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

MAY 25 1988

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No. 100-628. Ridomil 5G (metalaxyl). Amended registration request to add use on tomatoes. No MRID No. RCB No. 3741.

FROM: Linda S. Propst, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

Linda S. Propst

THRU: Andrew R. Rathman, Section Head
Special Registration Section 1
Hazard Evaluation Division (TS-769)

RR

TO: Lois Rossi, PM 21
Fungicide-Herbicide Branch
Registration Division (TS-767)

Agricultural Division of Ciba-Geigy Corporation is requesting an amended registration to use Ridomil 5G for use on tomatoes for control of Pythium damping-off, fruit and root rot.

Tolerances have been established for the combined residues of the fungicide metalaxyl [N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester] and its metabolites containing the 2,6-dimethylaniline moiety, and N-(2-hydroxy methyl-6-methyl)-N-(methoxyacetyl)-alanine methylester, each expressed as metalaxyl, in or on fruiting vegetables (except cucurbits) at 1.0 ppm [40 CFR 180.408 (a)]. Food/feed additive tolerances have been set at 3 ppm in processed tomatoes; 5 ppm wet tomato pomace; and 16 ppm in dry tomato pomace [21 CFR 193.277, 21 CFR 561.273].

Ridomil 2E (EPA Reg. No. 100-607) is currently registered for use on tomatoes at a rate of four to eight pints (1-2 lbs a.i.)/acre in 20 to 50 gallons of water as a broadcast soil surface spray at planting. Incorporate the Ridomil either mechanically or by irrigation. Ridomil 2E can also be applied four to twelve weeks prior to harvest as a surface application at the rate of 1.0 lb. a.i. (four pints)/acre. Do not apply more than 3.0 lb. a.i. (twelve pints) of Ridomil/acre/season. Do not apply within 7 days of harvest.

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The proposed amended registration would allow for 20 lbs. of Ridomil 5G (1.0 lb. a.i.)/treated acre to be applied uniformly over the surface of the soil at the time of planting for control of damping-off caused by Pythium spp. and Phytophthora spp. Additional applications can be made as soil surface applications under the vines to provide control of root and fruit rot. If only one application is planned, apply 20 lbs. (1.0 lb. a.i.)/treated acre under the vines four weeks after the planting application to four weeks before harvest, depending on the expected occurrence of the diseases. If root and fruit rot is a problem throughout the growing season or the occurrence of diseases cannot be predicted, make two additional applications under the vines, at 10 lbs. (0.5 lb. a.i.)/treated acre one 4-6 weeks after the planting application and another four weeks before harvest. Do not apply more than 40 lbs. (2.0 lbs. a.i.)/treated acre/season. Do not apply within 7 days of harvest.

Data submitted with this request reflect residues on treated tomatoes grown in seven states (California, Indiana, Iowa, New Jersey, North Carolina, Ohio, and Florida). Ridomil 5G or 2E was applied at transplant at 1.0 lb. a.i./A. Ridomil 5G or 2E was again applied at the same rate under the vines. Ridomil MZ58 was foliar applied four times at 14-day intervals at 1.16 lb. a.i./A (0.20 lb. a.i./A metalaxyl and 0.96 lb. a.i./A mancozeb). For comparison purposes, Ridomil 5G or 2E was also applied at 2.0 lb. a.i./A plus 4 foliar applications of Ridomil MZ58 at 2.32 lbs. a.i./A. Fruit samples were collected five or six days after the last treatment for residue analysis.

The highest metalaxyl residue reported resulting from a 1X application rate was 0.17 ppm and 0.20 ppm resulting from a 2X application rate.

Conclusions and Recommendations

RCB concludes that the tolerance established on tomatoes to cover the combined residues of metalaxyl and its metabolites (all expressed as metalaxyl) will not be exceeded as a result of using Ridomil 5G on tomatoes as proposed.

RCB has no objections to the proposed amended registration.

cc: Reading File, Circulation, Subject File, Reviewer,
Registration Std. File, PMSD/ISB

RDI: A. R. Rathman, 5/24/88; R. D. Schmitt, 5/24/88

TS-769:RCB:LSP:lsp:CM-2:Rm803C:557-7324:5/25/88