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

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JAN 29 1985

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

RCB # 173

MEMORANDUM

SUBJECT: PP#4E2974. Pydrin (Fenvalerate) on Collards.
Amendment of 7/18/84. Accession No. 072992.

FROM: Cynthia Deyrup, Ph.D., Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: John H. Onley, Section Head
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Hoyt Jamerson, Minor Use Officer
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

Background

Interregional Research Project No. 4 proposed a tolerance in PP#4E2974 for residues of pydrin [Fenvalerate; cyano (3-phenoxyphenyl) methyl-4-chloro-alpha-(1-methylethyl)benzeneacetate] in or on the raw agricultural commodity collards at 10 ppm.

Present Consideration

The present amendment of 9/18/84 consists of a cover letter and a revised Section D. The remaining outstanding deficiency discussed in RCB's 8/23/84 review (PP#4E2974, memo of C. Deyrup) of the 5/30/84 amendment to PP#4E2974 will be restated below followed by the petitioner's response and RCB's Comments/Conclusions. The numbering follows that used in the aforementioned review.

Deficiency 3a

We reserve final judgment regarding the adequacy of the proposed 10 ppm tolerance for residues of Pydrin on collards pending resolution of the following deficiencies in the submitted residue data: (1) clarification by the petitioner in the VA residue trial as to the correct identity of the 3 and 7-day PHI residue samples, i.e., all the 3-day PHI data residue reported in the residue summary are identified as 7-day PHI samples in the submitted chromatograms with the reverse situation noted for the 7-day PHI samples, and (2) clarification by the petitioner as to the mode of Pydrin application to collards (i.e., ground or aerial) since the proposed labeling in Section B does not preclude aerial application. If the residue data submitted in this petition were obtained by ground application only, then Section B must be revised to reflect this use pattern.

Petitioner's Response

The petitioner has submitted a revised Section D in which the resubmitted chromatograms from the VA study have been corrected. The PHI chromatograms of treated collards with a 7 day PHI are now labeled "7 day" instead of "3 day," and the chromatograms of treated collards with 3 day PHI are now labeled "3 day" instead of "7 day." In the 5/30/84 amendment to PP#42974 the petitioner restricted his proposed use (revised Section B) to ground application only.

RCB's Comments/Conclusions - #3a

This deficiency is now resolved.

Recommendations

TOX and EAB considerations permitting, RCB recommends that a tolerance of 10 ppm for residues of fenvalerate per se be established on collards.

Other tolerances for synthetic pyrethroid pesticides have been regulated in terms of parent compound or, in some cases, parent and metabolite. In an attempt to determine whether there is sufficient information available to draw a conclusion on how these pyrethroids should be regulated, RCB is conducting a comparative study on the metabolism of different pyrethroids. This will enable RCB to provide TOX with information regarding the levels of pyrethroid metabolites on crops so that TOX will be able to make a decision on whether pyrethroids need to be regulated in terms of parent compound only, parent and metabolites, or whether additional metabolism data are needed on metabolite levels in various crops.

When and if metabolites are added to the tolerance expression for Pydrin on crops, the tolerance level for Pydrin on collards will be reevaluated, and it will be placed under that expression.

Other Considerations

Neither Canada nor Mexico has established a tolerance for fenvalerate on collards. There will be no compatibility problem.

Codex has established a tolerance of 2 ppm for brassica leafy vegetables, a group which includes collards. Since the proposed tolerance on collards is 10 ppm, there will be a compatibility problem.

cc:R.F., Circu, Reviewer:TOX, EAB, EEB, PP#4E2974/Pydrin
RDI:JHOnley:1/16/85:RDSchmitt:1/18/85
TS-769:RCB:CM#2:RM810:X7377:CDeyrup:wh:1/23/85

INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL fenvalerate

CCPR NO. 117

PETITION NO. PP#4E 2974

Reviewer: C. Deyrup

F. Suss 10/15/84

Codex Status

[ ] No Codex Proposal Step 6 or above

Residue (if Step 9): fenvalerate

Crop(s)	Limit (mg/kg)
Brassica leafy vegetables	2*

Proposed U.S. Tolerances

Residue: Fenvalerate

Crop(s)	Tol. (ppm)
Collards	10 ppm

CANADIAN LIMIT

Residue:

Crop	Limit (ppm)
none (on collards)	

MEXICAN TOLERANCIA

Residue:

Crop	Tolerancia (ppm
none	

NOTES:

* recent JMPR (1984) proposed separate 5 ppm limit on headed cabbage.