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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 19 1992

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM OF CONFERENCE

SUBJECT: SAN-582H -- Metabolism in Corn. PP#0F3918.
DP Barcode D176597. CB # 9669.

Participants: Jim Fickle, Ada Breaux, Thomas Bade, Paul Moore;
Sandoz Agro, Inc.
John Abbotts, Mike Flood, Jim Stone; EPA. Mike Flood

Time/Place: May 6, 1992, 2:00 PM, Crystal City Marriott.

Representatives of Sandoz met with EPA to discuss additional work done on the metabolism of SAN-582H ("dimethenamid") in corn. CBTS's 1/24/91 review of the submitted metabolism study identified numerous deficiencies (PP#0G3892, memo of M. Flood). There were three major problems with the study: the identified residue was a small percentage of the total residue (a common occurrence with preemergence herbicides); identification was generally made using TLC with only one solvent system; and it was not clear that the solvent fractionation scheme did not partially partition the same unknowns into different solvents, in which case their concentrations would appear lower and our characterization requirements would be less stringent.

Sandoz reported that additional data have been obtained which show that the fractionation scheme does not arbitrarily partition one compound into two solvents. Identification of each component was made by using at least two chromatographic methods. The total percentage identified, however, was still small. For example, less than 19% of the radioactive residue in forage (PHI 50 days) could be identified. Over 40 different metabolites have been isolated in very small quantities.

Metabolites thus far identified have the SAN-582H thienyl ring unchanged. Sandoz could offer no explanation why there were no metabolic reactions involving this ring, but observed that model compounds in which the thienyl ring was modified were synthesized for the metabolism study, and these compounds were definitely not present. The company has been making a major effort to develop a "common moiety" analytical method -- such as the method for alachlor metabolites -- but has so far been unsuccessful. An analytical method is being developed for the sulfonate conjugate of SAN-582H. The conjugate was the major metabolite identified in the corn study, although its

concentration was less than ten percent of the total residue.

We stated that once the complete study has been reviewed, the HED Metabolism Committee would decide whether or not characterization was sufficient. We agreed that if an acceptable metabolism study indicates that residues in ruminants and poultry would be unmeasurable, it should not be necessary to conduct animal feeding studies. Preliminary results suggest that an animal feeding study will be unnecessary.

cc: SF (SAN 582H), RF, Circu., Mike Flood, John Abbotts, E. Haeberer, Jim Stone (H7505C), PP#0G3892, PP#0F3918.

H7509C:CBTS:Reviewer(MTF):CM#2:Rm800A:305-6362:typist(mtf):5/13/92.
RDI:SectionHead:ETHaeberer:5/18/92:BranchSeniorScientist:RALoranger: 5/18/92.