

US EPA ARCHIVE DOCUMENT

5-12-83

(IDR03R)

DATA EVALUATION RECORD

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CASE GS0103 PHORATE PM 300 08/27/82

CHEM 057201 Phorate (O,O-diethyl S-((ethylthio)met

BRANCH EEB DISC 55 TOPIC 051542

FORMULATION 04 - GRANULAR

FICHE/MASTER ID 00092834 CONTENT CAT 01

Cyanamid of Great Britain Limited (1964) Report on Field Observations of Toxicity of Phorate Granules to Wild Life; CDL/SJB/D,2,91. (Unpublished study received Jan 26, 1965 under 241-53; submitted by American Cyanamid Company, Princeton, N.J.; CDL: 001797-D)

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS
SEC: EEB -55-051541

DIRECT RVW TIME = 1 (MH) START-DATE 5/12/83 END DATE 5/12/83

REVIEWED BY: Ann Stavola
TITLE: Aquatic Biologist
ORG: HED/EEB
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SIGNATURE: Ann Stavola

DATE: 5/12/83

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE:

DATE:

DATA EVALUATION RECORD

CHEMICAL: Phorate

FORMULATION: 10G

CITATION: MRID 00092834. Cyanamid of Great Britain Limited (1964). Report on field observations of toxicity of phorate granules to wildlife: CDL/SJB/D.2. 91. (Unpublished study received Jan. 26, 1965 under 241-53; submitted by American Cyanamid Co., Princeton, N.J; CDL: 001797-D)

REVIEWED BY: Ann Stavola
Aquatic Biologist
HED/EEB

DATE REVIEWED: May 12, 1983

TEST TYPE: Field observations following application of a pesticide.

REPORTED RESULTS: Application of phorate granules to sugar beets and brussel sprouts is not hazardous to wildlife.

REVIEWER'S CONCLUSIONS:

The study is supplemental.

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This is a report of some field observations of the toxicity of phorate granules to wildlife in Great Britain. Four acres of resown beet were treated with 2.3 lb ai/a of 10% granules, and an adjacent 3 acres were treated with 1.5 lb ai/a. Prior to the applications of phorate the fields were surveyed and the following wildlife were observed in the fields: partridges, skylarks, brown linnets, blackbirds. No dead animals were seen up to 3 days post-treatment.

Twenty acres of brussel sprouts were treated with 10% granules at 1.5 lb ai/a. The fields were searched for 6 days after treatment for dead animals. A dead vole, linnet and partridge were found. No phorate was detected in the liver samples or gut contents of the linnet. In the gut contents of the vole 0.25 ppm was detected, and in the partridge 0.05 ppm was detected. Cholinesterase activities in the livers of these animals were not inhibited.

The study concluded that the application of phorate granules to sugar beets and brussel sprouts is not hazardous to wildlife.

Reviewer's Evaluation

This is a standard method of observing the toxicity of pesticides to birds in agricultural fields. However, the observers neglected to take into account that predators may have taken small mammals and birds that may have ingested phorate. Also the detection of phorate in 2 animals cannot be ignored.

Conclusions

1. Category: Supplemental
2. Rationale: The study can be used in a risk assessment.