

US EPA ARCHIVE DOCUMENT

**DATA EVALUATION RECORD
VEGETATIVE VIGOR TEST
§ 122-1 (TIER I)**

1. **CHEMICAL:** Azoxystrobin PC Code No.: 128810
2. **TEST MATERIAL:** ICIA5504 50 WG Purity: 48%
3. **CITATION**

Authors: L. Canning, C.L. Russell, and J.F.H. Cole
Title: ICIA5504: A Tier I Glasshouse Study to Evaluate the Effects on Vegetative Vigour on Terrestrial Non-Target Plants.
Study Completion Date: July 11, 1994
Laboratory: Zeneca Agrochemicals, Bracknell, Berkshire, UK
Sponsor: Zeneca Ag. Products, Wilmington, DE
Laboratory Report ID: RJ1597B
MRID No.: 436781-58

4. **REVIEWED BY:**

William Erickson
Biologist
EEB/EFED/EPA

Signature: *W. Erickson*

Date: *4/03/96*

5. **APPROVED BY:**

Harry Craven
Section Head 4
EEB/EFED/EPA

Signature: *H. T. Craven*

Date: *6/21/96*

6. **STUDY PARAMETERS**

Definitive Study Duration: 21 days

7. **CONCLUSIONS:** This study is scientifically sound and fulfills the guideline requirement for a Tier I vegetative vigor study for all species except rape.

8. **ADEQUACY OF THE STUDY:**

- A. **Classification:** Core for all species except rape; invalid for rape.
B. **Rationale:** Rape plants were treated with primicarb.
C. **Repairability:** No.

**DATA EVALUATION RECORD
VEGETATIVE VIGOR TEST
§ 122-1 (TIER I)**

1. **CHEMICAL:** Sulfentrazone 128810
PC Code No.: 129081

2. **TEST MATERIAL:** ICIA5504 50 WG Purity: 48%

3. **CITATION**

Authors: L. Canning, C.L. Russell, and J.F.H. Cole
Title: ICIA5504: A Tier I Glasshouse Study to Evaluate the Effects on Vegetative Vigour on Terrestrial Non-Target Plants.

Study Completion Date: July 11, 1994

Laboratory: Zeneca Agrochemicals, Bracknell, Berkshire, UK

Sponsor: Zeneca Ag. Products, Wilmington, DE

Laboratory Report ID: RJ1597B

MRID No.: 436781-58

DP Barcode: D217072, D217078

4. **REVIEWED BY:** Mark Mossler, M.S., Toxicologist,
KBN Engineering and Applied Sciences, Inc.

Signature: *Mark Mossler* Date: 1/19/96

APPROVED BY: Pim Kosalwat, Ph.D., Senior Scientist
KBN Engineering and Applied Sciences, Inc.

Signature: *P. Kosalwat* Date: 1/19/96

5. **APPROVED BY:**

Signature: Date:

6. **STUDY PARAMETERS**

Definitive Study Duration: 21 days

7. **CONCLUSIONS:** This study is scientifically sound and fulfills the guideline requirements for a vegetative vigor study for all species except rape. The study using rape is not scientifically sound because the plants were sprayed with primicarb during the test.

8. **ADEQUACY OF THE STUDY**

A. **Classification:** Core for all species except rape, invalid for rape.

9. GUIDELINE DEVIATIONS:

1. Rape plants were sprayed with primicarb for aphid control.

10. SUBMISSION PURPOSE: New chemical.

11. MATERIALS AND METHODS:

A. Test Organisms

Guideline Criteria	Reported Information
Species 6 dicots in 4 families, including soybean and a rootcrop; 4 monocots in 2 families, including corn.	Dicots: cocklebur, morning glory, rape, soybean, sugar beet, velvetleaf Monocots: corn, purple nutsedge, wheat, wild oat
Number of plants per rep 5	5 plants per rep, each in individual pots
Source of Seed	Various commercial suppliers

B. Test System

Guideline Criteria	Reported Information
Solvent	None
Site of test	Greenhouse
Planting method / type of pot	One plant/pot, 10-cm pots
Method of application	Track sprayer
Method of watering	Soil-level avoiding foliage
Growth stage at application 3-4 true leaf stage	Three to eight leaf stage

C. Test Design

Guideline Criteria	Reported Information
Dose range 2x or 3x	Tier I study conducted at two rates: 0.15 and 1.0 lb ai/A
Doses At least 5	2
Controls Negative and solvent	Negative control
Replicates per dose At least 3	3
Duration of test 14 days	21 days
Were observations made at least weekly?	Yes
Maximum labeled rate	1.0 lb ai/A

12. REPORTED RESULTS

Guideline Criteria	Reported Information
Quality assurance and GLP compliance statements were included in the report?	Yes
Was an NOEL observed for each species?	Yes
Phytotoxic observations	Yes
Were initial chemical concentrations measured? (Optional)	No
Were adequate raw data included?	Yes

Results for the most sensitive endpoint^a of each species

Species	Endpoint affected	Percent effect
Corn	dry weight	8.7
Purple nutsedge	dry weight	2.9

Species	Endpoint affected	Percent effect
Wheat	dry weight	4.9
Wild oat	dry weight	11.4
Cocklebur	damage	0.3
Morningglory	damage	0
Rape	dry weight	6.7
Soybean	damage	0.3
Sugar beet	damage	1.3
Velvetleaf	damage	0.7

*Determination of the most sensitive endpoint is based on the amount of inhibition or damage.

Observations: Effects of the compound were slight. Major symptoms of toxicity were stunted and malformed plants and some chlorosis and necrosis. Early senescence was also noted.

13. REVIEWER'S COMMENTS: All plants were treated with biological control to control aphids and white flies. Soybean plants were treated with a third biocontrol agent to control thrips. The biological control treatments probably did not affect the study, but plants should be cultivated in areas which are free of insects. Rape plants were sprayed with primicarb to control aphids.

The study is classified as **Core** for all species except rape. The study is invalid for rape and must be repeated for that species only.