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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 10 1993

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SECTION 18 EXEMPTION FOR USE OF **TRIADIMEFON** ON **ASPARAGUS**

TO: Susan Stanton, PM Team 41
Registration Division (H7505C)

FROM: Donna S. Davis
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THROUGH: Robert S. Quick, Section Head
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ID#: 93-MI-0007
DP Barcode: D190791
CBTS#: 11803

Chemical
EPA Approved Common Name: Triadimefon
Chemical Name: 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanone
Formulation Trade Name: Bayleton® 50DF
Registration#: 3125-320
Class: Fungicide

State or Agency applying for exemption: State of Michigan, Department of Agriculture

Type of exemption: Specific

Reason: To control asparagus rust in approximately 10,000 to 12,000 bearing acres of asparagus in Michigan.

RECOMMENDATION

TOX considerations permitting, CBTS has no objection to the issuance of this Section 18 exemption. An agreement should be made with FDA regarding the legal status of the treated

asparagus in interstate commerce.

CONCLUSIONS

1. The nature of the residue in plants is not adequately understood. However, tolerances have been established for residues of triadimefon and its metabolites containing the chlorophenoxy and triazole moieties in or on various plant commodities. Therefore for the purpose of this Section 18 exemption only, CBTS concludes that the nature of the residue in or on asparagus is adequately understood. We will consider the parent and its metabolites containing the chlorophenoxy and triazole moieties to constitute the residues of concern.

2. There are no animal feed items derived from asparagus. Therefore secondary residues are not expected to occur in meat, milk, poultry and eggs as a result of this proposed use.

3. Adequate analytical methodology is available in PAM II for enforcement purposes for the combined residues of triadimefon and its metabolites containing the chlorophenoxy and triazole moieties.

4. Analytical reference standards for triadimefon and its metabolites are available from the USEPA Chemical Standards Repository, Research Triangle Park, NC.

5. CBTS anticipates that the combined residues of triadimefon and its metabolites containing the chlorophenoxy and triazole moieties are not expected to exceed **0.15 ppm** as a result of this Section 18 use on asparagus.

6. The residue data used in the evaluation of this Section 18 request were generated by Analytical Bio-Chemistry (ABC) Laboratories, Inc., Columbia, Missouri.

Proposed Use

Bayleton® 50DF is to be applied foliarly at a rate of 2 - 4 oz ai/A (4 - 8 oz product/A) to asparagus ferns when rust pustules first appear. Additional applications are permitted at 14-day intervals if new rust pustules appear. A maximum seasonal application rate of 8 oz ai/A (16 oz product/A) is specified. Applications are not permitted within 6 months of anticipated harvest.

Residue Data

CBTS reviewed (7/20/90, W. Anthony) a 1990 Section 18 exemption request for an identical use of triadimefon on asparagus in the state of Michigan (90-MI-10). In our review dated 7/20/90, we concluded that residues of triadimefon and its metabolites were not likely to exceed 0.1 ppm. In the absence of actual residue data, this conclusion was based on (1) the long PHI; (2) the low application rate and (3) the rapid dissipation of triadimefon residues on cucumbers, tomatoes, legume vegetables, and winter wheat.

Subsequent to the 1990 Section 18 request, Miles, Inc. (formerly Mobay Corporation), submitted PP#1F3969 proposing the establishment of a tolerance for the combined residues of triadimefon and its metabolites containing the chlorophenoxy and triazole moieties in or on the raw agricultural commodity, asparagus at 0.06 ppm. The petitioner proposed that Bayleton® 50WP be applied to asparagus ferns for the treatment of rust at a rate of 2 - 4 oz ai/A when rust pustules first appear on the ferns. Repeat applications at 14-day intervals are allowed with a maximum seasonal rate of 8 oz ai/A.

Magnitude of the residue studies were submitted as part of PP#1F3969 and were reviewed on 7/27/91 (W. Wassell). CBTS concluded that the data were incomplete, and as a result, the reviewer was unable to evaluate the data and draw a conclusion on the adequacy of the proposed tolerance level of 0.06 ppm.

Despite the current status of the data, we will include the results from PP#1F3969 in our consideration of likely residue levels as this is the only actual residue data on asparagus treated with triadimefon in the Agency files.

Asparagus field trials were conducted in California (2), Washington, New Jersey and Indiana during 1989 - 1990. Two foliar applications were made after the harvest of the asparagus spears to ferns at a rate of 4 oz ai/A. Reapplication intervals ranged from 10 to 16 days using spray volumes of 4 to 68 gallons. The PHI ranged from 161 to 246 days. The combined residues of triadimefon and its metabolites in asparagus spears from the earliest harvest were reported at $\leq$ 0.05 ppm for all five field trials. However, the final report included a chromatogram for a sample from an undocumented field trial which showed combined residues of triadimefon and its metabolites at 0.12 ppm. While CBTS does not have any information on treatment rates, reapplication rates or PHI for this field trial, we must consider this data point until the circumstances surrounding it are clarified. We therefore conclude that the combined residues of triadimefon and its metabolites containing the chlorophenoxy and triazole moieties are not expected to exceed **0.15 ppm** as a result of this Section 18 use on asparagus.

Additional Information

Tolerances are established for the combined residues of triadimefon and its metabolites containing the chlorophenoxy and triazole moieties in or on various RACs under 40 CFR §180.410.

cc: circ., RF, Triadimefon Section 18 file, PP#1F3969, DDavis, RGriffin
H-7509C:CBTS:DSD:CM#2:Rm804:305-7085:dd:5/6/93
RDI:SecHd:RSQuick:5/7/93:BrSrSc:RALoranger:5/7/93
Disk: DSD-1 File:TRIADASP.S18