

11-26-76

EEE BRANCH REVIEW

DATE: IN \_\_\_\_\_ OUT \_\_\_\_\_ IN \_\_\_\_\_ OUT \_\_\_\_\_ IN 11/14 OUT 11/26/76  
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FIELD OR REG. NO. 241-243

PREPARED BY OR FOR: \_\_\_\_\_

DATE SUBMITTED 10/26/76

DATE OF SUBMISSION 10/25/76

DATE RECEIVED BY: \_\_\_\_\_

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

PREPARED BY: Bob Tayler (25)

PRODUCT NAME(S) Prowl

COMPANY NAME American Cyanamid Company

SUBMISSION PURPOSE Extend period of application from 60 to 140 days prior to planting and add Kochia scoparia controlled by Prowl in cotton.

CHEMICAL & FORMULATION Active Ingredient: N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine-43.8% EC (4 lb ai/gal)

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200.0 Introduction:

200.1 Uses:

See attached use sheet.

200.2 Background:

The American Cyanamid Company is requesting label revision of Prowl: 1) to extend the period of application from 60 days to 140 days prior to planting cotton, and 2) to add Kochia (Kochia scoparia) to the list of weed species controlled by Prowl in cotton.

Prowl was registered as a pre-plant incorporated for weed control in cotton, corn, and soybeans (EPA Reg. No. 241-263 dated 7/29/75). In cotton, the label permits application of Prowl with ground equipment at up to 60 days prior to planting. Registration of Prowl was amended on 5/24/76 to include: 1) aerial application, 2) delayed soil pre-plant incorporation to within 7 days after application, and 3) pre-plant non-incorporated provided a rain of 1/4 acre inch or more within 7 days after application.

201.0 Data Summary:

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201.1 Abstract of Test Reports:

Company summary tables (5) are filed with the EEEB.

201.2 Brief Description of Tests:

Data were from 82 small replicated test trials, 3 of which <sup>were</sup> from Mississippi, 13 from California, and the remaining 66 ~~trials~~ trials were from, Texas. Prowl was applied and incorporated according to label recommended rates and directions at 17-182 days prior to planting cotton. Standard herbicides employed in comparability testings included treflan, caparol, basalin, tolban and cobex. Only two applications were by air and the remaining were by ground equipment mechanically incorporated.

Test results showed that the herbicidal activities of Prowl <sup>were</sup> ~~was~~ evident in some test plots evaluated at 65-290 days after planting. In all test trials, Prowl's efficacy was equivalent to or better than reference herbicides. Weed species showing acceptable control that were present at the time <sup>of</sup> evaluation were: Pigweed (redroot), Lambs quarter, Barnyardgrass, Fall panicum, Goosegrass, Johnsongrass seedlings, Texas panicum, volunteer sorghum as well as the newly claimed Kochia. It should be noted, however, that Fall panicum, Texas panicum, and volunteer <sup>sorghum</sup> are not among the list of weed species on the Prowl Label. No phytotoxicity or yield data were submitted.

202.0 Conclusions:

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- 202.1 Claims Supported by the Data Submitted:  
Data submitted support use of Prowl for the control of Kochia in cotton. *variables*
- 202.2 Claims Not Supported by the Data Submitted:  
Because of the inherent ~~variability~~ in ~~the~~ cultural practices, climatic conditions, and edaphic factors among the cotton *adequately* growing states, it was felt that data submitted do not represent the geographic localities of the cotton belt in Eastern U. S. Therefore, extended application of Prowl to 140 days prior to planting must be denied at this time until additional data are submitted justifying the herbicidal selectivity of Prowl for weed control in cotton *through out the Cotton belt*
- 202.3 Additional Data Required to Support Claims and Achieve Amended Registration:  
To support extended application of Prowl ~~to~~ *on* cotton from 60 to 140 days prior to application, additional efficacy data must be submitted to support this claim. Data must represent adequate geographic coverage, cultural practices, climatic conditions and edaphic factors of the cotton growing states such as Arizona and Eastern U. S. In addition, label must be specific as to ~~the~~ optimum time of application under a given set of environmental *conditions* (soils, rain, temperature *range*), preceding ~~crops~~ *crops* (cover crops), cultural practices, or any other recommendations deemed necessary for such extended period of applications.
- 203.0 Recommendations: *the*  
*Adding* ~~the~~ Kochia to the list of weed species controlled by Prowl in cotton is acceptable. *Extending* ~~Exceeding~~ the period of application from 60 to 140 days before planting is unacceptable, pending submitting additional data as requested under the preceding section (202.3).

Sami Malak -- November 26, 1976  
Herbicide Efficacy Section  
Efficacy & Ecological Effects Branch

*MSW*

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