Interval (REI) is 4 hours.

EPA's registration decision document for this new active ingredient ¹ was included in the meeting package and Wijnja summarized the information. This particular strain originated from a subspecies that was registered years ago. It was determined that this new active ingredient is covered by the existing tolerance exemption for *Bacillus thuringiensis* (BT). The ingredient has low acute toxicity (category IV), it was determined that there is no dietary risk to humans, and occupational risks are not concern.

Environmental fate is characterized by readily breakdown in the environment; exposure to UV-light is associated with a half-life time of 48 hours, on foliar surfaces half-life is 1 to 4 days, and in soil it may be present for weeks to months. It is a naturally occurring organism.

Ecological risk assessment indicates that certain non-target insects may be susceptible to potential adverse effects, including Lepidopteran species, and lesser effects to coleopteran and orthopteran species, in general

This substance is practically non-toxic to fish, but some aquatic vertebrates may have sensitivity, mainly to the exotoxins that produce during manufacturing of the product. Studies done indicate typically exposure levels are well below the level of concern.

EPA concluded that this *Bacillus thuringiensis* strain is more specific for pest control compared to alternative insecticides. Its benefit as a biopesticide is that it is less harmful and has other favorable aspects to human health.

Bioprotec Plus was unconditionally registered by EPA in 2016. MDAR staff determined that it does not meet the criteria for potential groundwater pollutant as specified in the groundwater protection regulations (333 CMR 12.00).

Move that the Pesticide Board Subcommittee approve the product registrations for the following pesticide products. These products contain the active ingredient ***Bacillus thuringiensis ssp. Kurstaki strain EVB-113-19*** and have never before been registered in Massachusetts.

- Bioprotec Plus, EPA Reg. No. 89046-12

Moved: Berman
Second: Gooch

¹ Registration decision document for *Bacillus thuringiensis ssp. Kurstaki strain EVB-113-19*. Available at [regulations.gov](https://www.regulations.gov) in Docket ID: EPA-HQ-OPP-2015-0419

Approved: 4-0

- Discussion of the active ingredient ***Bacillus mycoides isolate J***, LifeGard WG (EPA Reg. No. 70051-119)

Bacillus mycoides isolate J is formulated in Lifegard WG, EPA Reg. No. 70051-119, is labeled for use on various agricultural crops grown outdoors as well as in greenhouses and shade houses.

Lifegard WG is approved for organic growing (OMRI-listed) and acts as a biological plant activator to reduce reoccurrence of plant disease. It is used as a preventative treatment and triggers plants' natural defense response. The product label indicates it is effective for up to 18 days following the application.

Lifeguard WG is applied to actively growing plants by ground application equipment, aerial or chemigation application (overhead sprinkler only). Maximum application rate is 4.5 ounces per acre, the Preharvest Interval (PHI) is zero days, and Personal Protection Equipment requires a particulate respirator to prevent repeat exposure to microbial substance that may cause allergic sensitization. EPA's registration decision document ² was included in the meeting package.

The mode of action is triggering the plants natural defense mechanisms known as Systemic Acquired Resistance (SAR). This mode of action is non-toxic and non-pathogenic. The substance has low acute toxicity (category III and IV) and it was concluded that no higher Tier tests were required.

Bacillus mycoides isolate J, is an organism that occurs naturally, commonly found in soil, water, and plant roots; residues occur on produce with no known adverse effects to humans.

The technical grade of this active ingredient was not toxic, but the end-product formulation causes slight irritation to the eye (category III). Repeated exposure could cause allergic sensitization. This risk is mitigated by PPE requirements.

Regarding ecological risk assessment, it was indicated this organism does not produce beta ecotoxins, that could have been of concern for non-target effects. Upon application of the product, the populations of the active ingredient decline significantly after 7-13 days. Exposure becomes indistinguishable from naturally occurring populations.

For birds and mammals available data indicate that this substance is not toxic, pathogenic or infective; it does not grow or survive at body temperature. Based on available data, the substance is not expected to have adverse effect to non-target insects. Aquatic organism toxic effects are not expected according to the label use of this product.

EPA indicates that benefits for this active ingredient include that it may postpone or eliminate the use of fungicide; it is also exempt from food tolerance and provides general benefits of bio-pesticides as being less harmful.

² Registration decision document for *Bacillus mycoides* isolate J. Available at [regulations.gov](https://www.regulations.gov) in Docket ID: EPA-HQ-OPP-2015-0007

This product was unconditionally registered by EPA. MDAR staff determined that it does not meet the criteria for potential groundwater pollutant as specified in the groundwater protection regulations (333 CMR 12.00).

Move that the Pesticide Board Subcommittee approve the product registrations for the following pesticide products. These products contain the active ingredient ***Bacillus mycoides isolate J*** and have never before been registered in Massachusetts.

- LifeGard WG (EPA Reg. No. 70051-119)

Moved: Berman
Second: Nascarella
Approved: 4-0

MOTION TO ADJOURN THE MEETING

It was moved, seconded and passed unanimously.

VOTED

To adjourn the April 21, 2017 Subcommittee Meeting.

Moved: Berman
Second: Nascarella
Approved: 4-0

Meeting adjourned at 9:50 a.m.