UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

623A

DATE: January 23, 1981

SUBJECT: Oryzalin (3,5-dinitro-N^4,N^4-di-n-propylsulfanilamide), TB/HED evaluations of requested tolerances on citrus, pome and small fruits; stone fruits; nuts; avocado; kiwi; olive; pomegranates; pistachios; figs; almond hulls at 0.05 ppm.

FROM: Mary L. Quaife, Ph.D., TB/HED (TS-769) MLQ 1/29/81 MLQ for RB Jaeger, 1/24/81

TO: Mr. Robert Taylor, PM
Registration Division (TS-767)

THRU: Mr. William Burnam, Acting Chief WB Burnam 1.29.81
Toxicology Branch/HED (TS-767)

PP No. 6F1859

Eli Lilly and Company
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That complete reports with data - including those on chronic feeding/oncogenicity, reproduction, teratology, and dominant lethal studies - need to be reviewed before further considering the PP was found by Dr. L. Anderson, TB/HED (12/5/79, this PP). Mr. D. L. Ritter, TB/HED, noted, 11/18/76, this PP, that oryzalin products are to be held up until resolution of the "nitrosamine problem."

Subsequently submitted rat and rabbit teratology studies on oryzalin were judged by Dr. Anderson (1/2/80) as "unremarkable" at up to 225 mg/kg/day (rat) and not teratogenic at up to 155 mg/kg/day, but negative for fetotoxicity only at 25 mg/kg/day (rabbit). To allay certain disquieting aspects, Dr. M. Adrian Gross, TB/HED chief, asked for a repeat teratology study in the rabbit and a new one on oryzalin in a third species; also for a repeat dominant lethal study (reviewed as raw data, only) (cf. EPA ltr., 5/22/80).

Recently, Petitioner supplied reports of rat chronic/oncogenicity, rat reproduction, rat dominant lethal (in final form), and bacterial mutagenicity (Ames) studies on oryzalin and related compounds.

We reviewed these studies (memos, dated 1/7/81 and 1/23/81, which will accompany this memo). In addition, we reviewed a proposed (10/7/80) protocol from Petitioner for a second rabbit teratology study on oryzalin and commented on Petitioner's proposal not to comply with TB/HED's earlier request for a new dominant lethal study and a teratology study in a third species (memo of 12/8/80, which will accompany this memo).

Of the four studies which we reviewed, the rat dominant lethal is judged unacceptable, and questions are raised with regard to the rat oncogenicity and rat reproduction studies. The bacterial mutagenicity tests are found acceptable.

Petitioner has stated that a mouse oncogenicity study will not be submitted until sometine in 1981.

It appears that a general metabolism study on oryzalin is a data gap, also.