PESTICIDE BOARD SUBCOMMITTEE MEETING

MINUTES OF MEETING

February 15, 2019

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

MEMBERS PRESENT

- Michael Moore, Chairperson, Director of Food Protection Program
  - Department of Public Health
- Hotze Wijnja, Ph.D., 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:

- Bruce Taub

I. MINUTES

VOTED

That the Pesticide Board Subcommittee approves the summary notes for January 18, 2019 meetings.

Moved: Berman
Second: Wijnja
Approved: 4-0

II. PRODUCT REGISTRATIONS

a. Packet number 190214

VOTED

That the Pesticide Board Subcommittee registers the pesticide products in packet number 190214 with the exception of the following product:

1. Fierce MTZ Herbicide, EPA Reg. No. 59639-236

Moved: Berman
Second: Wijnja
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. Fierce MTZ Herbicide, EPA Reg. No. 59639-236 containing ***Metribuzin***

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 ***Metribuzin*** from general to restricted use for groundwater concerns.

Moved: Berman
Second: Gooch
Approved: 4-0

III. NEW ACITIVE INGREDIENT

Discussion of the new active ingredient ***Afidopyropen.***

The new active ingredient Afidopyropen is formulated in three different products. Versys Inscalis Insecticide, EPA Reg. No. 7969-389, is labeled for use on brassica vegetables, leaf petioles, leafy vegetables, pome fruit and stone fruit. Sefina Inscalis Insecticide, EPA Reg. No. 7969-391, is labeled for use on citrus, cotton, fruit, vegetables and soybean. Ventigra Insecticide, EPA Reg. No. 7969-393, is labeled for use on ornamentals and vegetable transplants.

In certain situations, afidopyropen may provide an alternative to some commonly used insecticides, such as chlorpyrifos, neonicotinoid, and pyrethroids. The new active ingredient provides a new mode of action and provides control of aphids, whiteflies, and various scales of insects. Applications are done by ground spraying at relatively low application rates in terms of active ingredient per acre (0.045 lb a.i./acre per application and a seasonal maximum of 0.09 lb a.i./acre). The Preharvest Interval ranges from 0 to 7 days.

The label includes the signal word ‘caution’. The Environmental Hazards statements provide cautionary language to prevent exposures to water resources, minimize risk to honey bees, and ground water and surface water advisories.

EPA registered this active ingredient in 2018. The meeting package included the final 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- 2016-0416-0024”. Wijnja summarized the information for this active ingredient.

U.S. EPA and Health Canada's Pest Management Regulatory Agency conducted a joint review of afidopyropen. Afidoplyropen is a member of Pyropene class of chemical.

The mode of action is disruption of transient receptor vanilloid-type (TRPV) channel complexes. This results in over-stimulation and eventually silencing of the TRPV receptors in insect, this affects feeding and movement of insects.

Afidopyropen toxicity profile related to human health is characterized by have low acute toxicity, classified in category III, IV. It is not an eye or dermal irritant, nor a skin sensitizer. Due to the low toxicity, end-points were not identified. Target organs includes liver, hear, spleen, and reproductive organs. Neuro toxicity was not observed in the sub-chronic studies, in acute studies only at the limit dose. Developmental studies with rat and rabbit showed effect on skeletal structures, altered sex ratios, and resorption of fetuses. Reproductive studies showed effects in off-spring and parents, including body weight reductions and decreased spleen and thyroid weights. There were no effects observed in the dermal studies.

The end-points use in risk assessment was based on developmental and reproductive study results.

Carcinogenicity was classified as 'Suggestive Evidence of Carcinogenicity' based on benign adonemas in male rats and uterine adenocarcinomas in female rats. There were no mutagenic effects identified. Quantitative risk assessment was not needed for this chemical, chronic Reference dose (cPAD) was determined to be protective of all chronic effects, including carcinogenicity effects.

Food Quality Protection Act (FQPA) Safety factor was reduces form 10x to 1x based on the existing database.

Dietary risk assessment indicated acute dietary exposure for females 3.6% of population adjusted dose, which is below level of concern (<100%). Chronic exposure percentage values were even lower and not of concern.

Occupational risk based on dermal, and inhalation exposure assessment and using base line personal protection equipment was below the levels of concern.

Residential risk was not assessed since there is no residential use; post-application residential risk exposure was below levels of concerns.

Environmental fate of this chemical is characterized by being readily soluble in water, non-volatile, susceptible to break down by photolysis in soil, stable to hydrolysis, and moderately to slightly mobile in soil. Aerobic soil metabolism half-life ranges from 1 – 30 days, anaerobic half-life 15-59 days. Aquatic metabolism is slower with aerobic half-life values of 76-120 days. Field dissipation half-life ranges from 1.5 to 7.9 days. There were no residues below 12 inches depth in soils.

Environmental exposure is based on environmental concentration estimates on screening-level modeling assessment.

Risk concerns were identified related for chronic effects to aquatic invertebrates. Risk quotients were exceeded for worst-case exposure scenarios that included total toxic residues, multiple

crop cycles per year, and aerial applications. Consideration of parent compound only reduced the risk by half. Risk mitigation language on label addresses this concern. Aquatic and invertebrates are the most sensitive to the chronic effects. There are no risk identified for fish and amphibians both acute and chronic. Chronic risks were identified for small mammals foraging on short grass. No risk identified for birds or other mammals, and terrestrial plants.

Risk assessment for bees was based on a full suite of studies, including acute, chronic studies with adult bees, studies with larvae, and colony level studies (semi-field (tunnel) and full field studies. No acute or chronic risk was identified for adult bees and larvae. Short-term impaired behavior was observed in field studies, but there were no long-term effects at the colony level.

Benefits of this chemical is the new mode of action that is valuable in resistance management. The short Pre-Harvest Interval is also beneficial for certain crops when compared with alternative insecticides.

Afidopyropen was unconditionally registered by EPA. Identified risks were addressed by risk mitigation language. Relative to aquatic invertebrates, risk were mitigated by reduced application rates, spray buffer language, spray drift management, language related to the implementation of a vegetation buffer strip, and bee advisory language.

Regarding the public water supply protection regulations (333 CMR 12:00), it was pointed out that afidopyropen does not meet regulatory criteria for potential groundwater pollutant.

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

1. Versys Inscalis Insecticide (EPA Reg. No. 7969-389) for use in Brassica vegetables, leaf petioles vegetables, leafy vegetables, pome fruit and stone fruit.

2. Sefina Inscalis Insecticide (EPA Reg. No. 7969-391) for use in citrus, cotton, fruiting vegetables and soybean.

3. Ventigra Insecticide (EPA Reg. No. 7969-393) for control of piercing and sucking insects in ornamentals and vegetable transplants.

Moved: Berman
Second: Wijnja
Approved: 4-0

IV. 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 item was table for the next meeting.

V. **New Business**

MOTION TO ADJOURN THE MEETING

It was moved, seconded and passed unanimously.

VOTED
To adjourn the February 15, 2019 Subcommittee Meeting.

Moved: Berman
Second: Moore
Approved: 4-0
Meeting adjourned at 10:05 a.m.