US EPA ARCHIVE DOCUMENT

Petition

AUG 11 1976

Pesticide Petition #5F1606 CGA-24705
on corn and meat. Results of method trial

From: Donald Reed, Chemist, CHM
Registration Division (WH-567)

To: Henry M. Jacoby, Product Manager (24) and
Toxicology Branch

Thru: Chief, Chemistry Branch

A method trial has been conducted on the analytical method for residues of CGA-24705 in corn grain and beef liver. Because of the closing of our laboratories, it was necessary to run a portion of the trial at CIBA-Geigy's facilities, North Carolina.

The recoveries are summarized below:

Sample	Compound Used for Fortification	Fortification Level, ppm	% Recovery
corn grain	CGA-37913	0.10	94.88
corn grain	CGA-37913	0.20	89.70
corn grain	CGA-49751	0.10	90.90
corn grain	CGA-49751	0.20	70.70
corn grain	CGA-24705	0.10	38.49
liver	CGA-37913	0.085	99.100
liver	CGA-49751	0.080	43.45

We considered these results acceptable for the following reasons:

The method is designed to convert CGA-24705 and numerous metabolites to the two compounds, CGA-37913 and CGA-49751 using a HCl hydrolysis step. As noted, the recoveries were generally good when fortifications were made with the determined compounds. The conversion of parent CGA-24705 is not complete but was consistently in the 50% area in the petitioner's data. Our recoveries of parent measured as CGA-37913 were 38 and 49% which are in line with the petitioner's data.

Our chemists estimate that the method would require two chemists 4 days to run a single corn grain sample and 5 days to run a single beef liver sample. Such a time-consuming method would not be suitable for routine enforcement use. However, we anticipate that no enforcement action would be necessary. The residue data indicate that no detectable residues resulted in corn grain from exaggerated treatments at 2x. Since, the pesticide is a herbicide, gross misuse would be expected to result in crop loss. The petitioner has revised Section B to restrict the use of corn forage (see our memo of July 16, 1976) so that no tolerance is proposed for corn forage and fodder (until TOX requirements are met). No tolerances are presently required on meat, fat, and meat by-products, since no residues are expected on the remaining feed item, corn grain, (Category 3, 180.6(a).

Conclusions and Recommendations:

If TOX considerations permit, we recommend establishment of the tolerance as proposed in the Revised Section as of June 4, 1976 at 0.1 ppm in or on corn grain, excluding popcorn.

cc:TOX:EEE:FDA:CHM(5)
WH-567:DREED:mer:Rm 108:WSME:X62610:8/11/76