THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

Department of Agricultural Resources
251 Causeway Street, Suite 500, Boston, MA 02114
617-626-1700 fax: 617-626-1850 www.mass.gov/agr

MDAR
MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

KATHLEEN A. THEOHARIDES
Secretary

JOHN LEBEAUX
Commissioner

PESTICIDE BOARD SUBCOMMITTEE MEETING MINUTES

Tuesday, August 23, 2022
https://us06web.zoom.us/j/81005128274?pwd=OXRaTCtBbHNSVEZhbjhvREZuU0xJUT09
Passcode: 956306

BOARD MEMBERS IN ATTTENDANCE

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. PRODUCT REGISTRATIONS

Motion: That the Pesticide Board Subcommittee registers the pesticide products listed on the EIPAS PR August 23, 2022 Subcommittee cover sheet with the exception of the following products:

1. Passage Herbicide, EPA Reg. No. 81927-86;
2. Corsican Herbicide, EPA Reg. No.7969-279-55467; and
3. F4092-3, EPA Reg. No. 279-9651.

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

STATE RESTRICTED USE MOTIONS:

Restricted Use As Defined under the Groundwater Protection Regulations:

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

1. Passage Herbicide, EPA Reg. No. 81927-86, containing sulfentrazone; and
2. Corsican Herbicide, EPA Reg. No.7969-279-55467, containing dimethenamid-P

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 ***Sulfentrazone and Dimethenamid-P*** from general to restricted use for groundwater concerns.

Moved: R. Berman
Second: N. Keleher
Discussion: None
In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher
Opposed: None
Abstained: None

B. NEW ACTIVE INGREDIENTS

Bacillus velezensis strain RTI301 and *Bacillus subtilis* strain RTI477 are new active ingredients in the product F4092-3, EPA No. 279-9651, which is labeled for early season in-furrow seed and soil treatment.

Both microbial species are naturally occurring microorganisms that are ubiquitous in the environment, particularly in soil, and on plant undergrowth. These microbes function as antifungal agents to protect seedlings against disease caused by *Rhizoctonia*, *Fusarium*, and *Phytophthoria* species. Both strains have similar modes of action, including production of metabolites enhancing plant growth and secondary metabolites that are antagonistic against fungal and bacterial pathogens.

The product has label language requiring handlers to wear Personal Protective Equipment such as waterproof gloves and a NIOSH-approved air purifying respirator. The Restricted Entry Interval is 12 hours (REI).

Product should not be applied directly to water or areas where surface water is present. The label requires vegetative strips at least 25 feet wide between the field edge and where a down-gradient aquatic habitat exists. The label has mandatory spray drift management requirements of medium to coarse droplets, and not applying when wind speeds exceed 15 mph or during temperature inversions.

This product is labeled for corn, soybeans, canola, peanuts, and cotton. The application can be in-furrow,

incorporated into soil before planting, or sprayed before plants emerge. Foliar applications are not allowed, nor is application using an irrigation system.

Human health risk assessment studies on just the active ingredients did not exhibit any toxicity, infectivity, or pathogenicity. The acute pulmonary toxicity and oral toxicity studies on rats showed no adverse effects, and both strains are classified as Category IV (lowest level of concern) for oral, inhalation, and dermal exposures. No toxicological endpoints were established due to the low toxicity of the strains. Food and drinking water exposure to both strains are expected to be negligible.

The end product formulation was also assessed for human health impacts since it contains an already approved active ingredient (bifenthrin). Its toxicity is considered Category III for acute oral and eye exposures and Category IV for inhalation. F4092-3 is a dermal sensitizer and it is classified as level II for primary dermal irritation.

The aggregate risk assessment done by the Environmental Protection Agency showed no significant dietary food and drinking water or other non-occupational risks from these new active ingredients. Quantitative non-occupational or residential exposure assessments were not performed because these strains will be only applied in agricultural settings by seed treatment or direct soil application. Residential risk exposure to drift is unlikely. Quantitative occupational assessments were not performed due to low toxicity of the microbial active ingredients and the requirement of personal protective equipment on the label was considered sufficiently protective.

Bioaccumulation in test organisms was not observed. This product is not particularly mobile in soil. Risk assessment concluded that no adverse effects for wild mammals or birds are expected. Studies suggest bees will not be significantly affected by the use of this product at label rates. Testing for freshwater and marine fish was waived because existing scientific literature was deemed sufficient to determine risk. For example, *Bacillus subtilis* has been used as a beneficial probiotic for several species of fish and shrimp in commercial aquaculture with no reported adverse effects. The approved use pattern for this product has low levels of exposure for aquatic ecosystems. These strains are not related to any plant pathogens and are not considered a risk to non-target plants.

EPA registered this active ingredient unconditionally based on the finding that it meets FIFRA standards.

Bacillus velezensis and *Bacillus subtilis* do not meet the regulatory criteria for being potential groundwater pollutants as specified in 333 CMR 12.00.

Nascarella asked if the microbial toxicity assessment for this biopesticide also considered the active metabolites in addition to microbial population (i.e., colony forming units) and whether population is a reliable proxy in this case. Miller and Wijnja indicated that assessment of metabolite levels is usually not considered with the evaluation of microbial type of biopesticides. Staff will look into this aspect of toxicity assessments of biopesticides in general and consider this aspect with review of new microbial

pesticides in the future.

Move that the Pesticide Board Subcommittee approve the product registration for F4092-3, EPA Reg. No. 279-9651, containing the new active ingredients *Bacillus velezensis* strain RTI301 and *Bacillus subtilis* strain RTI477, that has never before been registered in Massachusetts.

Moved: R. Berman
Second: M. Nascarella
Discussion: None
In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher
Opposed: None
Abstained: None

G. NEW BUSINESS

ADJOURN
Motion: To adjourn the August 23, 2022Subcommittee Meeting.
Moved T. LaScola-Miner
Second: N. Keleher
In Favor: M. Moore, T. LaScola-Miner, R. Berman, M. Nascarella, N. Keleher
Opposed: None