

121601-9  
SHAUGHNESSEY NO.

5  
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 10-13-83 OUT 12-19-83

FILE OR REG. NO. 524-GUI

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 9-20-83

DATE RECEIVED BY HED 10-7-83

RD REQUESTED COMPLETION DATE 1-25-84

EEB ESTIMATED COMPLETION DATE 1/18/84

RD ACTION CODE/TYPE OF REVIEW 110/New Chemical

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

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. R. Taylor (25)

PRODUCT NAME(S) Harness

COMPANY NAME Monsanto Company

SUBMISSION PURPOSE Proposed full registration of corn, soybeans, peanuts,  
and grain sorghum

| SHAUGHNESSEY NO. | CHEMICAL, & FORMULATION                                          | % A.I. |
|------------------|------------------------------------------------------------------|--------|
| 121601           | 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methyl phenyl)<br>acetamide | 85.5   |
|                  |                                                                  |        |
|                  |                                                                  |        |
|                  |                                                                  |        |

Acetochlor

100 Pesticide Label Information

100.1 Pesticide Use

This pesticide submission is for controlling, weeds in corn, soybeans, peanuts, and grain sorghum.

100.2 Formulation Information\*

Active Ingredients

2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide . . . . . 85.5%

Inert Ingredients . . . . . 14.5%

\*Not from the label but confidential statement of formula 100.0%

100.3 - Application Methods, Directions, Rates

-100.5

No label available

101 Physical and Chemical Properties

Technical Chemical (from Farringer's 1/28/81 review)

101.1 Chemical Name

2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methyl phenyl)  
acetamide

101.2 Structural Formula

Not available from EEB files or the registration submission materials.

101.3 Common Name

Acetochlor

101.4 Trade Name

Harness

101.5 Molecular Weight

Not available

101.6 Physical State

1. Liquid
2. Colorless to Dark Purple
3. B.P." >200°C
4. M.P.: <0°C
5. Vapor Pressure < 1 mmHg
6. Hydrolysis Rate: Nondetectable @ pH 5-9

7. Dissociation Constant: None
8. Stable (1st detectable heat evolution @ 170°C
9. Specific Gravity: 1:11 @ 30°C

101.7 Solubility

Ether;  
Acetone;  
Benzene;  
Chloroform;  
Alcohol;  
Ethyl acetate  
H<sub>2</sub>O 233 ppm @ 25°C

102 Behavior in the Environment

No environmental fate data is available in EEB files or with the submission package.

103 Toxicological Properties

103.1 References for Toxicology Branch

No data available in EEB files.

103.2 Minimum Requirements

103.2.1 Avian Acute Oral LD<sub>50</sub>

| <u>Species</u> | <u>Results</u>                | <u>Formulation</u> | <u>Status</u> |
|----------------|-------------------------------|--------------------|---------------|
| Bobwhite Quail | LD <sub>50</sub> = 1560 mg/kg | Tech.              | Core          |

103.2.2 Avian Dietary LC<sub>50</sub>'s

| <u>Species</u> | <u>Results</u>             | <u>Formulation</u> | <u>Status</u> |
|----------------|----------------------------|--------------------|---------------|
| Bobwhite Quail | LC <sub>50</sub> >5620 ppm | Tech.              | Core          |
| Mallard Duck   | LC <sub>50</sub> >5620 ppm | Tech.              | Core          |

103.2.3 Fish Acute LC<sub>50</sub>'s

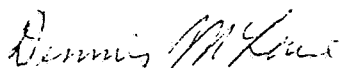
| <u>Species</u>      | <u>Results</u>               | <u>Formulation</u> | <u>Status</u> |
|---------------------|------------------------------|--------------------|---------------|
| Bluegill<br>Sunfish | LC <sub>50</sub> = 1.3 mg/l  | Tech.              | Core          |
| Rainbow<br>Trout    | LC <sub>50</sub> = 0.42 mg/l | Tech.              | Core          |

103.2.4 Aquatic Invertebrate LC<sub>50</sub>

| <u>Species</u>       | <u>Results</u> | <u>Formulation</u> | <u>Status</u> |
|----------------------|----------------|--------------------|---------------|
| <u>Daphnia magna</u> | 14 mg/l        | Tech.              | Core          |

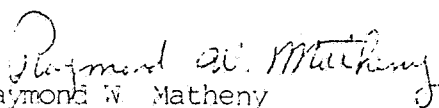
## 107 Conclusions

- 107.5 EEB has reviewed the proposed conditional registration of acetochlor for use on corn, soybeans, peanuts and grain sorghum. EEB is unable to complete an incremental risk assessment (3(c)(7) finding) for these uses because pertinent environmental chemistry data are lacking. In order to assess the risks associated with these uses, EEB requires environmental fate data profile.



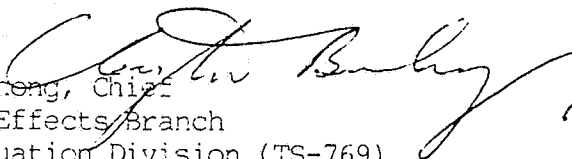
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Date: December 20, 1983



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Date: 12/20/83



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Date: 12/21/83