



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

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MAY 28 1987

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#4E3146 (No Acc. number) Permethrin (Ambush®) In Or On Avocados and Papayas. Amendment of 4/7/87 (RCB #2191).

FROM: W. T. Chin, Chemist *W. T. Chin*
Tolerance Petition Section III
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Philip V. Errico, Section Head *P. Errico*
Tolerance Petition Section III
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Hoyt L. Jamerson, PM #43
Minor Uses Officer
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

In a previous review (W. T. Chin, 2/17/87) regarding amendment of 8/19/86 in connection with PP#4E3146, RCB recommended against the proposed tolerance of 1.0 ppm for residues of the insecticide permethrin [(3-phenoxyphenyl)methyl-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate] and its metabolites 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid (DCVA) and (3-phenoxybenzyl)methanol (3-PBA) in or on the raw agricultural commodities avocados and papayas because of the deficiencies 1A and 1B identified in W. T. Chin's 2/17/87 memo.

In response to these deficiencies, the petitioner, Dr. G. M. Markle (National Coordinator, IR-4), submitted an amendment including a cover letter dated 4/7/87 to H. L. Jamerson (EPA) with a revised Section B for Ambush® uses in avocados and papayas. The deficiencies identified above are restated below, followed by the petitioner's response and RCB's comment/conclusion.

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Deficiencies 1A (Avocado Label) and 1B (Papaya Label)

The avocado label does not include the explanation as to how to determine the number of gallons per acre. The avocado label should be revised so that footnote 1/ reads:

"1/ Do not use more than 12.8 oz. Ambush®/A. The final spray should be no more concentrated than 12.8 oz./100 gallons. Since tree size and spacing will affect the amount of spray needed for dilute sprays, the applicator must know the number of gallons of water/A needed to spray the trees to the point of drip. If you do not know this gallonage, you should conduct a test to determine it. If you do not know how to conduct such a test with your equipment, you should ask for assistance from your equipment dealer. For dilute sprays (i.e. sprayed to the point of runoff) 12.8 oz Ambush® should be diluted with the gallonage determined by this test."

RCB requires this on the label because it is not clear whether the residue experiments on avocados involved sprays to the point of runoff, or were not sprayed to run-off but used the maximum proposed rate per acre. The label must clearly state that no more than 12.8 oz Ambush®/A may be applied.

The papaya label should also be revised for the same reasons as stated above for avocados.

The Petitioner's Response to Deficiency 1A (Avocado Label)

The footnote in the revised Section B for avocado label is revised as follows:

1/: Do not use more than 12.8 oz. Ambush®/A. The final spray should be no more concentrated than 12.8 oz./100 gallons. Since tree size and spacing will affect the amount of spray needed for dilute sprays, the applicators must know the number of gallons of water/A needed to spray the trees to the point of drip. If you do not know this gallonage, you should conduct a test to determine it. If you do not know how to conduct such a test with your equipment, you should ask for assistance from your equipment dealer. For dilute sprays (i.e. sprayed to the point of runoff) 12.8 oz Ambush® should be diluted with the gallonage determined by this test."

The Petitioner's Response to Deficiency 1B (Papaya Label)

The footnote in the revised Section B for papaya label is revised as follows:

1/: Do not use more than 12.8 oz. Ambush®/A. The final spray should be no more concentrated than 6.4 oz./100 gallons. Since tree size and spacing will affect the amount of spray needed for dilute sprays, the applicators must know the number of gallons of water/A needed to spray the trees to the point of drip. If you do not know this gallonage, you should conduct a test to

determine it. If you do not know how to conduct such a test with your equipment, you should ask for assistance from your equipment dealer. For dilute sprays (i.e. sprayed to the point of runoff) 12.8 oz AMBUSH® should be diluted with the gallonage determined by this test."

RCB's Comment/Conclusion on the Petitioner's Responses

RCB concludes that these deficiencies have been resolved. However, the petitioner is requested to make the following changes on the revised labels:

1. Add "Note: 6.4 oz of product = 0.1 lb a.i." to the avocado label.
2. Rearrange the RATE OF AMBUSH® shown in the papaya label as follows:

<u>lbs a.i./A</u>	<u>fl. oz/A</u>	<u>fl. oz/100 gal¹/</u>
0.2	12.8	6.4

RECOMMENDATION

TOX considerations permitting and pending the changes requested above, RCB recommends for the establishment of the proposed tolerance for residues of the insecticide permethrin and its metabolites DCVA and 3-PBA in or on the raw agricultural commodities avocados and papayas at 1.0 ppm.

cc: Circu., R.F., S.F., EAB, PP#4E3146, EEB TOX, PM#43, W.T.Chin, and PMSD-ISB
RDI: P.V.Errico(5/20/87): R.D.Schmitt(5/21/87)
TS-769: RCB: CM#2: RM812:557-4352: W.T.Chin:wc(5/26/87)