

US EPA ARCHIVE DOCUMENT

Shaughnessy No.: 125601

Date Out of EAB: MAY 29 1986

To: Robert Taylor
Product Manager 25
Registration Division (TS-767)

From: Samuel Creeger, Chief *SM*
Review Section #1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

Attached, please find the EAB review of...

Reg./File # : 54
Chemical Name: Paclobutrazol
Type Product : Plant growth regulator
Product Name : CLIPPER
Company Name : ICI
Purpose : Review soil dissipation test protocol

Action Code(s): 350 EAB #(s) : 5908
Date Received: 9/05/85 TAIS Code: _____
Date Completed: MAY 29 1986 Total Reviewing Time: 1 day

Deferrals to: _____ Ecological Effects Branch
_____ Residue Chemistry Branch
_____ Toxicology Branch

Monitoring study requested by EAB: _____

Monitoring study voluntarily conducted by registrant: _____

1. CHEMICAL: Paclobutrazol
2. TEST MATERIAL: N/A
3. STUDY/ACTION TYPE: Written account of ICI/EAB meeting
4. STUDY IDENTIFICATION: N/A

5. REVIEWED BY:

Stephen J. Simko
Chemist
EAB/HED/OPP

Signature:

S. Simko
5/29/86

6. APPROVED BY:

Samuel M. Creeger
Chief, Section 1
EAB/HED/OPP

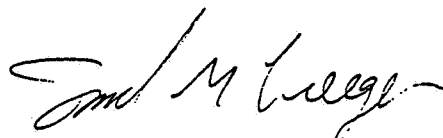
Signature:

Sam M Creeger
MAY 29 1986

7. CONCLUSIONS: The registrant's written account of the ICI/EAB meeting and follow-up telephone conversation is accurate on the question of the sites required for each crop. However, EAB's position on the analysis of soil samples was that the next two sampling intervals should be analyzed separately where the registrant's account is that only the next sampling interval be analyzed separately. On the irrigation issue, EAB's position is that the studies will be adequate only if the total rainfall and irrigation approximate the heaviest 5-year rainfall where the registrant's account is that only an average 5-year rainfall level is needed.
8. RECOMMENDATIONS: This response to ICI's account of the July 18, 1985 ICI/EAB meeting as well as the original EAB memo on the meeting (attached) should be forwarded to the registrant.
9. BACKGROUND: A meeting between ICI and EAB was held on July 18, 1985 concerning a previously submitted field dissipation protocol reviewed by EAB on May 30, 1985. An EAB memo of that meeting is attached.
10. DISCUSSION OF STUDIES: N/A
11. COMPLETION OF ONE-LINER:
12. CBI APPENDIX:

No CBI is included.

1. Chemical - Paclobutrazol.
2. Test material - Not applicable.
3. Study/Action Type - Request of waiver from aged leaching study.
4. Study Identification - Not applicable.
5. Reviewer - Samuel M. Creeger
6. Approved by - Samuel M. Creeger, Chief
Section #1/EAB



FEB 07 1986

7. Conclusions - The data requirements for the proposed greenhouse use are hydrolysis, aerobic soil metabolism and leaching/aged leaching. According to the March 15, 1984 EAB evaluation, all of the data requirements except aged leaching have been satisfied. Paclobutrazol was found to be stable to hydrolysis and aqueous photolysis, to aerobically degrade in soil with a half life of 1-7 months (shorter half lives in soils with higher organic matter content) and to have little potential for leaching (especially in organic soils such as those used in greenhouse-grown ornamentals that may be disposed of outdoors).

Since this submission involves use only in container-grown ornamentals in the greenhouse and less than 100 pounds of active ingredient nationwide, no significant impact on ground water supplies is expected. Therefore, for this use only, the aged leaching study may be waived.

8. Recommendations - A waiver from the requirement of the aged leaching study may be granted for this use only.
9. Background - The registrant, ICI Americas, has requested a waiver from the requirements of an aged leaching study normally required in support of their registration request for use of paclobutrazol on greenhouse, container-grown poinsettias and geraniums. If ICI captured the entire market, then less than 500 acres and 100 pounds of active ingredient would be involved.
10. Discussion of Individual Studies - Not applicable.
11. One-liner - Not applicable.
12. CBI Appendix - Not applicable.

MEETING MEMO

Subject: Paclobutrazol - Field Dissipation Study

Attendants: H. Manning, S. Hong (EAB), J. Miller (RD)
J. Wagner, P. Derdley, B. Feldberg (ICI Americas)

When: July 18, 1985

INTRODUCTION

The meeting was held to discuss field dissipation studies on paclobutrazol (Clipper®, Cultar®), a plant growth regulator. ICI has previously submitted a study protocol, and it was reviewed in EAB review of 5/30/85.


DISCUSSION

In that review, EAB recommended several changes in the protocol. One change was that supplemental irrigation would be necessary if rainfall is inadequate because the compound was found to leach at a moderate rate, especially in soils of low organic matter content.

The registrant said that they have already started the study in three sites:

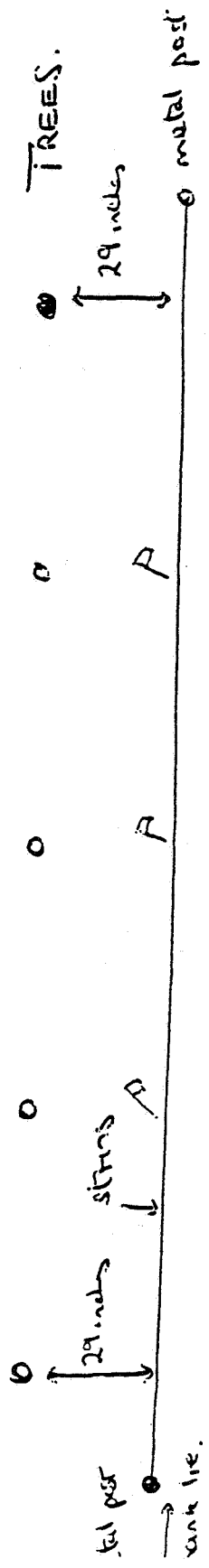
- 1) Orange orchard in FL - normal rainfall is very high - no irrigation has been done nor will be done;
- 2) Peach orchard in CA - normally irrigated;
- 3) Apple orchard in WV - normally not irrigated.

During a follow-up call from Wagner to S. Creeger on July 22, Wagner was told that our comments in the May 30, 1985 review still stand. He admitted that ICI took a risk in initiating the study without benefit of our comments on their protocol. Creeger noted to Wagner that an additional study in an irrigated citrus orchard may be needed and that studies in apple orchards in the northeast and northwest U.S. may be needed. Creeger also recommended that soil cores taken during the next two sampling intervals not be composited but analyzed separately. (The cores should have been analyzed separately earlier in the study). A schematic drawing of the sampling plan is attached.

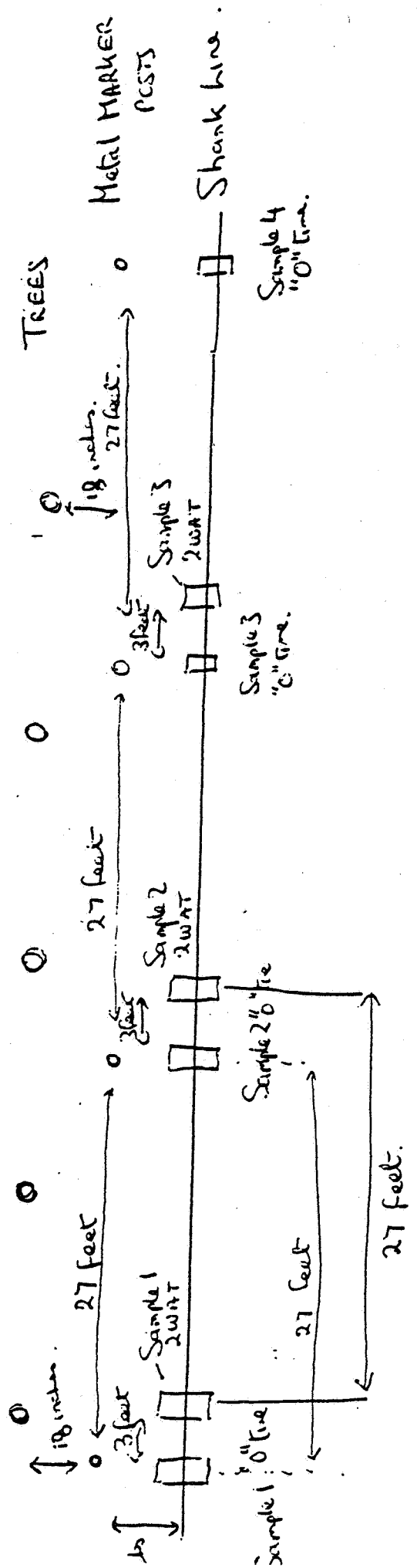

Soo Hong


Sam Creeger

APPLICATION:



MARKING AND SAMPLING:



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