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Subject: Imazalil: Importance in IPM Programs

I am responding to your request for information about the importance of imazalil in Integrated Pest Management (IPM) programs. This response from the Western IPM Center provides input from a seven-state region: Alaska, California, Idaho, Montana, Oregon, Utah, and Washington.

Citrus: (This information provided by Jim Farrar, Director, Western IPM Center)

In California the primary use of imazalil is for the control of post-harvest fungal rots (primarily blue mold and green mold) in citrus fruits.

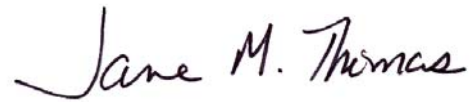
Other Uses: (This information provided by Jay Pscheidt, Oregon State University)

Imazalil has been used as a seed treatment in grains and can be very useful under the right circumstances. More recently imazalil has been labeled as a total release fogger for use in greenhouses. (Foggers give very good coverage which can be critical in the control of certain diseases.)

I have attached the 2011 California imazalil use information.

I hope you find this information useful.

Sincerely,

A handwritten signature in black ink that reads "Jane M. Thomas". The signature is written in a cursive style with a large initial 'J' and a long, sweeping underline.

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2011 California Imazalil Use Data

SITE NAME	PRODUCT NAME	POUNDS PRODUCT APPLIED	CHEMICAL NAME	POUNDS CHEMICAL APPLIED	AMOUNT TREATED	UNIT TREATED
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700 I	267.4303	IMAZALIL	119.0064835	15466	T
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 75 WSG	6	IMAZALIL SULFATE	6	3442	T
CITRUS FRUITS (ALL OR UNSPEC)	FRUIT-A-PEEL IMZ	271.8279	IMAZALIL	120.9634155	10852.3	T
CITRUS FRUITS (ALL OR UNSPEC)	FUNGAFLOR 500 EC	862.8947	IMAZALIL	384.8510362	116579	T
CITRUS FRUITS (ALL OR UNSPEC)	FUNGAFLOR 75 WSG	154.4	IMAZALIL SULFATE	154.4	50000	T
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLOR 500 EC	9.338	IMAZALIL	4.164748	33.2	C
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLOR 500 EC	1317.7218	IMAZALIL	587.7039228	63625.9	T
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLOR 75WSG	52.9	IMAZALIL SULFATE	52.9	17143	T
GRAPEFRUIT	DECCOZIL EC-289	18.0961	IMAZALIL	4.0173342	1751.74	T
GRAPEFRUIT	FRUIT-A-PEEL IMZ	10.2076	IMAZALIL	4.542382	777.36	T
LEMON	DECCOZIL EC-289	1196.1416	IMAZALIL	265.5434352	39238.95	T
LEMON	FRESHGARD 700 I	17.5633	IMAZALIL	7.8156685	2708	T
LEMON	FRESHGARD 75 WSG	4.1	IMAZALIL SULFATE	4.1	1554	T
LEMON	FRUIT-A-PEEL IMZ	51.9566	IMAZALIL	23.120687	1946.74	T
ORANGE (ALL OR UNSPEC)	DECCOZIL EC-289	4869.3869	IMAZALIL	1081.003892	114392.97	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 700 I	1743.4489	IMAZALIL	775.8347605	141020.2	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 75 WSG	120.3	IMAZALIL SULFATE	120.3	54901	T
ORANGE (ALL OR UNSPEC)	FRUIT-A-PEEL IMZ	2530.2554	IMAZALIL	1125.963653	163807.8	T
PUBLIC HEALTH PEST CONTROL	PACRITE FUNGAFLOR 500 EC	7749.3614	IMAZALIL	3456.215184		
STRUCTURAL PEST CONTROL	CLINAFARM EC	1.7024	IMAZALIL	0.2349312		
STRUCTURAL PEST CONTROL	PACRITE FUNGAFLOR 500 EC	214.2122	IMAZALIL	95.5386412		
TANGELO	FRUIT-A-PEEL IMZ	47.057	IMAZALIL	20.940365	1256.92	T
TANGERINE (MANDARIN, SATSUMA, MURCOTT, ETC.)	FRUIT-A-PEEL IMZ	88.6018	IMAZALIL	39.427801	2858.77	T
TANGERINE (MANDARIN, SATSUMA, MURCOTT, ETC.)	FRUIT-A-PEEL IMZ	429.6371	IMAZALIL	191.1885095	10923.24	U
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700	38.438	IMAZALIL	17.143348	241002.94	U
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 75 WSG	102.44	IMAZALIL SULFATE	102.44	892027.5	U
CITRUS FRUITS (ALL OR UNSPEC)	FUNGAFLOR 500 EC	2325.776	IMAZALIL	1037.296096	249799	T
CITRUS FRUITS (ALL OR UNSPEC)	FUNGAFLOR 75 WSG	716.0404	IMAZALIL SULFATE	716.0404	57024	T

2011 California Imazalil Use Data

CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLO 500 EC	247.0816	IMAZALIL	110.1983936	26512	T
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLO 500 EC	362.3117	IMAZALIL	161.5910182	38876	U
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLO 75WSG	381.5	IMAZALIL SULFATE	381.5	42768	T
GRAPEFRUIT	FRUIT-A-PEEL IMZ	1.1229	IMAZALIL	0.4996905	62.13	T
LANDSCAPE MAINTENANCE	FRUIT-A-PEEL IMZ	67.3701	IMAZALIL	29.9796945		
LEMON	FRESHGARD 700 I	40.5127	IMAZALIL	18.0281515	3715	T
LEMON	FRESHGARD 75 WSG	31	IMAZALIL SULFATE	31	3715	T
LEMON	FRUIT-A-PEEL IMZ	0.2042	IMAZALIL	0.090869	9.88	T
ORANGE (ALL OR UNSPEC)	DECCOZIL EC-289	14293.9222	IMAZALIL	3173.250728	299981.89	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 700 I	24.3545	IMAZALIL	10.8377525	2131	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 75 WSG	22	IMAZALIL SULFATE	22	2725	T
ORANGE (ALL OR UNSPEC)	FRUIT-A-PEEL IMZ	571.6247	IMAZALIL	254.3729915	11603.47	T
LANDSCAPE MAINTENANCE	MAGNATE 500 EC	2.4915	IMAZALIL	1.1087175		
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700	1536.1885	IMAZALIL	685.140071	192636.1	T
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 75 WSG	210.75	IMAZALIL SULFATE	210.75	37028.78	T
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700	33.33	IMAZALIL	14.86518	208976.9	U
COMMODITY FUMIGATION	FRESHGARD 700	177.9387	IMAZALIL	79.3606602		
ORANGE (ALL OR UNSPEC)	FRESHGARD 700 EC	4.6648	IMAZALIL	2.0805008	1141	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 700 I	25.5252	IMAZALIL	11.358714	4937	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 75 WSG	75.7	IMAZALIL SULFATE	75.7	11718	T
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700 I	176.5696	IMAZALIL	78.573472	6826	T
CITRUS FRUITS (ALL OR UNSPEC)	FUNGAFLO 500 EC	1775.1429	IMAZALIL	791.7137334	239566	T
CITRUS FRUITS (ALL OR UNSPEC)	FUNGAFLO 75 WSG	620.8404	IMAZALIL SULFATE	620.8404	163944	T
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLO 500 EC	575.2166	IMAZALIL	256.5466036	77819	T
CITRUS FRUITS (ALL OR UNSPEC)	PACRITE FUNGAFLO 75WSG	350	IMAZALIL SULFATE	350	59024	T
GRAPEFRUIT	DECCOZIL EC-289	41.9836	IMAZALIL	9.3203592	3217.21	T
GRAPEFRUIT	FRESHGARD 700 I	7.0253	IMAZALIL	3.1262585	572	T
GRAPEFRUIT	FRESHGARD 75 WSG	2	IMAZALIL SULFATE	2	572	T
GRAPEFRUIT	FRUIT-A-PEEL IMZ	119.3266	IMAZALIL	53.100337	6820.01	T

2011 California Imazalil Use Data

LEMON	DECCOZIL EC-289	1566.986	IMAZALIL	347.870892	54587.6	T
LEMON	FRUIT-A-PEEL IMZ	303.3694	IMAZALIL	134.999383	10489.16	T
LIME (MEXICAN LIME, ETC.)	DECCOZIL EC-289	0.2792	IMAZALIL	0.0619824	8.95	T
ORANGE (ALL OR UNSPEC)	DECCOZIL EC-289	6653.4828	IMAZALIL	1477.073182	228375.71	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 700 I	196.7088	IMAZALIL	87.535416	9810	C
ORANGE (ALL OR UNSPEC)	FRESHGARD 700 I	2079.9613	IMAZALIL	925.5827785	123695	T
ORANGE (ALL OR UNSPEC)	FRESHGARD 75 WSG	13.4	IMAZALIL SULFATE	13.4	3395	C
ORANGE (ALL OR UNSPEC)	FRESHGARD 75 WSG	169.9	IMAZALIL SULFATE	169.9	64616	T
ORANGE (ALL OR UNSPEC)	FRUIT-A-PEEL IMZ	13078.4643	IMAZALIL	5819.916614	468575.08	T
TANGELO	FRUIT-A-PEEL IMZ	275.9109	IMAZALIL	122.7803505	11422.98	T
TANGERINE (MANDARIN, SATSUMA, MURCOTT, ETC.)	FRUIT-A-PEEL IMZ	269.1739	IMAZALIL	119.7823855	8439.06	T
TANGERINE (MANDARIN, SATSUMA, MURCOTT, ETC.)	FRUIT-A-PEEL IMZ	59.4082	IMAZALIL	26.436649	2373.26	U
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700	865.781	IMAZALIL	386.138326	2846349.75	C
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 700	149.3261	IMAZALIL	66.5994406	936265.09	U
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 75 WSG	235.35	IMAZALIL SULFATE	235.35	2067637	C
CITRUS FRUITS (ALL OR UNSPEC)	FRESHGARD 75 WSG	79.16	IMAZALIL SULFATE	79.16	695420.6	U
LEMON	DECCOZIL EC-289	4323.0595	IMAZALIL	959.719209	352883.06	T
LEMON	DECCOZIL EC-289	766.3695	IMAZALIL	170.134029	41007	U
RESEARCH COMMODITY	PRESCRIPTION TREATMENT BRAND FUNGAFLOR TR DRY MICRO TOTAL RELEASE FUNGICIDE	0.125	IMAZALIL	0.0175		
						T=tons
						U=Misc Units
						C=cubic feet of commodity