PP#7G3547/ESB
2406

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

MAY 11 1988

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Memorandum

Subject: PP#7G3547; 45639-EUP-YY
Amitraz for used on cotton;
MRID No. 405908-01, RCB No. 3737.

From: Francis B. Suhre, Chemist
Special Registration Section II
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

Thru: Edward Zager, Section Head
Special Registration Section II
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

To: Dennis Edwards, PM-12
Insecticide-Rodenticide Branch
Hazard Evaluation Division (TS-769)

NOR-AM Chemical Co. has submitted a temporary tolerance petition (PP#7G3547) for residues of amitraz/metabolites in or on cottonseed at 0.3 ppm. RCB recently recommended in favor of PP#7G3547 (F. Suhre, memo of 5-11-88) in connection with late season application (21 to 35 day PHI) of MITAC EC (Amitraz 1.5 lbs. ai/gallon) on cotton (45639-EUP-27).

45639-EUP-YY calls for early and late season application of OVASYN (3,825 gallons) to 3,825 acres in 10 states, as listed below:

State	Acres	Lbs. ai
AK	800	800
AZ	500	500
CA	100	100
LA	400	400
MS	600	600
TX	700	700
AL	400	400
GA	250	250
SC	50	50
NC	25	25
Total	3,825	3,825

OVASYN Insecticide/Miticide is a registered trademark of NOR-AM Chemical Co., and contains 1.5 lbs. amitraz ai/gallon.

A metabolism study entitled, " M77 AMITRAZ: The Fate of Amitraz in Cotton Late Season Application" by A. Fortsch, 3/25/88, (MRID No. 405908-01), was provided in support of 45639-EUP-YY. This study was recently reviewed in connection with 45639-EUP-27 (F. Suhre, memo dated 5-11-88). In summary (for the purpose of a temporary tolerance), we consider the metabolic nature of amitraz in or on cottonseed to be adequately understood. The residues of concern are the parent compound,per se, and its 2,4-dimethylaniline metabolites N-(2,4-dimethylphenyl)-N-methyl formamide and N-(2,4-dimethylphenyl)-N-methylmethanimidamide (both calculated as amitraz).

OVASYN is intended for use to control mites, bollworm, and tobacco budworm on cotton. For mites, use OVASYN alone; for insect control, tank mix with a pyrethroid insecticide. Apply (aerial or ground spray) as a single treatment of 2-2/3 to 4 pints (0.5 to 0.75 lbs. ai) per acre, or as two sequential applications of 2-2/3 pints per acre. Do not exceed 5-1/3 pints (1.0 lbs. ai) per acre per season. Treatments should be made when mite populations begin to build but before the infestation reaches high levels. OVASYN may be applied when cotton plants are 4-6 inches tall and up until 21 days before harvest. Label use restrictions, include: Do not apply more than 5-1/3 pints per acre per growing season; do not apply within 21 days of harvest; do not apply shortly before rainfall; and do not allow prepared solutions to stand overnight.

Residue data submitted in connection with PP#7G3547 reflect early, mid, and late season application of amitraz (see, F. Suhre, memo of 8-12-88). The data indicate that residues of amitraz/metabolites will not exceed the proposed temporary tolerance (0.3 ppm) as a result of this proposed experimental use (45639-EUP-YY).

Amitraz/metabolites do not concentrate in the processed fractions of cottonseed, therefore, food/feed additive tolerances are not required (PP#5G3185, C. Deyrup, memo of 2-27-85).

Conclusions

1. For the purpose of this temporary tolerance request only, we consider the metabolic nature of amitraz in or on cottonseed to be adequately understood. The residues of concern are the parent compound,per se, and its 2,4-dimethylaniline metabolites: N-(2,4-dimethylphenyl)-N-methyl formamide; and N-(2,4-dimethylphenyl)-N-methylmethanimidamide (both calculated as amitraz).

2 . The GC/ECD residue analytical method described in PP#4F3081 (Accession No. 263864) appears adequate for enforcement of the purposed tolerance at 0.3 ppm in or on cottonseed.

3. The residue data submitted in connection with PP#7G3547 (see, F. Suhre, memo of 8-12-87) indicate that the proposed temporary tolerance of 0.3 ppm will not be exceeded as a result of this proposed experimental use 45639-EUP-YY.

4. A processing study conducted in connection with PP#5G3185 (see, C. Deyrup, memo of 2-27-85) indicates that amitraz/metabolites do not concentrate in processed fractions derived from cottonseed. Therefore, no food/feed additive tolerances are required.

Recommendation

TOX considerations permitting, we recommend in favor of 45639-EUP-YY.

cc: R.F.,S.F.,Circu.,PP#7G3547, Reviewer, RCB TAS Staff, PMSD
RDI:EZ:5/11/88:RDS:5/11/88
TS-796:FBS:fbs:557-1883:CM#2:RM814:5/11/88