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

APR 26 1993

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Flumetsulam Metabolism in Soybeans and Field Corn. The HED Metabolism Committee Meeting Held on 4/21/93.

FROM: Nancy Dodd, Chemist Nancy Dodd
Tolerance Petition Section II
Chemistry Branch I- Tolerance Support
Health Effects Division (H7509C)

THROUGH: Debra Edwards, Ph.D., Chief
Chemistry Branch I- Tolerance Support
Health Effects Division (H7509C) Debra Edwards

TO: Members of the HED Metabolism Committee
Health Effects Division (H7509C)

Metabolism of flumetsulam in soybeans and field corn was discussed by the HED Metabolism Committee on 4/21/93. Following a discussion of the metabolism in soybeans and corn (see the 4/16/93 briefing memo and the material section below), members of the HED Metabolism Committee were asked to determine the residues of concern in soybeans and field corn.

In response, the HED Metabolism Committee concluded that the residue of concern resulting from the proposed uses of flumetsulam on soybeans and field corn is parent per se. This decision was based on the low levels of total radioactive residues present in plant metabolism studies and the lack of toxicological concern for metabolites which have the sulfonamide linkage intact.

A. Individuals in Attendance:

1. Metabolism Committee: (Signatures indicate concurrence unless otherwise stated)

Richard Schmitt Richard D. Schmitt

Karl Baetcke Karl G. Baetcke

Michael Metzger Michael L. Metzger

Alberto Protzel

Reto Engler

George Ghali George Ghali

2. Scientists: (Non-committee members responsible for data presentation; signatures indicate technical accuracy of panel report)

Elizabeth Doyle E.A. Doyle

Sanyvette Williams S.D. Williams

Elizabeth Haeberer Elizabeth Haeberer

Nancy Dodd Nancy Dodd

3. Metabolism Committee Members in Absentia: (Committee members who were unable to attend the discussion; signatures indicate concurrence with the overall conclusions of the Committee)

Richard Loranger Richard Loranger

B. Material Reviewed:

The plant metabolism data reviewed were soybean metabolism studies (MRID #'s 425135-01 and 425135-02 in PP#2F4036; MRID#'s 419317-12 and 419317-13 in PP#1G4006) and corn metabolism studies (MRID #'s 425738-01 and 425738-02 in PP#2F4036; MRID #'s 419317-14 and 419317-15 in PP#1G4006) submitted to the agency by DowElanco. Low total radioactivity was found in soybeans (beans), corn forage, and corn fodder. No radioactivity (<0.005 ppm) was found in corn grain. The metabolism data were summarized in N. Dodd's briefing memo to the HED Metabolism Committee dated 4/16/93.

No detectable residues of parent per se were found in field trials of soybean grain, corn grain, corn forage, and corn fodder. The analytical method is a GC/MS method which determines parent per se.

Parent was the major residue in the rat metabolism study.

cc: RF, SF, Circu., PP#2F4036, N. Dodd (CBTS), E. Haeberer (CBTS), PM#23, A. Kocialski (CCB)

RDI: E. Haeberer:4/21/93:R. Loranger:4/23/93
H7509C:CM#2:Rm 804F:305-5681:N. Dodd:nd:4/23/93