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

JUN 23 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Chlorpyrifos (Lorsban 50W) EPA Reg. No. 464-552.
Review of Amended Registration Request for Additional
Uses on Blueberries.
(No MRID No.) [DEB #5390] {HED Project 9-1547}

FROM: Francis D. Griffith, Jr., Chemist
Dietary Exposure Branch
Health Effects Division (H7509C) *Francis D. Griffith, Jr.*

THRU: Andrew R. Rathman, Section Head
Special Registration Section I
Dietary Exposure Branch
Health Effects Division (H7509C) *ARR*

TO: Dennis H. Edwards, Jr., PM-12
Insecticide-Fungicide Branch
Registration Division (H7505C)

RD request DEB review the amended registration for additional uses on blueberries to see if there is a chlorpyrifos residue problem.

CONCLUSION

The listing of additional pests controlled, use at previously approved rates in tank mixes, and use as a soil treatment for fire ant mounds in blueberry growing areas does not create a concern for additional chlorpyrifos and its metabolite residues in blueberries.

RECOMMENDATION

DEB recommends for the registration of Lorsban 50W (Chlorpyrifos), EPA Reg. No. 464-552, be amended as proposed. The existing chlorpyrifos tolerance in blueberries as listed in 40 CFR 180.342 does not need to be revised with these label changes.

DETAILED CONSIDERATIONS

DIRECTIONS FOR USE/Labeling

The registrant has submitted a revised label listing additional pests controlled in blueberries, use of chlorpyrifos in tank mixes on blueberries, and use on fire ant mounds in blueberry growing areas.

DEB Comments

The use of chlorpyrifos on blueberries has been previously reviewed and accepted by DEB (aka RCB) (see memoranda PP#7E3466 by W. T. Chin dated 4/30/87 and 7/16/87).

For this amended registration the registrant proposes the same maximum application of 3 lbs. Lorsban 50WP (1.5 lb a.i. chlorpyrifos) per acre, up to 3 times per season with a repeat application interval of 14 days and a PHI of 28 days. The amended registration lists these additional pests controlled in blueberries: blueberry fleabeetle, blueberry tip borer, blueberry sawfly, obliquebanded leafroller, putnam scale, blueberry maggot and plum curculio. To control blueberry maggot and plum curculio the registrant proposes an alternative treatment/tank mixes containing 0.75 lb a.i. chlorpyrifos (1.5 lb. Lorsban) + 0.5 lb. of phosmet (1 lb. of Imidan 50W) or 0.35 lb. of azinphos methyl (1.0 lb of Guthion 35W). Tolerances have been established for phosmet on blueberries at 10 ppm (see 40 CFR 180.261) and for azinphos methyl at 5 ppm (see 40 CFR 180.159) when used as directed.

To control fire ants in blueberry growing areas the registrant proposes applying chlorpyrifos as a drench at a rate of 7 level teaspoons of Lorsban (3-1/2 teaspoons of chlorpyrifos a.i.) per 4 gallons of water applying 1 gallon per mound as a gentle spray to thoroughly wet the mound and the surrounding 4-foot area (approximately 12 sq. ft.). While this is a higher application rate per acre then proposed (and accepted) DEB does not foresee a chlorpyrifos residue problem in blueberries from this use since application is to the fire ant mounds, not to the blueberry plants.

Previously, DEB had concluded that residues from the proposed use would not be expected to exceed the tolerance of 2 pm of which no more than 1 ppm is chlorpyrifos. Since the use has not been changed in the amended registration proposal, DEB draws the same conclusion. Thus we have no concerns that this amended registration proposal for use of chlorpyrifos on blueberries will result in overtolerance residues. The listing

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of additional pests controlled, use of chlorpyrifos at previously approved rates in tank mixes and use as a soil treatment for fire ants in blueberry growing areas does not create residue concerns for DEB. We recommend for the registration of Lorsban 50W be amended as proposed.

H7509C:DEB:Reviewer(FDG):CM#2:Rm814B:557-0826:mb:6/21/89:
edited:fdg:6/21/89.

cc: R.F., Circu(6), Reviewer (FDG), TOX, PP#7E3466, ISB/PMSD
(Eldredge).

RDI:Section Head:A.R.Rathman:6/22/89:E.Zager:6/22/89.