

8/11/82

CASE GS0092

NALED

PM 110 12/22/81

CHEM 034401

aled ( 1,2-dibromo-2,2-dichloroethyl d

BRANCH EEB

DISC 55 TOPIC 45150045

FORMULATION 12 - EMULSIFIABLE CONCENTRATE (EC OR E)

FICHE/MASTER ID 00037799

CONTENT CAT 51

Johansen, C. (1961) See Poisoning Investigations, 1961: Report  
No. 8577. (Unpublished study received Mar 26, 1975 under 3125-  
EX-119; prepared by Washington State Univ., submitted by Mobay  
Chemical Corp., Kansas City, Mo.; CDL:094390-1)

SUBST. CLASS = S.

DIRECT RVW TIME = (HH) START-DATE 8/3/82 END DATE 8/3/82

REVIEWED BY: Allen W. Vaughan  
TITLE: Entomologist  
ORG: EEB/HED  
LOC/TEL: Crystal Mall / 79307

SIGNATURE:

*Allen W. Vaughan*

DATE: 8/11/82

APPROVED BY:

TITLE:

ORG:

LOC/TEL:

SIGNATURE:

DATE:

[ BEST AVAILABLE COPY ]

1. Chemical: Dibrom (naled)
2. Formulation: 20% WP, 8 lb/gal E
3. Citation: Johansen, C. 1961. Bee poisoning investigations, 1961. Report No. 8577. (Unpublished study rec'd. Mar. 26, 1975 under 3125-EX-119; prepared by Wash. St. Univ., subm. by Mobay Chemical Corp., Kansas City, Mo.; CDL: 094390 - I) FICHE/MASTER ID 00037799.
4. Reviewer: Allen W. Vaughan  
Entomologist  
EEB/HED
5. Date Reviewed: August 3, 1982
6. Test Type: Toxicity to bees
  - A. Test species: Honey bee  
(Apis mellifera)
7. Reported Results: Dibrom is highly toxic to bees, but residual toxicity is short-lived (less than 24 hr.) Dibrom WP has a greater residual toxicity than the E formulation.
8. Reviewer's Conclusions: This study is scientifically sound, and shows naled to be highly toxic to honey bees, but with a short-lived residual toxicity.

OK

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## Materials and Methods

### Test Procedures

Treatments were made by hand to small plots of alfalfa. Cages of bees were placed in the plots prior to treatment. At intervals after treatment, foliage samples from each plot were placed in cages and the cages were loaded with bees. Bees were checked for mortality after 24 hours.

### Statistical Analysis

None reported.

## Discussion/Results

At 1 lb AI/A, both dibrom formulations caused 100% mortality of bees treated during application. All bees were dead within 30 minutes. Three hour residues of the WP formulation ( 1 lb AI/A) caused 100% mortality, while residues of the E formulation (same time and rate) caused 59% mortality. 24-hr. residues were not toxic to honey bees.

## Reviewer's Evaluation

### A. Test Procedures

Procedures were sound.

### B. Statistical Analysis

None reported

### C. Discussion/Results

This study is scientifically sound