9-24-82

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

AUG 24 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: 82-CA-92. Proposed Section 18 exemptions for the use of Bayleton on cucurbits

FROM: Edward Zager, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Charles L. Trichilo, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Emergency Response Section
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

The California Department of Food and Agriculture requests a Section 18 exemption for the use of Bayleton 50 WP (50% active ingredient) on cucurbits. PP#OE2393 and PP#OF2349 proposing tolerances for residues of Bayleton (1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanone and its metabolite KWG 0519 (-(4-chlorophenoxy)- -(1,1-dimethylethyl)-1H-1,2,4-triazol-1-ethanol in or on cucumbers at 0.1 ppm and melons at 0.2 ppm are currently in reject status due to questions concerning analytical methodology.

The proposed use would permit multiple applications at the rate of 1-2 oz. act/A in a minimum of 20 gallons of water per acre by ground equipment and a minimum of 5 gallons of water by aircraft. No more than 6 oz. act/A may be applied per season. There is a 3-day PHI.

The metabolism of Bayleton in cucumbers was discussed in our review of PP#OE2393 (A. Smith, 12/2/80). For the purpose of this emergency use, we consider the residue of concern in cucurbits to be Bayleton and its metabolite KWG 0519. We note that the GC method used to generate the residue data appears to determine only the free residues of Bayleton and

KWG 0519. However, conjugated residues of Bayleton and KWG 0519 are not likely to exceed 20% of the total residue in cucurbits.

Residue data reflecting applications to cucumbers grown in Mexico were submitted with PP#OE2393. Following 3 foliar applications at the rate of 1.8 oz act/A residues of Bayleton and KWG 0519 were <0.01-0.04 ppm at 5 days, <0.01-0.02 ppm at 15 days.

Residue data reflecting applications to cantaloupes also grown in Mexico were submitted with PP#OF2349. Following 3 foliar applications at the rate of 1.75 oz act/A residues of Bayleton and KWG 0519 were 0.03-0.13 ppm, at 0 days; 0.05-0.08 ppm at 5 days and 0.03-0.11 ppm at 15 days.

Based on the above data we estimate that residues of Bayleton and KWG 0519 will not exceed 0.2 ppm in or on cucurbits as a result of the proposed use.

Meat, Milk, Poultry and Eggs

There are no feed items involved in this use. Consequently, there will be no problem of secondary residues in meat, milk, poultry and eggs.

Conclusions

1. Residues of Bayleton and its metabolite KWG 0519 will not exceed 0.2 ppm in or on cucurbits as a result of the proposed use.

2. The proposed use will not lead to secondary residues in meat, milk, poultry and eggs.

Recommendation

TOX considerations permitting, we have no objections to the proposed Section 18 exemptions. An agreement should be made with FDA regarding the legal status of treated cucurbits in commerce.

cc: R.F.
Circu
Reviewer
Subject file
Section 18, S.F.

RDI:Section Head:RJH:DATE:8/16:RDS:Date:8/17/82
TS-769:RCB: :pad(RAVEN):RM810:CM#2x77324:08/23/82