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SHAUGHNESSEY NO. | REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 4/7/82 OUT 6/15/82

FILE OR REG. NO. 3125-EUP-173, -174

PETITION OR EXP.

DATE OF SUBMISSION March 24, 1982

DATE RECEIVED BY HED April 6, 1982

RD REQUESTED COMPLETION DATE July 5, 1982

EEB ESTIMATED COMPLETION DATE

RD ACTION CODE/TYPE OF REVIEW 754/EUP-Amendment

TYPE PRODUCT(S): I, D, H, F, N, R, S Insecticide/Nematicide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. H. Jacoby (21)

PRODUCT NAME(S) Nemacur 15G (3125-EUP-173)

Nemacur 3E (3125-EUP-174)

COMPANY NAME Mobay Chemical Co.

SUBMISSION PURPOSE Proposed amendments of EUP's for use on grapes

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100601	Fenamiphos	

4 pages

100. Pesticide Name

Nemacur 3E and Nemacur 15G

100. Experimental Use Label Information

100.1 Pesticide Use

The purpose of the amended proposal is to extend the evaluation of Nemacur for control of nematodes infesting grapes on 100 acres in California only to add a total of 280 acres of grapes (fresh fruit market only) in Washington, Michigan, Ohio, New York, and Pennsylvania.

100.3 Application Methods Directions, Rates

See review #16 by L. Touart, 3/31/80. Proposed modifications include the optional use of ground injection equipment intended to apply either granules or liquid 2 or more inches below the soil surface.

100.6 Proposed EUP Program

See review #16 by L. Touart, 3/31/80. The proposed amendment will add the following acreages to the 100 acres orginally approved for California: Washington, 50; Michigan, 20; Ohio, 10; New York, 50; and Pennsylvania, 50. This will bring the total treated acreage up to 260 for Nemacur 3E and 120 for Nemacur 15G. The total pounds AI will increase from 1800 to 6840.

101. Physical and Chemical Properties

See review #20 by M. Gessner, dated 12/3/80.

102. Behavior in the Environment

See review #20, dated 12/3/80.

103. Toxicological Properties

See review #20, dated 12/3/80.

104. Hazard Assessment

104.1 Discussion

Nemacur is an organophosphate compound that is highly toxic to fish and wildlife. While acceptable LD_{50} values have not been determined, conversion from LC_{50} data indicate, for instance, an LD_{50} of 3.6 mg/kg for bobwhite quail or 0.68 mg/ animal. (See review #20 by M. Gessner, dated 12/3/80).

104.2 Likelihood of Adverse Effects to Non-target Organism

For the proposed use on grapes, the most likely route of high exposure to birds is the ingestion of granules that are either spilled at the row ends or not incorporated in the soil by discing. For a modal size of 0.1 mg/granule, an LD_{50} for quail would be about 45 granules of Nemacur 15G. For sparrows, the LD_{50} dose would be about 7 granules. Risks to small birds from exposed granules thus is moderate while risks from an EC soil application would probably be lower. The incremental risk from adding a total of 280 acres in 5 states to the 100 acres currently approved for California would be minor in comparison with current use of Nemacur on other crops.

104.3 Endangered Species Considerations

EEB does not have sufficient information to conclude that Nemacur can be used safely in areas where endangered species may be exposed.

105. Conclusion

EEB has completed its review of the request for additional acreage in 5 states to use Nemacur under an EUP to control nematodes infesting grapes. EEB concludes that, due to the low number of acres involved (280), there will be no significant increase in exposure or risks to non-target organisms. However, the registrant must verify with either the appropriate state officials or the Endangered Species Specialists of Regional Fish and Wildlife Service offices that the field plots and adjacent areas are void of endangered or threatened species.

105.6 Recommendation

EEB recommends that the registrant monitor this use of Nemacur and consider steps that can be taken to minimize exposure to wildlife.

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17 June 1982

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