



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

Received 6/22/86
Nick Sommer

JAN 22 1986

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No. 359-706. Amended registration for Aliette®
on pineapples. RCB No. 1431. Accession No. 259114.

FROM: Linda S. Propst, Chemist *Linda S. Propst*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Andrew R. Rathman, Section Head *R. Loranger for*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Henry M. Jacoby, PM #21
Herbicide-Fungicide Branch
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

Rhone-Poulenc Inc., is requesting an amended registration for the use of Aliette® fungicide on pineapple.

A tolerance has been established for residues of the fungicide aluminum tris (O-ethylphosphonate) at 0.1 ppm in or on pineapple, pineapple fodder, and pineapple forage (40 CFR 180.415).

The currently registered use of Aliette® 80 WP, a wettable powder formulation containing 80% fosetyl-Al (aluminum tris-(O-ethyl phosphonate)) on pineapples allows for 2.0 lbs. a.i./100 gallons of water intended to treat the number of slips required to plant one acre to be applied as a pre-plant dip prior to planting. In addition to the pre-plant dip, 4 foliar sprays may be applied at 3 lb a.i./acre to established plants when aggravating environmental conditions (i.e., excessive rainfall) occur or are anticipated. The current PHI is 9 months.

The proposed amended registration would increase the maximum number of foliar sprays from 4 to 6 per year; reduce the pre-harvest interval from 9 months to 90 days; and reword the label concerning the gallonage to be used with foliar treatments as follows: Apply

in sufficient water for thorough coverage. Do not exceed 400 gallons per year.

The analytical method used to generate the residue data for this amended registration has undergone a successful method try-out for fosetyl-Al in or on pineapples in conjunction with PP#2F2702 (memo of E. Greer to R. W. Cook, 6/29/83).

Residue data from two locations in Hawaii (Honolua, Maui and Kunia, Oahu) were submitted with request. Both locations treated pineapples with Aliette® as follows:

- (a) 1 single dip treatment using 2 lb a.i./100 gal.
- (b) 1 single dip treatment using 2 lb a.i./100 gal. followed by 6 post-plant foliar treatments in 3 month intervals at 3 lb a.i./300 gal/acre (1X recommended rate). (Total=20 lb a.i./acre)
- (c) 1 single dip treatment using 2 lb a.i./100 gal. followed by 6 post-plant foliar treatments in 3 month intervals at 6 lb a.i./300 gal/acre (2X recommended rate). (Total=38 lb a.i./acre)

Both locations made their last application of Aliette® 90 days prior to harvest.

All residues of parent compound were non-detectable in fruit, peel, leaves, and bran. We note, however, that residues of non-regulated phosphorus acid were as high as 4.44 ppm in the fruit, 3.16 ppm in the peel, 3.48 ppm in the leaves, and 16.38 ppm in the in the bran from pineapples treated with 20 lb. a.i./acre (the maximum recommended rate).

From the above data, we conclude that residues of Aliette® will not exceed the established 0.1 ppm for pineapple, pineapple fodder and pineapple forage as a result of the proposed amended registration. We will defer to TOX, however, concerning the significance of the level of phosphorous acid.

Conclusions

1. Residues of Aliette® in or on pineapple, pineapple fodder, and pineapple forage will not exceed the established tolerance of 0.1 ppm as a result of the proposed use.
2. Residues of phosphorous acid may well approach 5 ppm in the fruit, peel, and leaves of pineapples and 20 ppm in the bran of pineapples treated with Aliette® at the maximum proposed rate.

Recommendations

We have no objections to the proposed amended registration, pending review by TOX as to their concerns with the levels of phosphorous acid occurring in the fruit, peel, leaves, and bran of pineapple as a result of the proposed use.

cc: Reading File, Subject File, Amended Use File, PP#2F2702,
Reviewer, TOX, PMSD/ISR
RDI: A. R. Rathman, 1/21/86; R. D. Schmitt, 1/22/86
TS-769:LSP:lsp:CM#2:Rm810:557-7324:1/22/86