EEB BRANCH REVIEW

DATE: IN 11/19/84 OUT 12/27/84

FILE OR REG. NO. 279-EUP-96

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 10/11/84

DATE RECEIVED BY HED 11/15/84

RD REQUESTED COMPLETION DATE 2/5/85

EEB ESTIMATED COMPLETION DATE 1/29/85

RD ACTION CODE/TYPE OF REVIEW 716/EUP

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

DATA ACCESSION NO(S). 254990

PRODUCT MANAGER NO. H. Jacoby (21)

PRODUCT NAME(S) Funginex 1.6 EC

COMPANY NAME FMC Corporation

SUBMISSION PURPOSE Proposed EUP extension for use on almonds

SHAUGHNESSEY NO. CHEMICAL, & FORMULATION % A.I.

107901 Triforce 18.2%

Inert Ingredients 81.8%


MEMORANDUM

TO: Henry Jacoby, Project Manager #21
Registration Division

THRU: Norman Cook, Section Head, Section #2
Ecological Effects Branch

THRU: Henry Craven, Acting Chief
Ecological Effects Branch, HED

SUBJECT: EUP Extension for Almonds

EEB has reviewed the proposed extension of 279-EUP-96 (funginex 1.6 EC) for use on almonds in the state of California only. This extension involves 175 acres of almonds (small crop acreage) that will be treated with 210 pounds of technical material. Based upon the available data EEB concludes that the proposed extension of 279-EUP-96 provides for no significant increase in exposure or risks to nontarget organisms.

Fish Hazard

Based upon the available data Triforine appears to be practically non-toxic to both warmwater and coldwater fish with an LC50 > 1000 ppm, but one must keep in mind that the acute 96 hour LC50 studies for both bluegill sunfish and rainbow trout are unacceptable in support of registration because there were solubility problems in the studies. See review by D. Urban on 3/14/78, R. Hitch on 8/23/77 and D. McLane 10/11/84 for additional information.

Honey Bee

Honey bees are used extensively to pollinate almonds, there is a high probability of bee exposure to this product during repeated applications to almonds during the blooming period.

No data are available on the toxicity to triforine to honey bees. In order to assess the hazard of this product to honey bees, EEB requires a honey bee acute contact LD50 study.
Prior to consideration of registration of the proposed use of triforine on almonds, the following minimal studies are required on the technical grade material of each active ingredient in the product:

(a) the 96-hour LC$_{50}$'s for a coldwater species (Rainbow trout) and a warmwater species (Bluegill sunfish) of fish; and

(b) honey bee acute contact LD$_{50}$ study.

Curtis E. Laird
Curtis E. Laird
Fishery Biologist
Ecological Effects Branch