



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

DATE: August 5, 1981

SUBJECT: 81-CA-29. Section 18 exemption for DDVP on figs
in CA.

FROM: Lynn M. Bradley, Chemist
Residue Chemistry Branch (TS-769)

TO: Donald Stubbs
Emergency Response Section
Registration Division (TS-769)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

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

The California Department of Food and Agriculture requests a specific exemption under FIFRA Section 18 for the use of DDVP (2,2-dichlorovinyl dimethyl phosphate, formulated as Vaponite 2 Emulsifiable Insecticide, EPA Reg. No. 201-235-ZB, 2 lb active/gal DDVP) on figs to control dried fruit beetles.

A maximum of 11,862 acres will be treated with no more than 23,724 lb active DDVP.

The use proposed for this exemption is for 0.5-2.0 lb active/A to be applied in at least 5 gal water/A by air or 100 gal/A by ground. A 4 day interval between applications is to be observed, and not more than 5 applications may be made. The PHI is 5 days.

Petition 1E2510/FAP#1H5309 propping tolerances of 0.1 ppm for residues of DDVP in or on the r.a.c. figs and 0.5 ppm in or on the processed commodity dried figs resulting from the same use pattern (with 300 - 400 gal/A by ground rather than aerial applications or 100 gal water/A as is presently proposed) has received a favorable recommendation from RCB, pending receipt of a revised Section B which imposes a restriction against grazing livestock in treated fig orchards. The addition of this restriction is needed for the sake of consistency with other orchard crops, as cover crops are not normally grown in fig orchards.

In the petition we concluded the following (see the memo of M. J. Nelson, 7/20/81):

- (1). The nature of the residue is adequately understood.
- (2). Adequate analytical methodology is available for enforcement.
- (3). The proposed tolerances of 0.1 ppm for fresh figs and 0.5 ppm for dried figs are appropriate to cover residues likely to result from the proposed use.
- (4). There are no recognized feed items associated with figs. Therefore there is no reasonable likelihood of secondary residues occurring in meat, milk, poultry or eggs.

The letter accompanying this request indicates that cull figs may end up as livestock feed.

Tolerances are established at 0.05 ppm for eggs and the meat, fat and meat byproducts of poultry and at 0.02 ppm for milk and the meat, fat and meat byproducts of cattle, goats, horses and sheep (40 CFR §180.235).

Studies are available which indicate that DDVP is rapidly metabolized and excreted [J. Ag. Food Chem 10, 370 (1962)] and does not accumulate in livestock tissues. Also, DDVP is a metabolite of naled, and feeding studies with naled show that DDVP does not accumulate in tissues.

Based on this information and the low levels of DDVP likely to be consumed from this source, we conclude that any secondary residue of DDVP which might occur as a result of this exemption will be adequately covered by the established tolerances for meat, milk, poultry and eggs.

Conclusions and Recommendations

1. Residue levels of DDVP are not expected to exceed 0.1 ppm in the r.a.c. figs.
2. Residue levels of DDVP are not likely to exceed 0.5 ppm in the processed commodity dried figs.
3. The established tolerances for meat, milk, poultry and eggs will be adequate to cover any secondary residues of DDVP which might result from the proposed emergency use.

TOX considerations permitting and provided some administrative agreement is made with FDA regarding the legal status of treated figs in commerce, we recommend in favor of this exemption.

cc: PP#1E2510
Reading file
Circu
Reviewer
TOX
Subject File DDVP
Section 18 file

TS-769:Reviewer:LMBradley:LDT:X77324:CM#2:RM:810:Date:8/3/81
RDI:Section Head:RJH:Date:8/3/81:RDS:Date:8/3/81