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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

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OFFICE OF
PESTICIDES AND
TOXIC SUBSTANCES

Dr. Jon Turmel
Entomologist
Vermont Department of Agriculture
116 State Street
Montpelier, Vermont 05602

Dear Dr. Turmel:

You have recently expressed concern over the following statement found in the 1988 Bacillus thuringiensis Fact Sheet and its application to forestry use Bacillus thuringiensis products. "The nontarget organism effects include acute toxicity in birds (178 ppm LD50 and 1 ppm NOEL) and suggest adverse effects in freshwater fish, plants, aquatic invertebrates, and rare beneficial insects."

At the time that the 1986 draft Registration Standard for B. thuringiensis was written, it was concluded that "although substantial gaps were found to exist in the ecological effects data base, there were no substantive concerns regarding unreasonable adverse effects of B. thuringiensis for registered products." (See the 1988 B. t. Fact Sheet.) In addition to data addressed by the 1986 draft Registration Standard, the 1988 Registration Standard addressed data that had been reviewed by the Agency since 1986. The avian effect and suggested adverse effects mentioned in the first paragraph of this letter were obtained from such testing done on an unregistered strain of B. thuringiensis. This strain is still not registered and has no applications pending with the Agency. The avian LD50 value of 178 ppm for this strain was obtained via the interperitoneal injection route of testing.

At the present time, the Agency still has no substantive concerns regarding unreasonable adverse effects of B. thuringiensis for registered products.

When the fact sheet for B. thuringiensis is updated, I will send you a copy. If you have any further questions, please feel free to contact me at (703) 557-4409.

Sincerely,

Michael Mendelsohn

Michael Mendelsohn
Microbiologist
Product Manager Team (17)
Insecticide/Rodenticide Branch H7505C