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

JAN 27 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP8E3619. Iprodione on Sweet Cherries. Letter of November 11, 1988. MRID Nos. 408978-00 and 408978-91. DEB No.: 4725

FROM: R. W. Cook, Chemist
Tolerance Petition Review Section I
DEB/HED (TS-769C)

TO: H. Jamerson, PM Team 43
Registration Support Branch
RD (TS-767C)

and

Toxicology Branch - Herbicide, Fungicide and Antimicrobial Support
Health Effects Division (TS-769C)

THRU: Robert S. Quick, Section Head
Tolerance Petition Review Section I
DEB/HED (TS-769C)

DEFICIENCIES REMAINING TO BE RESOLVED: None

CONCLUSIONS

Residues resulting from both the pre- and postharvest uses are not expected to exceed the established 20 ppm tolerance in or on sweet cherries.

RECOMMENDATIONS

We recommend for the proposed postharvest treatment for sweet cherries without change in the current tolerance level of 20 ppm.

In our previous review (July 12, 1988), several deficiencies were noted. We shall repeat the deficiency, the petitioner's comments, and then our conclusions and recommendations.

Deficiency 1

The proposed use is for postharvest treatment of cherries.

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The only use information on the label is that treatment is to be at the rate of 1 lb ai/100 gallons. The use directions should be expanded to more clearly describe how the cherries are to be treated; i.e., the type of equipment to be used, the dipping time, the number of pounds of fruit to be treated with 100 gallons.

Petitioner's Response to Deficiency 1

The petitioner responds that use instructions now clearly describe how the fruit is treated:

"For postharvest disease control apply Rovral once to the fruit as a dip or spray treatment without rinsing as follows:

"Postharvest Spray Treatment: Sweet cherries are provided a postharvest spray treatment in the commercial stem cutting, sizing and sorting equipment using a wash of potable water with chlorine followed by the Rovral treatment spray. Incorporate Rovral\ into the spray using conventional spray equipment. Treat 25,000 pounds or more of fruit with 100 gallons of Rovral spray solution.

or

"Postharvest Dip Treatment: Sweet cherries are provided a postharvest dip treatment in conventional treaters (stem cut and fruit sorted before hydrocooling and Rovral dip treatment). Incorporate Rovral into the dip tank using conventional dipping treatment. Treat 25,000 pounds or more of fruit with 100 gallons of Rovral dip solution with a dip time of up to 15 minutes. Recharge dipping tank with fresh solution to maintain the necessary level for good operation.

"Do not reuse treated runoff solution. Rovral may be tank mixed with DCNA products registered for use on sweet cherries."

This response is adequate.

Deficiency 4

We can draw no conclusion with regard to the residue data until the following questions are answered:

1. More complete information concerning field sampling practices.

2. Complete description of the postharvest treatment, with comparison to good commercial practices of washing and storage.

3. Storage stability data reflecting the storage and

handling of cherries as occurred in this trial are needed to demonstrate nondegradation or nondeterioration during the multiple step process of grinding, extracting, and analyzing the samples.

Petitioner's Response to Deficiency 4

The petitioner responds to the above questions. Sweet cherries were picked by commercial pickers. All cherries on individual trees were picked. Containers of cherries were maintained in cold storage prior to shipment.

Both the dip treatment and the spray treatment were conducted under good commercial practices; details are included. Treatment was made on commercial equipment (not scale or pilot plant equipment) and appears appropriate for the purposes of our considerations. These responses are adequate.

Storage Stability

There is concern that iprodione residues may not be stable during extended storage under the conditions of the previously reviewed residue study. The petitioner has submitted storage stability data (MRID No. 408978-01) for iprodione and its isomer (RP30228) and its metabolite (RP32490). Sweet cherries were fortified with iprodione, its isomer and its metabolite at levels of 0.05 to 1.0, 0.05 to 0.5, and 0.05 to 0.5, respectively, and stored at 0 `F for 4 months prior to analysis by Method 151.

Recoveries ranged from 85 to 116, 92 to 96, and 82 to 88 percent, respectively for iprodione, its isomer, and its metabolite. These data are adequate to demonstrate that residues of iprodione are stable under the conditions of storage.

Residues for both the pre- and postharvest use are not expected to exceed the already established tolerance (for preharvest use) in or on sweet cherries.

cc:RF,PP8E3619,RWCook, PMSD(ISD),circ.(7)
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