Quantitative Usage Analysis for propargite
Case Number: 243 PC Code: 97601
Analyst: Jihad Alsadek Date: Revised August 16, 2000

Based on available pesticide survey usage information for the years 1988 through 1998, an annual estimate of propargite's total domestic usage averaged almost two million pounds active ingredient (a.i.) for over a million acres treated. Most of the acreage is treated with two and a half pounds a.i. or less per application and two pounds and a half a.i. per year. Propargite is an insecticide with its largest markets in terms of average total pounds active ingredient allocated to corn, cotton, grapes, almonds, mint, and walnuts. The remaining usage is primarily on apples, peaches, alfalfa, dry beans, potatoes, tangelos, nectarines, and peanuts. Tolerances for apples, apricots, succulent beans, cranberries, dried figs, fresh figs, peaches, pears, plums (fresh prunes), and strawberries have been revoked. Only six of them (plums and prunes, strawberries, apples, apricots, peaches, and pears, highlighted at the end of the usage profile) still show propargite use and the rest show very little or no use at all, and that is why they are not listed (fresh and dried figs, cranberries, and succulent beans). Most of the usage is in FL, CA, MI, ID, WA, TX, AND MN. **Changes to the May 25, 2000 QUA are italized. These changes may change the risk measure for this chemical.**

Site	Acres (000) Grown	Acres Ttd (000)		% Crop Ttd		Lb AI (000)		Ave. Appl Rates			States of Most Usage (% of total lb ai used on this site)
		Weighted Average	Est Max	Weighted Average	Est Max	Weighted Average	Est Max	lb ai/ acre/yr	# appl /year	lb ai/A /appl	
Grapefruit	350	3.1	6.2	0.9%	1.8%	7.8	15.6	2.5	1.1	2.3	FL 100%
Lemons	62	0.1	0.9	0.2%	1.4%	0.3	1.6	2.4	1.0	2.4	CA 100%
Oranges	1,750	12.0	24.0	0.7%	1.4%	43.4	153.0	3.6	1.4	2.6	FL 95%
Tangelos	20	0.2	1.0	0.9%	5.0%	0.4	2.5	2.5	1.0	2.5	FL 100%
Cherries, Sweet	47	2.6	6.0	5.5%	12.9%	6.5	6.9	2.5	1.0	2.5	CA 100%
Cherries, Tart	49	0.2	1.0	0.4%	2.1%	0.5	2.8	2.8	1.0	2.8	MI 100%
Nectarines	27	6.0	12.0	22.2%	44.4%	20.0	40.0	3.3	1.0	3.3	CA 100%
Stone-Like Fruit, Other	188	15.5	43.7	8.2%	23.2%	33.7	104.1	2.2	1.1	1.9	CA 85%
Grapes [1]	829	180.0	249.4	21.7%	30.1%	350.0	487.5	1.9	1.3	1.6	CA 100%
Almonds	435	150.0	256.5	34.5%	58.9%	320.0	542.0	2.1	1.2	1.8	CA 99%
Walnuts	204	51.6	94.5	25.3%	46.3%	120.0	180.4	2.3	1.2	2.0	CA 100%
Carrots	104	0.6	2.0	0.6%	1.9%	0.2	0.4	0.4	1.0	0.4	CA 100%
Potatoes	1,433	29.6	84.2	2.1%	5.9%	43.0	126.2	1.5	1.0	1.5	WA 85%
Sweet Corn	731	3.7	7.3	0.5%	1.0%	10.0	20.1	2.7	1.4	2.0	CA WA 83%
Beans, Dry	1,809	87.4	180.0	2.0%	4.0%	50.4	111.4	0.6	1.0	0.6	CA ID WA 100%
Sorghum	11,115	22.0	44.0	0.2%	0.4%	2.8	5.5	0.1	1.0	0.1	TX 99%
Corn	73,357	280.0	504.0	0.4%	0.7%	460.0	891.5	1.6	1.0	1.6	CA NE CO KS 86%
Alfalfa	23,701	28.9	73.6	0.1%	0.3%	54.9	139.4	1.9	1.2	1.6	NV CA WA ID 83%
Peanuts	1,581	11.4	46.0	0.7%	2.9%	22.5	87.9	2.0	1.0	1.9	AL GA NC FL VA 91%
Cotton	12,859	210.0	372.0	1.6%	2.9%	360.0	706.1	1.7	1.2	1.5	CA AZ TN 94%
Hops	42	23.2	32.0	5.0%	8.0%	33.8	46.7	1.5	1.0	1.5	WA OR 93%
Sugar Beets	1,425	1.8	3.0	0.1%	0.2%	5.0	10.0	2.8	1.0	2.8	CA TX 81%
Tangerines	24	0.2	1.0	0.8%	4.3%	0.5	2.4	2.4	1.0	2.4	FL 100%
Mint*	170	37.4	57.8	22.0%	34.0%	-	-	-	-	-	-
Ornamental*	-	-	-	-	-	2.0	3.0	-	-	-	-
Boysenberries*	2	-	-	-	-	-	-	-	-	-	-
Rasperries*	17	-	-	-	-	-	-	-	-	-	-
Currants*	1	-	-	-	-	-	-	-	-	-	-
Limes*	4	-	-	-	-	-	-	-	-	-	-

Filberts*	33	-	-	-	-	-	-	-	-	-	-
Macadamia and Pistachio Nuts*	116	-	-	-	-	-	-	-	-	-	-

Site	Acres (000) Grown	Acres Ttd (000)		% Crop Ttd		Lb AI (000)		Ave. Appl Rates			States of Most Usage (% of total lb ai used on this site)
		Weighted Average	Est Max	Weighted Average	Est Max	Weighted Average	Est Max	lb ai/ acre/yr	# appl /year	lb ai/A /appl	
Quinces*	-	-	-	-	-	-	-	-	-	-	-
Dates*	7	-	-	-	-	-	-	-	-	-	-
Persimmons*	4	-	-	-	-	-	-	-	-	-	-
Clover*	-	-	-	-	-	-	-	-	-	-	-
Plantations (Chris. trees)*	136	-	-	-	-	-	-	-	-	-	-
Pine Plantations*	36	-	-	-	-	-	-	-	-	-	-
Fir(Grand, Douglas, & Noble)*	-	-	-	-	-	-	-	-	-	-	-
Scotch Pine*	-	-	-	-	-	-	-	-	-	-	-
Carnation*	-	-	-	-	-	-	-	-	-	-	-
Chrysanthemum*	-	-	-	-	-	-	-	-	-	-	-
Rose*	-	-	-	-	-	-	-	-	-	-	-
Jojoba*	6	-	-	-	-	-	-	-	-	-	-
Blue spruce*	-	-	-	-	-	-	-	-	-	-	-
Even though there are no food-use for these crops on the label, still some propargite use occurs											
Pecans (nonbearing)	492	0.5	1.1	0.1%	0.2%	0.6	1.1	1.0	1.1	1.0	GA CA 95%
Avocados (nonbearing)	82	2.9	6.0	3.5%	7.3%	6.0	12.0	2.1	1.0	2.1	CA 100%
Tolerances for these crops have been revoked but some usage still occurs on the nonbearing acreage											
Plums & Prunes	47	3.6	7.2	7.7%	15.3%	6.0	12.0	1.7	1.1	1.5	CA 91%
Strawberries	16	2.5	5.0	15.6%	31.3%	4.0	8.0	1.6	1.0	1.6	CA OR 84%
Apples	170	18.0	36.0	10.6%	21.2%	32.0	64.0	1.8	2.2	0.8	NY WA MI MA CA ME 64%
Apricots	6	0.1	0.2	1.2%	6.0%	0.2	1.0	2.9	1.0	2.9	CA 100%
Peaches	87	10.0	20.0	11.5%	23.0%	21.0	42.0	2.1	1.3	1.6	CA 81%
Pears	25	0.1	0.2	0.2%	1.3%	0.1	0.2	1.3	1.4	1.0	NY WA MA CA MI 87%
Total		**1,120**	**2,043**			**1,807**	**3,539**				

COLUMN HEADINGS

Weighted average--the most recent years and more reliable data are weighted more heavily.
Est Max = Estimated maximum, which is estimated from available data.
Average application rates are calculated from the weighted averages.

NOTES ON TABLE DATA

Usage data primarily covers 1988 - 1998.

***: These are registered sites but have little or no propargite usage.**

Tea is imported from China (1% of total tea acres grown is treated), Indonesia (1%), Japan (0.03%), Taiwan (0.1%), and Vietnam (0.01%). 2.14 percent of the tea imported from these countries is treated with propargite. The value for each country is the product of the percent of the tea treated in this country multiplied by the percent of U.S. imports from each country. The first percent is how much tea is treated divided by the total amount of tea grown in this country, multiplied by 100. The second percent is how much is imported from this country divided by the total amount of world tea produced, multiplied by 100. BEAD used Produce Studies data base for the first percent and FATUS for the second.

[1]:*Available data show that approximately 67 percent of grape juice consumption come from the US, and the other third comes from imports. It is estimated,*

based on available proprietary and foreign data, that almost 9 percent of grape juice is treated with propargite. This 9 percent is a weighted average from domestic data (CA data); 11 percent for wine, 54 for raisins, 20 for table, zero for other states, and less than 1 percent for US imports. Us imports is divided as follows: 3.3 percent for chile, 1.2 for Italy, and 7.3 for France. Domestic percentages for the three types of grapes (wine, raisins, and table) are calculated by dividing total area treated by total area grown, both treated and untreated, multiplied by 100. Foreign percentages are calculated as follows: 1) percent of crop treated is done for each country (acres or hectares treated are divided by acres or hectares grown) times 100. 2) Percent of US grape imports is calculated for each exporting country (Amount imported is divided by total amount of world grapes production) times 100. These two percentages are then multiplied by one another for each country and then summed up to get the 9 percent weighted average of propargite treated grape juice.
Other/Crop Groups

Stone-Like Fruit, Other includes apricots, avocados, dates, nectarines, olives, coconuts, mangoes, and feijoa.

SOURCES: EPA data (1988-98), USDA/NASS (1990-97), National Center for Food and Agricultural Policy (1992), CA (1993-95), and Maritz (1996, partial).