Preliminary Quantitative Usage Analysis

of

Fonofos

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INTRODUCTION

PURPOSE OF ANALYSIS

This report is a preliminary quantitative usage analysis of the pesticide uses of fonofos (Dyfonate). Fonofos is a soil insecticide produced by the Stauffer Chemical Company. The material in this analysis is intended as an input into detailed risk/benefit analyses which will be conducted by the Environmental Protection Agency as part of the development of a registration standard for fonofos. The usage estimates presented here are preliminary and subject to revision during the registration standards development process as intra-agency and interagency review, public comments and public hearings may provide additional data.

SCOPE AND APPROACH

This analysis summarizes the usage estimates for the pesticide uses of fonofos as a soil insecticide for control of corn borer, corn rootworms, wireworms, seed corn maggots, symphylans (garden centipedes) and other soil pests. The estimates presented here are based on available information within EPA including published pesticide usage surveys. Usage is sometimes presented in ranges which reflect annual variation in cropping patterns and pesticide usage.

Table 1

Derivation of Net Supply for Domestic Usage of Fonofos as a Pesticide, Typical Current Year Basis (1980-1982)

	Pounds Active Ingredient (000)
Domestic Production	[redacted]
Imports	
Exports	
Net Supply for Usage	

COMMERCIAL/FINANCIAL INFORMATION IS NOT INCLUDED

II. GENERAL PRODUCTION AND USAGE QUANTITIES

Fonofos is a soil insecticide produced by the Stauffer Chemical Company. About [redacted] annually in the U.S. (Table 1). No report of significant imports or exports of fonofos have been found and thus material available for domestic use is estimated to be about [redacted] active ingredient per year.

Fonofos is used principally on corn with the Mid West region being the primary area of usage. Smaller quantities are used on field crops including peanuts, sugar beets, potatoes, tobacco and sugarcane. Table 2 provides estimates of the usage of fonofos by site.

COMMERCIAL/FINANCIAL INFORMATION IS NOT INCLUDED

Table 2

Domestic Usage of Toxaphene as a Pesticide
by Usage Sector and Site, Typical Current Year Basis (1979).

Sectors/Site	Approx. Quantity A. I. Pounds(000)	Percent	Pct. of Site Treated Per Yr.	Regional/States Usage Info.
Agricultural:				
Major sites:				
corn	10,420	95	8	Midwest
peanuts	243	2	4	GA, NC, SC, AL, TX
sugar beets	193	2	6	CA, MN, ND,
potatoes (Irish)	129	1	4	ID, OR, WA, ME
sugarcane	8	<1	<1	South, Hawaii
tobacco	7	<1	<1	NC, KY, MD, SC, VA, GA
Total	11,000	100		
Grand Total	11,000	100		

III. SITE SPECIFIC USAGE

CORN

Fonofos is applied to corn to control corn borer, corn rootworms, wireworms, seedcorn maggot, symphylans (garden centipedes) and other soil pests. Applications can be made by foliar application or by ground equipment; also postemergent soil application at cultivation (band). About 9,571 thousand acre treatments are estimated on about 48,000 farms (Table 3).

Other Uses

Fonofos is applied on relatively small proportions of the acreage of sugarcane and tobacco. Application may be made at planting, or broadcast by ground equipment on these sites. An estimated 3,000 acres of sugarcane, and 9,000 acres of tobacco are treated. Also a very small proportion of the acreage of peanuts, sugar beets, and potatoes (Irish) are treated. An estimated 940 farms treat with fonofos (peanuts), 570 farms (sugar beets), and 270 farms (potatoes) (Table 3).

Table 3

Site Specific Usage of Fonofos

Site	Pounds AI (000)	Number of of Acre Treatments (000)	Base Acreage Treated (000)	Principal Application Method	Number of Farms Treated
Corn	10,420	9,571	6,838	Ground equipment	48,000
Peanuts	243	81	65	Banded soil application	940
Sugar Beets	193	70	61	Banded soil application	570
Potatoes	129	43	43	Broadcast soil application	270
Tobacco	7	9	9	Preplant broadcast	750
Sugarcane	8	3	3	Banded soil application	250

Source: EPA estimates