

The Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs



Department of Agricultural Resources

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www.mass.gov/agr



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PESTICIDE BOARD SUBCOMMITTEE MEETING MINUTES

Tuesday, February 15, 2022

Zoom Meeting: <https://us02web.zoom.us/j/82650454059?pwd=R2VkTEZpVWk5SkwyWHozWERMMFBLdz09>

Meeting ID: 826 5045 4059

Passcode: dt5gHQ

BOARD MEMBERS IN ATTENDANCE

Michael Moore, DPH, Food Protection Program, (Chair)	Present
Taryn LaScola-Miner, MDAR, Designee for Commissioner Lebeaux	Present
Marc Nascarella, DPH, Designee for Commissioner Cooke	Present
Nicole Keleher, DCR, Designee for Commissioner Cooper	Present
Richard Berman, Commercial Applicator	Present

The Board did meet or exceed the minimum number (3) of members present to form a quorum and conduct business.

A. REVIEW OF MINUTES FOR DECEMBER 21, 2021:

Motion: R. Berman

Second: N. Keleher

Discussion: None

In Favor: M. Moore, R. Berman, T. LaScola-Miner, M. Nascarella, N. Keleher

Opposed: None

Abstained: None

B. PRODUCT REGISTRATIONS

Motion: That the Pesticide Board Subcommittee registers the pesticide products listed on the EIPAS PR February 15, 2022, Subcommittee cover sheet with the exception of the following products:

- Canopy, (EPA Reg. No. 352-444),
- Durus, (EPA Reg. No. 83100-62-83979),
- Tendovo Herbicide, (EPA Reg. No. 100-1684), and
- Zironar Biofungicide/Bionematicide, (EPA Reg. No. 279-3618).

Moved: R. Berman

Second: T. LaScola-Miner

Discussion: None

In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher

Opposed: None

Abstained: None

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

- Canopy, (EPA Reg. No. 352-444), containing Metribuzin
- Durus, (EPA Reg. No. 83100-62-83979), containing Atrazine and Acetochlor
- Tendovo Herbicide, (EPA Reg. No. 100-1684), containing Metribuzin and S-Metolachlor

may cause an unreasonable risk to man or the environment, when taking into account the economic, social and environmental costs and benefits of their 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 Acetochlor, Atrazine, Metribuzin, and Metolachlor from general to restricted use for groundwater concerns.

Moved: R. Berman

Second: T. LaScola-Miner

Discussion: None

In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher

Opposed: None

Abstained: None

C. NEW ACTIVE INGREDIENT

Miller presented a summary of information on two new microbial active ingredients: *Bacillus licheniformis* strain FMCH001 and *Bacillus subtilis* strain FMCH002. The product under consideration for approval containing these strains is Zironar Biofungicide/Bionematicide, EPA Reg. No. 279-3618, an early season in-furrow seed and soil treatment. These ingredients are gram positive, spore-forming bacteria that are widely distributed in soil, water, air, the human digestive tract and/or on human skin. Both strains have multiple modes of action, including production of metabolites that enhance plant growth as well as secondary metabolites that are antagonistic against fungal and bacterial pathogens.

Handling precautions on the label indicate the primary health concern is exposure to high concentrations of microbial proteins that might cause allergic reactions. To mitigate this risk, there is label language requiring handlers to wear personal protection equipment. This product should not be applied directly to water or areas where surface water is present. This product is only labeled for use on corn, cotton, soybeans, sugar beets, and sugar cane crops. The label advises using the highest labeled rate under arid conditions.

Miller summarized EPA risk assessments of these ingredients, described in the Registration Decision document that was included in the meeting packet.¹ The human health risk assessment determined no health concerns. An acute pulmonary toxicity study of the *B. licheniformis* strain on rats indicated no clinical signs of persistent infection, toxicity, or pathogenicity. Patterns of clearance were exhibited in all organs examined.

The acute oral toxicity study demonstrated no adverse effects after a single oral dose of 5000 mg/kg body weight in female rats and a dermal toxicity study showed no mortality in both male and female rats. Eye irritation observed in female rabbits was minimal, and no human or animal hypersensitivity incidents were reported at any stage of testing or development. A rat dermal irritation study classified the test product as slightly irritating to the skin. The same tests were conducted with the *B. subtilis* strain with similar results, except *B. subtilis* was observed to be non-irritating to the skin of female rabbits.

Because of the acute pulmonary test results and the lack of toxicity in acute oral and dermal toxicity studies, additional testing was waived for inhalation toxicity and pathogenicity. The toxicity classification for

¹ This document and additional supporting documents are available at www.regulations.gov, in docket "EPA-HQ-OPP-2017-0187"

human oral, inhalation, eye, and dermal exposure are all IV, which is the lowest level of concern. The aggregate exposure risk estimate for food, drinking water, residential uses of a pesticide, and other non-occupational sources of exposure indicated no unreasonable adverse effects are expected for human populations in general or to infants and children.

Environmental risks of the proposed applications would be primarily limited to potential soil exposure within a treated field, specifically in-furrow areas. However, these strains are readily biodegradable and can be broken down in waste treatment processing. Bioaccumulation in test organisms were not observed in any studies and these bacteria are not expected to be mobile in soil.

Ecological risk assessments of these *Bacillus* strain impacts on non-target organisms indicate no expected effects. Adverse effects on avian species are not expected at field application rates and quail studies showed no effects at the maximum hazard dose studied (10^{10} colony forming units per day). Human health risk assessments based on rats and rabbits suggest no adverse effects to wild mammals are expected. Bees are unlikely to be exposed because forage is not expected to be present at the time of proposed soil applications. Testing was waived for nontarget insects due to the natural levels of exposure already present in the environment. Testing was also waived for freshwater fish, marine fish, and invertebrates. *Bacillus* commonly exist with marine organisms and in aquatic ecosystems with no adverse impacts. Non-target plant exposure is unlikely because treated seeds or spray treatments go directly into furrows. EPA noted the active ingredients are not taxonomically related to known plant pathogens and additional testing requirements were thus waived.

These active ingredients do not meet the criteria for groundwater pollutants.

Motion: That the Pesticide Board Subcommittee approve the product registration for Zironar Biofungicide/Bionematicide, EPA Reg. No. 279-3618, containing the new active ingredient *Bacillus licheniformis* strain FMCH001 and *Bacillus subtilis* strain FMCH002, and has never before been registered in Massachusetts.

Moved: R. Berman

Second: T. LaScola-Miner

Discussion: None

In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher

Opposed: None

Abstained: None

E. NEW BUSINESS

Berman asked about an update relative to the preparation for neonicotinoids becoming State Restricted Use by July 1, 2022. LaScola-Miner provided an update on the efforts by staff to inform stakeholder groups about the upcoming changes for certain neonicotinoid products. This included outreach to the regulated community and notification of manufacturers.

ADJOURN

Motion: To adjourn the February 15, 2022 Subcommittee Meeting.

Moved: R. Berman

Second: T. LaScola-Miner

In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher

Opposed: None