

PESTICIDE BOARD SUBCOMMITTEE MEETING

MINUTES OF MEETING

March 19, 2019

**10th FL Charles River Conference RM #10, 1 Ashburton Place (McCormick Building)
Boston, MA**

MEMBERS PRESENT

- Michael Moore, Chairperson, Director of Food Protection Program
 - Department of Public Health
- Marc Nascarella, Designee for Commissioner Monica Bharel
 - Department of Public Health
- Taryn LaScola, Alternate Designee for Commissioner John Lebeaux
 - Department of Agricultural Resources
- Kenneth Gooch, Designee for Commissioner Leo Roy
 - Department of Conservation and Recreation
- Richard Berman
 - Commercial Applicator

ALSO PRESENT:

- Susie Reed, Department of Agricultural Resources
- Hotze Wijnja, Ph.D., Department of Agricultural Resources

I. PRODUCT REGISTRATIONS

a. Packet number 190315

VOTED

That the Pesticide Board Subcommittee registers the pesticide products in packet number 190315 with the exception of the following products:

1. Prodiazone Select, EPA Reg. No. 89442-44 (SRU)
2. Unison Edge, Reg. No. 5905-565

Moved: Berman

Second: Nascarella

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. Prodiazone Select, EPA Reg. No. 89442-44 containing *Sulfentrazone*

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 *Sulfentrazone*, from general to restricted use for groundwater concerns

Moved: Berman

Second: Gooch

Approved: 4-0

2,4-dichlorophenoxyacetic Acid (2,4-D) MOTION

Move: That the Pesticide Board Subcommittee register the following product:

1. Unison Edge, EPA Reg. No. 5905-565

as restricted use pursuant to the Subcommittee's decision on April 14, 1989, to register products containing 20% or more of **2,4-dichlorophenoxyacetic acid (2,4-D)** and/or its derivatives as state restricted use.

Moved: Berman

Second: Wijnja

Approved: 4-0

II. NEW ACTIVE INGREDIENTS

Discussion of the new active ingredient *Duddingtonia flagrans strain IAH 1297*:

The new active ingredient *Duddingtonia flagrans strain IAH 1297* is a biopesticide formulated in two different products, Bioworma, EPA Reg. No. 91253-1, a concentrated formulation labeled for mixing into feed, feed supplements and premixes to control infective worm larvae within the manure of grazing animals, and Livamol with Bioworma, EPA Reg. No. 91253-2, a palatable feed supplement labeled for mixing into feed to control infective worm larvae within manure of grazing animals.

This Bio-pesticide interrupts re-infestation cycle of parasitic worms in grazing animals. The fungal spores pass through the animal's digestive tract and germinate in manure on the field where the fungus traps and consumes parasitic larvae and nematodes in manure.

This particular strain of fungus is naturally occurring in soils around the world. It was isolated from a soil in Australia and further studied for pesticidal properties.

This biopesticide was first registered by EPA in 2018. The meeting package included the registration decision document for this active ingredient. This EPA document and additional supporting documents are available at www.regulations.gov in docket "EPA-HQ-OPP- 2017-0296". Wijnja summarized the information for this active ingredient.

The acute toxicity studies data indicated low acute toxicity and being non-irritating, categorized as III or IV. Exposure of animal to this organism did not induce signs of toxicity, infectivity, or pathogenicity. EPA did not require higher testing based on low acute toxicity profile. Overall, no adverse effects are expected from use according to label instructions.

Based on the use pattern of feed-use to grazing animals and characteristics of this fungus, food and drinking water exposure is not expected to exceed natural background exposures. Dietary risk is therefore not of concern.

Occupational risk assessment indicates no risk expected when following precautionary information on label and the use of required personal protection equipment.

The ecological risk assessment concludes that the use of this biopesticide has low potential for risks to non-target organisms. Background exposure is occurring since it is a naturally occurring organism. The organism does not grow in the bodies of bird or mammals and animal studies indicated no toxic or pathogenic effects. Data for earth worm and arthropods show no negative effects from exposure to this substance. No effects expected to insects and honey bees. Exposure to aquatic organisms is expected to be low and not of concern for adverse effects.

Benefits of this biological pesticide include that it provides an additional tool that will help in dealing with resistance that developed to certain situation anti parasitic drugs.

Move that the Pesticide Board Subcommittee approve the product registrations for the following pesticide products. These products contain the active ingredient *Duddingtonia flagrans strain IAH 1297* and have never before been registered in Massachusetts.

- Bioworma (EPA Reg No. 91253-1) for mixing into feed, feed supplements and premixes to control infective worm larvae within the manure of grazing animals
- Livamol with Bioworma (EPA No. 91253-2) a palatable feed supplement for mixing into feed to control infective worm larvae within manure of grazing animals.

Moved: Berman

Second: Nascarella

Approved: 5-0

Discussion of the new active ingredient *Pronitridine (G77)* formulated in the product Centuro, EPA Reg. No.84886-4.

Pronitridine, also indicated as G77, is a nitrification inhibitor. It inhibits transformation of ammonia fertilizer to nitrate through action upon soil bacteria. Nitrate is the nitrogen form that plants take up, but leaches easily. In certain situations, the conversion of ammonia needs to be inhibited to limit the loss of nitrogen fertilizer. The environmental impact of nitrate leaching is the threat to drinking water and surface water quality.

Centuro is a liquid mix with ammonia-based fertilizer that requires a mixing rate 3 to 10 gallon per ton of fertilizer. It can also be mixed with manure and applied at a rate of 1 to 2 gallon per acre. The product can be applied to soil surface, incorporated or injected and timing can be as a pre-plant, at-plant or early post plant application.

Pronitridine (G77) was first registered by EPA in 2018. The meeting package included the final registration decision document for new active ingredient G77. This EPA document and additional supporting documents are available at www.regulations.gov, in docket “EPA-HQ-OPP- 2016-0662-0011”. Wijnja summarized the information.

G77 is mixture of ureas, triazone and N-cyanoguanidine (DCD). The overall risk assessment was qualitative in nature based on the lack of toxicity of G77 and its components. There no effects observed in the acute oral, dermal studies and it is not a dermal sensitizer. Sub-chronic and chronic studies were waived based on the results from acute toxicity studies.

For the dietary risk assessment it was determined that it is a non-food use since it is not used on plants. No tolerance is required conducted for this substance. G77 degrades to ammonia and other nitrogen components. A drinking water assessment was not conducted.

The occupational risk assessment determined that there is no risk with the use of personal protective equipment (PPE) as required on the label.

The environment fate assessment of this substance relied on existing data for its components and is expected to behave in the same manner. It degrades by soil microorganisms into carbon dioxide and plant available nitrogen. A hydrolysis study further evidence that the complex mixture degrades into its components.

Ecological risk assessment was based on data for the individual components as well as data for G77 from studies with non-vascular plants and acute studies with rats. For aquatic organisms, the components are classified as slightly to practically non-toxic. No risk is expected based on the low environmental concentrations. Risk to birds and mammals is not expected based on low toxicity for components and low exposure potential. No data were available for terrestrial invertebrates, but based on the overall low toxicity profile and the application scenario to soil there is no risk expected. There is potential for effects to plants, but only at high exposure levels. The label application rates are such that risk to plants is not expected.

The benefits of this product include the enhanced efficiency of fertilizers through slowdown of conversion of ammonia to nitrate. G77 combines a slow-release fertilizer with nitrogen inhibitor. G77 has favorable properties in terms flashpoint and corrosiveness compared to alternative products.

EPA registered G77 unconditionally. Relative to groundwater protection regulations 333 CMR 12.00, G77 does not meet the criteria for potential ground water pollutant.

Move that the Pesticide Board Subcommittee approve the product registrations for the following pesticide products. These products contain the active ingredient **Pronitridine (G77)** and have never before been registered in Massachusetts.

- Centuro (EPA Reg. No. 84886-4) a nitrification inhibitor, fertilizer additive for use on canola, corn, rice, small grains, sorghum and wheat to delay nitrification of ammoniacal and urea nitrogen fertilizer.

Moved: Berman
Second: LaScola
Approved: 5-0

III. Consideration of Remote Participation Policy: Follow up on previous discussions of remote participation at meetings, the Subcommittee will consider adopting a remote participation policy based on the Open Meeting Law Guide.

This agenda was tabled for consideration at the April 2019 meeting

MOTION TO ADJOURN THE MEETING

It was moved, seconded and passed unanimously.

VOTED

To adjourn the March 19, 2019 Subcommittee Meeting.

Moved: Berman

Second: LaScola

Approved: 5-0

Meeting adjourned at 10:25 a.m.