242216 RECORD NO.
121001 SHAUGHNESSEY NO. REVIEW NO.
EEB REVIEW
DATE: IN <u>05-03-89</u> OUT MAY 8 1989
FILE OR REG. NO. 89-OR-12
PETITION OR EXP. NO.
DATE OF SUBMISSION 03-13-89
DATE RECEIVED BY EFED04-28-89
RD REQUESTED COMPLETION DATE
EEB ESTIMATED COMPLETION DATE 05-13-89
RD ACTION CODE/TYPE OF REVIEW 510
TYPE PRODUCT(S) Herbicide
TYPE PRODUCT(S) Herbicide DATA ACCESSION NOS.
PRODUCT MANAGER NO. D. Stubbs (41)
PRODUCT NAME(S) Poast (Sethoxydim)
COMPANY NAMEState of Oregon
SUBMISSION PURPOSE Proposed Sec. 18 for use on
snap beans
SHAUGHNESSEY NO. CHEMICAL AND FORMULATION % AI
121001 Sethoxydim

EEB REVIEW

Chemical: Poast (Sethoxydim)

100 Submission Purpose and Label Information

100.1 Submission Purpose and Pesticide Use

The State of Oregon is requesting an emergency exemption (Section 18) for the use of Poast herbicide to control wild proso millet in snap beans. No new data were submitted with this request.

100.2 Formulation Information

Contains 1.5 lb ai per gallon.

100.3 Application Methods, Directions, Rates

- Application rate is 0.5 pt (0.093 lb ai) per acre
- Make only one application per season
- Do not apply within 30 days of harvest
- Use ground equipment only

100.4 Target Organisms

Target organism is wild proso millet, (Panicum miliaceum).

101 Hazard Assessment

101.1 Discussion

The proposed emergency exemption would allow the use of Poast herbicide on 300 acres of snap beans in Oregon. Maximum application rate is 0.5 pints of product (0.093 lb ai) per acre, with one application allowed. Exemption period is May 1 through July 10, 1989. Application is authorized in Marion, Linn, and Yamhill Counties.

101.2 Likelihood of Adverse Effects on Nontarget Organisms

Data from previous EEB reviews indicate that sethoxydim is practically nontoxic to mammals, birds, and freshwater fish, and no more than slightly toxic to aquatic invertebrates. The low use rate will result in residues of less than 25 ppm on terrestrial dietary food items. Direct application to water at the maximum proposed rate would result in an aquatic EEC of less than 0.05 ppm, substantially less than that expected to adversely affect aquatic fauna. Given an environmental half-life of less than four days in

both soil and water, sethoxydim is not expected to cause any adverse effects in nontarget fauna.

101.3 Endangered Species Considerations

On the basis of low toxicity to mammals, birds, fish, and aquatic invertebrates, hazard to endangered species of animals is not expected from the proposed use. The only organisms at risk might be nontarget plants.

Review of EEB's Endangered Species files indicates that there is one endangered plant species listed as occurring in the subject counties: Bradshaw's lomatium, which is listed for Linn and Marion Counties. According to the USFWS recovery plan, this species is endemic to lowland prairie, and is threatened by agricultural development. Thus, there may be a potential exposure situation via use under the proposed exemption.

The submission package does not provide sufficient information to allow EEB to conduct a hazard assessment for this endangered plant species. More detailed information on the location of snap bean acreage is needed before hazard can be determined. EEB defers to the US Fish and Wildlife Service, Office of Endangered Species, on this matter. Application of Poast herbicide to snap beans in Linn and Marion Counties should not be authorized until OES, Boise, Idaho office, has reviewed potential hazard to endangered plant species under this proposed exemption.

101.4 Adequacy of Toxicity Data

The existing database is adequate to assess hazards to nontargets under the proposed exemption.

103 Conclusions

EEB has reviewed the proposed emergency exemption for the use of Poast herbicide on snap beans in Oregon. EEB concludes that the proposed use will not result in hazard to nontarget fauna.

One endangered plant species may be exposed to the herbicide via application to snap beans. EEB cannot assess the potential for hazard to this plant species with information currently at hand. EEB will defer to the OES Regional Office in Boise, Idaho, on this matter. Application under this proposed exemption should not be authorized until OES has been notified and has had opportunity to conduct an endangered species review.

Allen W. Vaughan, Entomologist
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

Norman J. Cook, Supervisory Biologist Ecological Effects Branch Environmental Fate and Effects Division (H7507C)

James W. Akerman, Chief Ecological Effects Branch Environmental Fate and Effects Division (H7507C)