

D.P.

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Date:
Replied to:
Action of:

August 4, 1972

Subject:

Request for a tolerance for gibberellic acid of 0.15 ppm in or c sugar cane.

To:

Mr. Drew M. Baker, Jr., Chief
Petitions Control Branch
Pesticides Tolerances Division

Pesticide Petition No. 3F1296

Abbott Agricultural & Veter
Division
North Chicago, Illinois 6

Related Petitions: 404, 7F0544, 8F0658, 0G0857, 2E1223

Present Tolerances:

40 CFR 180.224

0.15 ppm (negligible)

- artichokes, blueberries, citru
grapes, hops, leafy vegetables
fruits

40 CFR 121.1010

2 ppm
0.5 ppm

- malt
- finished malt beverage

No new toxicity data was submitted with the current petition.
following is a summary of the toxicity tests previously submit
and evaluated:

Test	Species	Compound	Result
Acute Oral	House	Gibberellic acid in CFC	LD50 > 25.0
		Gibberellic acid in dilute NaOH	LD50 15.1
		Gibberellic acid spray dried	LD50 6.3
	Rat	Gibberellic acid in CFC	LD50 > 15.0

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75

Test	Species	Compound	Result
		Gibberellic acid in dilute NaOH	LD ₅₀ > 15.0 g/kg
	Dog	Gibberellic acid	LD ₅₀ > 5 g/kg
		Gibberellic acid spray dried	LD ₅₀ > 0.5 g/kg
5-Month feeding study	Rat	Na salt	Body weights decre at 400 ppm
15-Week feeding study	Rat	5% gibberellic acid	No effect
90-day feeding study	Dog	Na salt	No effect at 1000
4 1/2 Week feeding study	Rat	Na salt	No effect at 1000
90-Day feeding study	Rat	Gibberellic acid	No effect at 1 g
212-375 Day feeding study	Rat	Gibberellic acid	No effect at 10,
202 Day Feeding study	Rat	Gibberellic acid	No effect at 10
398 Day Feeding study	Rat	Gibberellic acid	No effect at 10
187 day feeding study	Dog	Gibberellic acid	No effect at 0.
385 Day feeding study	Dog	Gibberellic acid	No effect at 1
385 day feeding study	Dog	Gibberellic acid	No effect at 0 for 187 days for 198 days
2-Year carcino- genicity	Rat	Gibberellic acid	Negative
Reproduction Study	Pat	Na salt	Negative

242

The toxicity data which has been previously submitted supports the proposed tolerance. The memo of Mr. E.L. Gunderson (PP# 009857, August 29, 1969), discloses that residues of gibberellic acid resulting from the proposed use (on sugarcane) will be of a lower order of magnitude (<0.05 ppm). Significant gibberellic acid residues would not be expected in sugar, syrup, or molasses derived from treated sugarcane. Significant residues would not be expected in the bagasse and hence there would be no problem of transfer of residues to meat and milk. If CB's conclusions remain unchanged, TB can support the proposed tolerance on sugarcane and can consider said tolerance as negligible if the petitioner should request such (present temporary tolerance is negligible and all existing tolerances - all at this same level - are negligible residue tolerance).

RECOMMENDATION

Toxicology Branch finds the proposed tolerance of 0.15 ppm gibberellic acid in or on sugarcane to be safe.



William E. Parkin, D.V.M., D.P.H.
Toxicology Branch
Pesticides Tolerances Division

cc: JCCummings
PRD/EPA
Atlanta Branch (CLewis)
Perrine Branch
Division Reading File
Branch Reading File
PP# 3F1296

R/D Init:GEWhitmore 8/4/72
WEParkin:em 8/4/72
Init:GEWhitmore *A.W.*