

US EPA ARCHIVE DOCUMENT



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

JUN 23 1986

MEMORANDUM

SUBJECT: Azinphos-methyl (Guthion) Registration Standard -
Addendum #1 (Interim Rotational Crop Restriction)

FROM: Samuel M. Creeger, Chief *Sam M Creeger*
Section #1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

THRU: David J. Severn, Chief *David J Severn*
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

TO: Amy Rispin, Chief
Science Integration Staff
Hazard Evaluation Division (TS-769)

Attached is Addendum #1 to the Exposure Assessment Branch chapter of the Azinphos-methyl Registration Standard which was completed on 4/11/86. This addendum provides an interim position on the rotational crop restriction issue.

This addendum does not contain Confidential Business Information.

Please contact me if you need additional information.

Attachment

cc: A. Barton, HED
J. Heckman, HED
H. Manning, EAB
file

PROPOSAL OF AN INTERIM ROTATIONAL CROP RESTRICTION
FOR AZINPHOS-METHYL

OBJECTIVE:

To recommend an interim, scientifically supportable rotational crop statement less restrictive than a blanket statement against planting any rotational crop at any time.

BACKGROUND AND DISCUSSION:

The need for a label statement prohibiting the planting of any rotational crop to azinphos-methyl treated fields can be modified to a less restrictive statement by considering an interim radio-labeled rotational crop study submitted by the registrant (Mobay) in 1976 and the position taken by the Toxicology Branch on benzazimide-containing residues in RAC's.

Based on an interim, confined, ^{14}C -ring-labelled rotational crop study briefly evaluated in the 10/6/76 EAB review (which was not supplied by PMSD to EAB for consideration in the Standard presumably due to its interim nature), there is clear evidence that rotational crops have potential to take up residues other than those covered by the tolerance. In this radiolabeled study (done at 1 lb ai/A or 1/4 the maximum rate), wheat was planted 127 days after application and harvested as forage at 28 days of growth. The forage was found to contain identifiable residues of benzazimide (0.08 ppm) and residues of an unknown (0.20 ppm) even though no detectable residues of azinphos-methyl or azinphos-methyl oxygen analog were found. Since the non-radiolabelled rotational crop studies analyzed only for azinphos-methyl and its oxygen analog, they would be declared inadequate in light of this radiolabeled study because the benzazimide residues were not considered. In subsequent discussion on this issue with the registrant (Mobay), our need for additional rotational crop data was recorded. (See the EAB review dated 3/19/82).

However, EAB has recently learned that the Toxicology Branch is not concerned about the presence of residues containing the benzazimide moiety. (See the 5/1/86 handwritten memo from Kyle Barbehenn to Herb Manning).

CONCLUSIONS:

EAB can take the following interim position on the rotational crop restriction:

"All crops except root crops may be planted in fields treated with azinphos-methyl 30 days post-application and later; root crops may be planted 6 months post-application and later."

Please note that this position may change upon receipt and evaluation of the rotational crop data cited as data gaps in the Data Tables.