121001
SHAUGHNESSY NO.

REVIEW NO.

EE BRANCH REVIEW

DATE: IN 8-20-85 OUT 11-04-85

FILE OR REG. NO. 7969-58

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 7/19/85

DATE RECEIVED BY HED 8/19/85

RD REQUESTED COMPLETION DATE 11/06/85

EEB ESTIMATED COMPLETION DATE 10/30/85

RD ACTION CODE/TYPE OF REVIEW 335

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

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. R. Taylor(25)

PRODUCT NAME(S) Poast

COMPANY NAME BASF Wyandotte Corporation

SUBMISSION PURPOSE Proposed conditional registration of use on tomatoes and bell peppers

SHAUGHNESSY NO.	CHEMICAL & FORMULATION	% A.I.
121001	sethoxydin	18

20
416

Pesticide Name: Sethoxydin

100 Submission Purpose and Label Information

100.1 Submission Purpose

The registrant seeks a conditional registration (Section 3) to allow the use of Poast herbicide on tomatoes and bell peppers to control annual and perennial grass weeds.

100.2 Formulation Information

Active ingredient:
sethoxydin.....18.0%

Inert ingredients.....82.00%

[1.5 lbs. a.i./gallon]

100.3 Application Methods, Directions, Rates

Refer to the attached labeling.

100.4 Target Organisms

Annual and perennial grass weeds, refer to attached labeling for specific grasses.

100.5 Precautionary Labeling

"Do not apply directly to lakes, ponds, or streams. Do not contaminate water by cleaning of equipment or disposal of wastes."

101 Hazard Assessment

101.1 Discussion

Poast is a selective broad spectrum postemergence herbicide for the control of annual and perennial grass weeds. It is currently registered for use on soybeans, cotton, sugar beets, non-bearing food crops and ornamentals. The proposed amendment would allow the use of this product on tomatoes and bell peppers.

The maximum proposed application rate is 0.3 lbs. a.i./acre per treatment with up to 3 treatments permitted for a total of 0.9 lbs. a.i./acre per season.

101.2 Likelihood of Adverse Effects to Non-target Organisms

Sethoxydin is practically non-toxic to mammals (LD_{50} > 2000 mg/kg) and birds (LD_{50} > 2000 mg/kg; LC_{50} > 5000 ppm). The low use rates will result in exposure concentrations less than 100 ppm on most dietary foodstuffs. Aquatic organisms are also insensitive to sethoxydin (finfish 96-hr LC_{50} > 100ppm ; aquatic invertebrate 48-hr EC_{50} = 75.7 ppm). Direct application of sethoxydin to water at the maximum rate would result in a concentration less than 0.1 ppm, substantially less than that necessary to adversely effect aquatic fauna. Given an environmental half-life of less than 4 days in both soil and water (less than 1 day in direct sunlight), sethoxydin is not expected to result in any adverse impacts to non-target fauna.

101.3 Endangered Species Considerations

No significant impact is expected to any endangered/threatened animal due to the low application rates, toxicity and persistence of sethoxydin. However, sethoxydin is extremely toxic to members of the grass family and there are three endangered grasses currently listed:

Texas wild rice (Zizania texana)
Solano grass (Orcuttia mucronata)
Eureka dune grass (Swallenia alexandrae)

Of these only Solano grass has been identified as potentially being exposed to Poast herbicide as a result of this amendment. Approximately 18,000 acres of tomatoes are grown in Solano county. Acreage located above the vernal pools (where Solano grass grows) in east central Solano county supply the only water to the pools and this acreage is under intensive agriculture including corn, alfalfa, wheat, sugar beets, sunflowers and nut trees in addition to tomatoes. In order to avoid any possible jeopardy to Solano grass, Poast herbicide should be prohibited for use in the area adjacent to the Olcott Pool in Solano county, California. Appropriate labeling is presently being finalized within the EEB and will be forwarded upon completion.

103 Conclusions

The Ecological Effects Branch has completed an incremental risk assessment (3(c)(7) finding) of the proposed registration of Poast herbicide for use on tomatoes and bell peppers. Based upon the available data EEB concludes that the proposed uses provide for no significant increase in exposure or risks to nontarget organisms, except to the endangered Solano grass. In order to avoid possible jeopardy to Solano grass, the Poast herbicide label will require restrictions for use in Solano county, California.

(SEE ATTACHED STATEMENT)

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11-5-85
Les Touart, Fisheries Biologist
Section 1

11/5/85
Ray Matheny, Head
Section 1

11/6/85
Michael Slimak, Chief
EEB

Poast (Tomatoes)

ENVIRONMENTAL HAZARDS

Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered or threatened species or adversely modify their habitat is a violation of Federal law.

The use of this product is controlled to prevent death or harm to Solano grass which occurs in Solano County, CALIFORNIA. Before using this product in this county you must obtain the EPA Endangered Species Bulletin (EPA/ES-85-13) available from either your County Agricultural Extension Agent, the Endangered Species Specialist in the California Department of Fish and Game, or the Regional Office of the U.S. Fish and Wildlife Service (Portland, Oregon) or the U.S. Environmental Protection Agency (San Francisco, California). THIS BULLETIN MUST BE REVIEWED PRIOR TO PESTICIDE USE. THE USE OF THIS PRODUCT IS PROHIBITED IN THIS COUNTY UNLESS SPECIFIED OTHERWISE IN THE BULLETIN.