

DATE: April 26, 1978

SUBJECT: Glyphosate, request for tolerance for combined residues for it and its metabolite, aminomethylphosphonic acid, on asparagus at 0.2 ppm (negligible).

FROM: TB/RD

TO: PM Mr. R. Taylor

PP No. 8F2070

Joint venture, of
Monsanto and IR-4

8/21/78

Proposed use of Roundup on asparagus which would provide residues for which tolerance is requested (cf. memo title, above) would involve pre-emergence or post-harvest (after spears have been removed) use at 1 to 1½ quarts of product (formulation containing 39.9% isopropylamine salt of glyphosate). EPA Registration No. of formulation is 524-309.

All supporting TOX data on glyphosate are by reference to previous submissions. These studies include 90-day rat and dog feeding, 2-yr rat and dog feeding, mouse mutagenicity, rabbit teratologic, rat reproduction, and mouse carcinogenicity studies, all from Industrial Bio-test. In addition, there are a hen delayed neurotoxicity and a rat cholinesterase study.

For summary of all test results, cf. Mr. R. Landolt's memo, 3/15/77, PP 6F1798. These studies support tolerances.

However, the question of TOX significance of nitrosoglyphosate - occurrence in treated commodities remains unsettled. We do not have CHM memo for this PP; previously, CHM estimated up to 20 ppb nitrosoglyphosate occurring in treated commodities. Petitioner has submitted TOX data on nitrosoglyphosate evaluated by TB as partially satisfactory (in 10/4/77 memo, PP No. 5F1560 and several other PPs). Notably, the projected 18-mo. hamster carcinogenicity study on nitrosoglyphosate had gone only 6 months; it does not, of course, determine carcinogenicity status of nitrosoglyphosate at this early stage.

Conclusion: Essential TOX data on nitrosoglyphosate being incomplete, and recommend for the requested tolerance.

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nearly supporting studies on glyphosate, from IBT, being unverified, we do not
EPA FORM 1320-6 (REV. 3-76) Mary L. Quaife, Ph.D., TB/RD