DATA EVALUATION RECORD
INVERTEBRATE TOXICITY TEST

1. **CHEMICAL:** Azoxystrobin (128810)

2. **TEST MATERIAL:** Formulation; 23.7% w/v suspension concentrate

3. **CITATION:**

Authors:	Yearsdon, H.A. and L.C. Farrelly
Title:	ICIA5504: Investigation into the toxicity of a 250 g l^{-1} SC formulation to the carabid beetle *Poecilus cupreus*.
Date:	1994
Laboratory:	Zeneca Agrochemicals, Jealotts Hill Research Station, Bracknell, Berkshire, UK
Lab. Report #:	94JH151
Sponsor:	Zeneca Agricultural Products, Wilmington, DE
MRID No.:	436781-69

4. **REVIEWED BY:**

William Erickson
Biologist
EEB/EFED

Signature: W. Erickson
Date: 4/04/96

5. **APPROVED BY:**

Harry Craven
Section Head 4
EEB/EFED

Signature: H. T. Craven
Date: 6/21/96

6. **STUDY PARAMETERS/RESULTS SYNOPSIS:**

Age/size of Test Organism:	not specified
Study Duration:	14 days
Dosage:	0.22 lb ai/acre
Significant effects:	none

7. **CONCLUSIONS:** The study is scientifically sound.

8. **ADEQUACY OF THE STUDY:** Supplemental.

9. **MAJOR GUIDELINE DEVIATIONS:** Not a guideline study.

10. **SUBMISSION PURPOSE:** New chemical.

11. MATERIALS AND METHODS:

Test Organism:

Guideline Criteria	Reported Information
Species	carabid beetle (*Poecilus cupreus*)
Age	not specified
No. per rep.	6 (3 males, 3 females)

Test System:

Guideline Criteria	Reported Information
Site	laboratory
Application equipment	calibrated hydraulic track-sprayer fitted with a single Teejet
Test cages	plastic boxes (18 x 12 x 6 cm) filled 1-cm deep with air-dried quartz sand; lid had hole covered with 2-mm nylon mesh
Water content of sand	moistened to 70% of its maximum water-holding capacity by adding deionized water
Temperature	19-21°C
Relative humidity	42-72%
Photoperiod	16 h light/8 h dark

Test Design:

Guideline Criteria	Reported Information
Duration	14 days
Treatment Groups	control (deionized water), azoxystrobin (250 g ai/ha*), and a toxic standard (dimethoate, 400 g ai/ha)

Guideline Criteria	Reported Information
Test procedure	immediately before spraying, water capacity was restored to 70%, food (1 blowfly larva per beetle) was added, and any beetles that had buried themselves were returned to the surface
No. replicates	5

*0.22 lb ai/acre

12. REPORTED RESULTS:

General Results:

Guideline Criteria	Reported Information
Quality assurance and GLP compliance statements were included in the report?	yes
Raw data included?	yes

Mortality and Knockdown Effects: Visual assessments were made twice on treatment day and at 24 h, 48 h, and every two days thereafter. Beetles were assessed according to the following five criteria: healthy; moderate knockdown (poor coordination of movement); severe knockdown (little movement); dead; or not visible (condition not assessed). All treated beetles (except some treated with dimethoate as a toxic standard) survived and were assessed as being healthy (i.e., no knockdown) through the duration of the test.

Feeding activity also was assessed at two-day intervals for the first 10 days and at termination of the study. No clear differences in feeding activity were recorded (see table below).

Days after treatment	**% larvae eaten**	
	control (deionized water)	**azoxystrobin (0.22 lb ai/acre)**
2	70	73
4	83	80
6	60	70

8	90	87
10	80	90
14	83	80

Statistical analysis: None.

Conclusions: "According to the IOBC Classification Scheme, ICIA5504, formulated as a 250 g l^{-1} SC and applied at a nominal rate of 250 g ai ha^{-1} is classified as "Harmless" (Category 1, <30% mortality) to *Poecilus cupreus*."

13. **REVIEWER'S DISCUSSION/CONCLUSIONS:** The study is scientifically sound. At an application rate of 0.22 lb ai/acre, azoxystrobin had no apparent adverse impact on carabid beetles.