

US EPA ARCHIVE DOCUMENT

9-8-82

113501
SHAUGHNESSEY NO.

REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 8-5-82 OUT 9-8-82

FILE OR REG. NO. 100-607

PETITION OR EXP. PERMIT NO. _____

DATE OF SUBMISSION 7-28-82

DATE RECIEVED BY HED 8-4-82

RD REQUESTED COMPLETION DATE 10-14-82

EEB ESTIMATED COMPLETION DATE 10-7-82

RD ACTION CODE/TYPE OF REVIEW 330/Amendment - New Food/Feed use

TYPE PRODUCT(S): I, D, H, F, N, R, S Fungicide

DATA ACCESSION NO(S). _____

PRODUCT MANAGER NO. H. Jacoby (21)

PRODUCT NAME(S) Ridomil 2E Fungicide

COMPANY NAME Ciba-Geigy

SUBMISSION PURPOSE Proposed Conditional Registration of Squash Use

SHAUGHNESSEY NO. .	CHEMICAL, & FORMULATION	% A.I.
<u>113501</u>	<u>Metalaxyl</u>	<u>25.11%</u>
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_____	_____	_____
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Ridomil 2E

100 Pesticide Label Information

100.1 Pesticide Use

Fungicide for use on squash

100.2 Formulation Information

Ridomil is 25.11% Metalaxyl

100.3 Application Methods, Directions and Rates

Apply as foliar spray 1/2 to 1 pint of Ridomil® 2E per acre as a tank mix with other fungicides such as Bravo® 500, Dithane® M-22, Manzate®, Dithane® M-45, or Manzate® 200 in sufficient water to obtain thorough coverage. Start application when the squash plants are in the "two-leaf" stage and continue at 14-day intervals throughout the season. Do not apply more than 6 pints of Ridomil® 2E per acre per season.

100.4 Target Organism

For control of downy mildew caused by Pseudoperonospora cubensis.

100.5 Precautionary Labeling

There was no precautionary statement included on the label.

101 Physical and Chemical Properties

See previous review by J. Tice dated 6/26/81
(This is the review for the numerous uses.)

102 Behavior in the Environment

Summary taken from review by J. Tice dated 6/26/81: "Ridomil is stable to hydrolysis and soil surface photolysis but does photodegrade in water with a half-life of 1 week. Photosensitizers accelerate degradation. Aerobic and anaerobic soil half-lives are 7 to 9 weeks, respectively, with CGA-62826 forming which in turn breaks down. Soil microbes metabolize Ridomil but soil microbe functions are not affected at use rates. Ridomil and its soil residues leach strongly in soil and especially strongly in sandy soils low in organic matters. Ridomil dissipates under field conditions with a half-life of 2 weeks and accumulation in whole fish is not expected to exceed 10X."

103 Toxicological Properties

103.1 Mammals

From review by J. Tice dated 6/26/81. Rats Acute Oral LD₅₀ = 669 mg/kg 90% A.I.

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103.2 Minimum Requirements

Selected test results from DER's.

<u>Organism</u>	<u>Test</u>	<u>Results</u>	<u>Test Material</u>	<u>Category</u>
Mallard Duck	Acute Oral	LD ₅₀ = 1466 mg/kg	96.9%	Core
Bobwhite Quail	8-Day Dietary	LC ₅₀ > 10,000 ppm	"	Core
Mallard Duck	"	" >10,000 ppm	"	Core
Bluegill Sunfish	96-hr	LC ₅₀ >100 ppm	95.1%	Core
Rainbow trout	96-hr	LC ₅₀ = 132 ppm	"	Core
<u>Daphnia magna</u>	48-hr	LC ₅₀ = 121 ppm	"	Core

104 Hazard Assessment

According to the basic toxicity test results, Metalaxyl is slightly toxic to mammals and birds and practically non-toxic to fish and aquatic invertebrates.

According to the fate information Metalaxyl is not very persistent in the field nor does it tend to bioaccumulate in fish.

The proposed use, squash, does not provide for a significant increase in acreage and should not increase the exposure of Metalaxyl to non-target organisms over those uses already assessed in J. Tice's reviews both dated 6/26/81.

104.3 Endangered Species

Considering it's low toxicity and short half-life, Metalaxyl should not adversely affect endangered species when used on squash.

104.4 Adequacy of Toxicity Data

The available toxicity data were sufficient to perform this hazard assessment.

107 Conclusions

107.5 Data Requests

No additional data are needed at this time.

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107.7 Recommendations

EEB has completed an incremental risk assessment of the proposed conditional registration of Ridomil® for use on squash. Based upon available data EEB concludes that the proposed use provides for no significant increase in exposure or risks to non-target organisms.

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