

SEP 25 1978

PP# 6F1830: Chlorpyrifos on Sorghum.
Amendment of 5/31/78.

Alfred Smith, Chemist, RCB,
Hazard Evaluation Division (TS-769)

PM #12 (Frank T. Sanders) and TOX

THRU: Chief, RCB

The amendment is in response to our letter of 9/26/77 (Frank T. Sanders, PM 12) which indicated several deficiencies of the petition which precluded a favorable recommendation. The petitioner's response seeks to resolve the deficiencies indicated.

A revised label has been submitted. Sweet varieties of sorghum are not to be treated, and the treated crops are not to be used for forage, fodder, hay, or silage within 14 days after the last treatment. These changes resolve the deficiencies noted in items 1 and 4 of our reject letter.

A revised tolerance proposal has been submitted for residues in fodder. A tolerance of 6.0 ppm is now proposed for combined residues of chlorpyrifos and its metabolite in or on sorghum fodder. This resolves the question raised in item 2 of our reject letter.

Grain and Milling Fractions

Samples of grain sorghum were obtained from crops in Mississippi and Kansas. The crops had been treated as proposed and sampled at normal harvest of 49 and 62 days after the last treatment. The grain samples were analyzed and processed to milling fractions. Only the sample from Mississippi yielded sufficient residues in the grain to show residues in the milling fractions.

The grain had residues of 0.27 ppm. The flour, shorts, and middings had residues of 0.06-0.27 ppm. Maximum residues in the bran (0.42 ppm), germ (0.38 ppm), and screenings (0.40 ppm) are all higher than the level in the grain. The concentration factors are: bran (1.6X); germ (1.4X); screenings (1.5X). Contrary to the petitioner's view, a food additive tolerance is necessary to cover residues in these items. While such items are not human foods, they are used in the livestock diet.