

SA



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

OFFICIAL RECORD
HEALTH EFFECTS DIVISION
SCIENTIFIC DATA REVIEWS
EPA SERIES 361

OCT 23 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#9F3698: [Formerly PP#8F3698]: ~~Metalaxyl~~: Tolerances for the Crop Grouping: Root and Tuber Vegetables. Amendment of September 15, 1989. Revised Sections B and F for PP#8F3698. No MRID No. DEB No.5836

FROM: Joel Garbus, Ph.D., Chemist *J. Garbus*
Tolerance Petition Section III
Dietary Exposure Branch
Health Effects Division (H7509C)

THRU: Philip V. Errico, Head *Philip V. Errico*
Tolerance Petition Section III
Dietary Exposure Branch
Health Effects Division (H7509C)

TO: S. Lewis/B.Chambliss PM-21
Herbicide-Fungicide Branch
Registration Division (H7505C)

CIBA-GEIGY Corporation, Greensboro, NC, has submitted revised Sections B and F to petition PP#8F3698 for permanent tolerances for the combined residues of metalaxyl and its metabolites in or on the root and tuber vegetable groupings. The petition as originally submitted was assigned petition number 8F3698 but now carries the number 9F3698. Because of the minor nature of these amendments, we will process the submission as is. However, for future submissions the petition number should correspond to that of the original submission.

Conclusions:

1. The revised Section B is not suitable as it does not include any restrictions on the number of applications per season and does not include a recommended PHI.
2. The revised section F is acceptable. The wording now conforms to the nomenclature of 40 CFR 180.34 (9) (i) and (ii). The proposed tolerances are supported by the residue data.

1
 HED
 2/20/78
 100 200000 7000

2

Recommendation:

We recommend against the proposed tolerances for metalaxyl on the root and tuber vegetable groupings for the reasons stated in conclusion 1.

The petitioner should revise Section B to include a limitation of 4 applications per season and a 7 day PHI.

Section B

Section B as submitted with the original petition allowed for the preplant or at-planting application of 1-2 lbs ai/A of metalaxyl as Ridomil 2E.

For subsequent foliar applications metalaxyl/mancozeb (Ridomil MZ58) was to be applied beginning when conditions were favorable for disease but before actual infection and continued at 14 day intervals. The rate to be used was equivalent to 0.15 to 0.2 lbs ai/A of metalaxyl and 0.72 to 0.96 lbs ai/A of mancozeb. The higher rates were to be used under heavy disease pressures. No more than 4 application should have been made per season with the last at least 7 days before harvest.

The revised version of Section B retains the preplant application of metalaxyl but replaces the foliar use of mancozeb/metalaxyl (Ridomil MZ58) with metalaxyl alone (Ridomil 2E).

The revised version of the label calls for the foliar application of 0.15-0.2 lb ai/A of metalaxyl 2E. Applications are to begin when conditions are favorable for disease but before infection and continue at 14 day intervals until the threat of disease is over.

We note that the restriction of foliar applications to 4 such applications per season and the restriction of a 7 day PHI for the last application is not retained in the revised label.

Section F

The petitioner, CIBA-GEIGY Corporation, originally requested that permanent tolerances be established for the combined residues of metalaxyl [N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester] and its metabolites containing the 2,6-dimethylaniline moiety and N-(2-hydroxymethyl-6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester, each expressed as metalaxyl equivalents, in or on the root and tuber vegetable grouping as follows:

Root and Tuber Vegetable Tops	15.0 ppm
Root and Tuber Vegetable Roots	0.5 ppm

In the revised Section F the tolerances requested remain the same but the nomenclature for the crop grouping is revised to conform

to the nomenclature of 40 CFR 180.34 (f) (9) (i) and (ii).

It is requested that tolerances be established for the combined residues of metalaxyl and its metabolites containing the 2,6-dimethylaniline moiety and N-(2-hydroxymethyl-6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester, each expressed as metalaxyl equivalents, in or on the following raw agricultural commodities:

Leaves of Root and Tuber Vegetables (Human Food or Animal Feed) Group	15.0 ppm
Root and Tuber Vegetables Group	0.5 ppm

Discussion

In our review of PP 8F3698 we recommended that the group tolerances be rejected, in part, because of the proposed use of mancozeb as a component of the foliar spray. Mancozeb does not have tolerances established for the representative crops and neither group tolerances for the root and tuber vegetable group or the leaves of the root and tuber vegetable (human food or animal feed) group.

As a consequence, the petitioner has replaced the foliar use of a metalaxyl/mancozeb mix with metalaxyl alone. This effectively resolves the issues posed by the proposed use of mancozeb on commodities of these crop groupings

The remaining question is whether sufficient residue data has been presented to allow for group tolerances for metalaxyl.

PP 8F3698 has values for metalaxyl residues for potato tubers, carrot root, radish root, and sugar beet root, and for radish and sugar beet tops.

The representative commodities for the root and tuber vegetable group are potatoes, carrots, radishes, and sugar beets.

The representative commodities for the leaves of the root and tuber vegetable (human food or animal feed) group are turnips and sugar beets.

With the exception of radish tops instead of turnip tops, all of the representative commodities are included. With the discretion allowed by §180.34, we will consider radish tops as a suitable alternative to turnip tops.

For each of the six rac's, field trials were conducted at four sites. Twenty residue trials were conducted with the representative root and tuber vegetables, carrots, potatoes, radishes, and sugar beets, in ten states, CA, ME, NB, ND, MN, OH, WA, NY, TX, and FL. Carrots were grown and treated in CA, NY, WA, and TX (69% of national crop); potatoes were grown and treated in CA, ME, ND, WA,

and FL (35% of national crop); sugar beets were grown and treated in WA, CA, MN, TX, OH, and NE (49% of national crop); radishes were grown and treated in CA, NY, and FL. No residue data on turnip tops were submitted.

In these trials, the foliar spray was the mancozeb/metalaxyl mix. In all instances the residue levels of metalaxyl and its metabolites on roots and tubers and leaves were below the proposed tolerances. We assume that similar results would be found if metalaxyl alone were to be used.

We conclude that the field trial residue data support the proposed tolerances for the crop groupings.

cc: PP9F3698, PP9F3698, S. File, RF., Circ., R. Schmitt, Reviewer,
PMSD/ISB

RDI: PE:10/19/89:RAL:10/19/89

H7509C:DEB:JG:jg:CM:2:Rm:803:557-1405:10/20/89.