EEB REVIEW

DATE: IN 4-8-87 OUT 17 APR 1987

FILE OR REG. NO 87-OK-01

PETITION OR EXP. NO.

DATE OF SUBMISSION 3-9-87

DATE RECEIVED BY HED 4-7-87

RD REQUESTED COMPLETION DATE 4-22-87

EEB ESTIMATED COMPLETION DATE 4-22-87

RD ACTION CODE/TYPoE OF REVIEW 510

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

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. Don Stubbs (41)

PRODUCT NAME(S) Botran 75W

COMPANY NAME Oklahoma Dept. of Agriculture

SUBMISSION PURPOSE Proposed Section 18 for use on peanuts in Oklahoma

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

031301 Botran (2,6-Dichloro-4-nitro-aniline)
Botran (DCNA)

100 Submission Purpose and Label Information

100.1 Submission Purpose and Pesticide Use

The State of Oklahoma is requesting an emergency exemption (Section 18) for the use of Botran 75W on peanuts, to control sclerotinia blight. No data were submitted with this request.

100.2 Formulation Information

Active Ingredient:

2,6-Dichloro-4-nitroaniline ....................... 75%

Inert Ingredients .................................. 25%

100.3 Application Methods, Directions, Rates

Application would be made at rates of 2-4 lb of product (1.5-3.0 lb ai) per acre. Material may be applied by air, by ground equipment, or by overhead irrigation equipment. A maximum of two applications would be allowed under this exemption. The proposed use period is July 15 to September 30, 1987.

100.4 Target Organism

Sclerotinia blight fungus (Sclerotinia minor)

101 Hazard Assessment

101.1 Discussion

The State of Oklahoma is requesting an emergency exemption for the use of Botran on peanuts. Botran is currently registered for use on a number of crops, including deciduous fruits, vegetables, cotton, and ornamentals. The maximum foliar application rate is 5.0 lb ai per acre; the maximum soil application rate is 30 lb ai per acre. Oklahoma is requesting a maximum of two applications at 1.5 to 3.0 lb ai per acre. According to the material submitted with the request, treated acreage will probably be in the following counties: Bryan, Caddo, Carter, Grady, Hughes, Johnston, Lincoln, Love, Marshall, and Stephens. The total acreage covered under this exemption is estimated at 12,000 acres.
101.2 Likelihood of Adverse Effects on Nontarget Organisms

Botran is no more than slightly toxic to birds and is practically nontoxic to mammals and honey bees. Hazard to terrestrial nontarget organisms is not expected from the proposed use.

Botran is moderately to highly toxic to freshwater fish (bluegill LC₅₀ = 1.08 ppm; rainbow trout LC₅₀ = 0.56 ppm). To assess the potential hazard of the proposed use, aquatic EEC's were calculated using the highest application rate (3 lb ai/acre). These calculations (see attachment) show the highest EEC to be 36.6 ppb (0.0366 ppm). As this is less than one tenth the LC₅₀ of the more sensitive fish species, hazard to fish is not anticipated even at the highest application rate.

No data were available on the toxicity of Botran to freshwater aquatic invertebrates. Thus, hazard to these organisms cannot be evaluated.

101.3 Endangered Species Considerations

Review of EEB's Endangered Species files indicates that only two federally listed species, bald eagle and interior least tern, are found in the counties listed under this exemption. Based on the low avian toxicity of Botran and the limited acreage to be treated, hazard to these species is not anticipated.

103 Conclusions

EEB has reviewed the proposed emergency exemption for the use of Botran on peanuts in Oklahoma. EEB cannot complete a hazard assessment for this use because data on freshwater aquatic invertebrates are not available. For nontargets other than aquatic invertebrates, this use will not present a significant increase in exposure or toxicity. There are no federally listed endangered or threatened species in Oklahoma that will be adversely affected by this use.

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I. For foliar application

A. Runoff

\[ 3.0 \text{ lbs} \times 0.02 \times 10 \text{ (A)} = 0.6 \text{ lb} \]

(from 10 A. drainage basin)

EEC of 1 lb a.i. direct application to 1 A. pond 6-foot deep = 61 ppb

Therefore, EEC = 61 ppb \times 0.6 \text{ (lb)} = 36.6 \text{ ppb}

II. For aerial application

A. Runoff

\[ 3.0 \text{ lbs} \times 0.6 \times 0.02 \times 10 \text{ (A)} = 0.36 \text{ (tot. runoff)} \]

(appl. efficiency) \quad (2 \% \text{ runoff}) \quad (10 \text{ A. d. basin})

B. Drift

\[ 3.0 \text{ lbs} \times 0.05 = 0.15 \text{ lb} \]

(5 \% \text{ drift})

Tot. loading = 0.36 \text{ lb} + 1\text{ lb} = 0.15 \text{ lbs}

Therefore, EEC = 61 ppb \times 0.51 \text{ (lbs)} = 31.1 \text{ ppb}