



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

AUG 9 1982

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: 82-AZ-10. Proposed Section 18 exemption for the use of vinclozolin on lettuce in Arizona.

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 Arizona Commission of Agriculture and Horticulture requests a Section 18 exemption for the use of vinclozolin (3-(3,5-dichlorophenyl)-5-ethenyl-5-methyl-2,4-oxazolidinedione, Ronilan) to control Sclerotinia spp on lettuce.

PP#9G2204 proposing inter alia a temporary tolerance of 10 ppm for residues of vinclozolin and its dichloroaniline-containing metabolites in or on lettuce is currently in reject status due to the inadequacy of the proposed tolerances.

In our review of PP#2F2595 (K. Arne, 6/11/82) we recommended for the establishment of a 10 ppm tolerance for residues vinclozolin on lettuce.

A Section 18 exemption permitting 3 applications of 0.75 lb act/A to lettuce with a 14 day PHI was issued to N.J. in 1981.

The proposed use would permit a single application of 2 lbs act/A with a 28 day PHI.

The metabolism of vinclozolin in lettuce was discussed in our review of PP#9G2204 (B. Davis, memo of 1.18/80). The residue of concern consists of the parent compound and metabolites containing the 3,5-dichloroaniline moiety.

Residues were analyzed by an analytical method which determines residues of vinclozolin and its 3,5-dichloroaniline containing metabolites. The method involves release of 3,5-dichloroaniline from vinclozolin and its metabolites by alkaline hydrolysis and simultaneous steam distillation, chloroform partition and analysis by GC-EC of the acylated derivative of 3,5-dichloroaniline.

Residue data reflecting 11 studies in CA, MI, NY, NJ and WI were submitted with PP#9G2204. There are no residue data available reflecting a single application at the rate of 2 lbs act/A. Following 2 applications at the rate of 0.75-1 lb act/A at 3-15 day intervals (which may be considered equivalent to a single 2 lb act/A application and a 28 day PHI) residues of vinclozolin and its 3,5-dichloroaniline metabolites ranged from 0.07-4.82 ppm in or on lettuce at PHI's of 14-24 days.

We thus estimate that residues will not exceed 10 ppm in or on lettuce 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 with secondary residues in meat, milk, poultry and eggs.

Conclusions

1. Residues of vinclozolin and its dichloroaniline containing metabolites are not likely to exceed 10 ppm in or on lettuce as a result of the proposed use.
2. There will be no problem with secondary residues of vinclozolin in meat, milk, poultry or eggs.

Recommendation

Toxicology considerations permitting, we have no objections to the proposed use. An agreement should be made with FDA regarding the legal status of the treated commodities in commerce.

cc: Edward Zager
R.F.
Circu
Subject S.F.
Section 18 S.F.
TOX

TDI:Section Head:RJH>Date:8/4/82:RDS>Date:8/4/82
TS-769:RCB:Reviewer:E. Zager:LDT:X77324:CM:#2:RM:810>Date:8/5/82