

ISA/PK PP# 140528

Petitions Control Branch and
Division of Toxicological Evaluation

September 21, 1966

Pesticides Branch, Division of Food
Standards and Additives

AF 9-577

PP #760528: Temporary tolerance for Benefin on peanuts.

The Elanco Products Company proposes a temporary tolerance for residues of N-butyl-N-ethyl-a,a,a-trifluoro-2,6-dinitro-p-toluidine (Benefin, Balan) at 0.05 ppm in peanuts from its use as a pre-emergence herbicide.

Under this temporary tolerance a total of 360 pounds of Balan L.C. formulation (or about 60 pounds active ingredient) are to be used in 5 states. When applied at the minimum recommended rate, this amount would be enough to treat about 75-100 acres of peanuts or approximately 0.004% of the acreage planted to peanuts in the United States.

Detailed considerations pertaining to this evaluation are embodied in the accompanying evaluation of the copending petition #760514 which proposes a permanent tolerance for Benefin on peanuts which will follow very shortly. For this reason we have dispensed with statements in this review on the need for additional data for a permanent tolerance.

Conclusions:

No metabolism data for Benefin on peanuts was submitted with either this petition or with petition #760514. However, since Benefin is structurally very similar to Treflan, it is reasonable to expect that their metabolites might also be similar. A list of possible metabolites of Treflan has been compiled in Table I. Studies of Treflan on cotton have shown trace amounts of Metabolite II to be present. Radiometric studies of Treflan on soybeans have shown an unidentified metabolite to be present at levels as high as 0.13 ppm.

The data reported show no detectable residues of the parent compound, Benefin (<0.01 ppm) on peanuts resulting from the proposed usage. This does not include any metabolites, nonetheless we feel the residue data are adequate for the purposes of this temporary tolerance involving about 60 pounds of active ingredient.

The residue data presented show that this use on peanuts will also result in Benefin residues on peanut hay and hulls (max. calc. value approximately 0.05 ppm), both of which are livestock feeds. The label does bear a restriction against grazing livestock on treated fields or feeding forage from treated fields to livestock. Considering the small amounts of material actually involved in this experimental usage,

we feel that this restriction is practical particularly in light of the fact that a large proportion of the peanuts and peanut hay grown is used for feeding by the grower himself and thus remains under his control. The hulls from the shelling plant are normally a minor feed item.

There is thus no reasonable expectancy of residues in meat or in milk from this experimental usage.

Recommendation:

Pharmacological considerations permitting, we recommend that the proposed temporary tolerance for Benefin at 0.05 ppm in peanuts be established.

R.S. Quick

cc:

DTE
SCI-R
SCI-OD
DFC(Jones)
BRC(Johnson)
FSA/OD
FSA/PB
PP #7G0528
FSA/Quick
PP #7F0514

RSQuick:dep-md
9/21/66

RD/I--JAlpert