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October 21, 2005

Mr. Phil Poli
USDA/ARS/OPMP
1400 Independence Avenue, SW
Room 3871-South Bldg., Mail Stop 0315
Washington, DC 20250-3191

Dear Phil,

This letter is in response to your request from Paul Whatling of Cheminova with some very specific questions concerning the use of dimethoate on citrus, broccoli, and cauliflower grown in California. Dr. Whatling noted that Cheminova is looking at application rate reductions, seasonal application reductions and loss of aerial application.

Questions regarding use of dimethoate on citrus: The USDA Crop profiles seem to indicate that dimethoate is used in California, but no information was given about the use pattern (pests controlled, maximum single application rate needed, maximum number of applications per year that are needed, minimum re-treatment interval required, and application methods needed). Is this information something that that you might be able to get from growers in CA?

Dimethoate has historically been used for citrus thrips control in California citrus. However, increasing resistance is developing and this use is declining. Use is increasing for katydid control, as other materials that effectively controlled katydids are being phased out. It may be used for citricola scale and other occasional pests.

The maximum rate used is 3.10 lb ai per acre. The median rate is just under 2.0 lb ai per acre, except use on tangerines with a median rate of 0.88 lb ai per acre. The maximum number of applications per field is 3. However, this number is misleading. Many of the applications to a field are made to a portion of the field on one day, with another portion treated at a later date. The area treated is captured as one field with multiple applications, even though a given acre is treated only once. In the rare cases where re-treatment is required, the minimum re-treatment interval needed is 30 days. Virtually all applications are made with ground equipment. Only 13 applications were made by air in 2003.

For katydids no more than 2 applications are made at a reduced rate in combination with spinosad (Success). It is applied at hatch.

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Questions regarding use on broccoli and cauliflower: We also could use some help in refining the use pattern needed for broccoli and cauliflower. We understand that a majority of these crops produced in the US are grown in CA. Currently, we are proposing a maximum single application rate of 0.5 mg/kg/day [0.5 lb ai/ac/day?], and up to 6 applications per year. We anticipate that 6 applications per year will lead EPA to determine risk of concern in the drinking water and ecological assessments, so we are interested in knowing if growers can accept a maximum of 4 applications per year. We would also like to know if growers could live with a restriction of applying dimethoate to these crops via ground equipment only (to reduce potential drift).

Based on the California Department of Pesticide Regulation 2003 Pesticide Use Report, a maximum single application rate of 0.5 lb ai per acre is the current standard. No applications exceeded this rate for broccoli or cauliflower. Based on these data, four applications per year should allow for adequate control of pests. Over one-half of the applications made to broccoli and over 10 percent of the applications made to cauliflower are performed by aircraft. A restriction to ground only would not allow growers to control pests when the ground is too wet for ground equipment and/or the plants are too large for tractor passage.

Please refer to the tables on the following page.

If you have any further questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Rick Melnicoe". The signature is written in a cursive, flowing style.

Rick Melnicoe
Director, Western IPM Center

From 2003 Pesticide Use Report – California Department of Pesticide Regulation

Crop or Site	Num. of Fields	% Base Acres Treated	Base Acres Treated	Cum. Acres Treated	Total Lbs AI	Lbs AI/ acre treated			Num. apps	Num. Applications per treated field		
						Med rate	Min rate	Max rate		Med apps/field	Min apps/field	Max apps/field
CITRUS	7	5.98	172	276	245	1.97	0.49	2.96	9	1.00	1.00	2.00
GRAPEFRUIT	3	0.27	29	29	77	1.99	1.99	1.99	3	1.00	1.00	1.00
LEMON	28	2.07	1,051	1,349	2,180	1.86	0.33	1.99	36	1.00	1.00	3.00
ORANGE	651	10.83	22,282	24,357	36,972	1.96	0.03	3.10	811	1.00	1.00	3.00
TANGELO	13	5.37	215	225	281	1.97	0.74	1.99	15	1.00	1.00	2.00
TANGERINE	34	17.75	2,172	2,388	1,910	0.88	0.22	1.97	42	1.00	1.00	3.00

Crop or Site	Num. of Fields	% Base Acres Treated	Base Acres Treated	Cum. Acres Treated	Total Lbs AI	Lbs AI/ acre treated			Num. apps	Num. Applications per treated field		
						Med rate	Min rate	Max rate		Med apps/field	Min apps/field	Max apps/field
BROCCOLI	3,340	28.94	46,548	62,632	29,882	0.50	0.25	0.50	4,788	1.00	1.00	4.00
BRUSSELS SPROUT	72	20.70	1,737	3,144	2,201	0.60	0.49	1.00	162	2.00	1.00	6.00
CABBAGE	380	12.92	3,575	5,178	2,330	0.49	0.25	0.50	581	1.00	1.00	3.00
CAULIFLOWER	877	17.39	10,431	12,924	6,209	0.50	0.25	0.50	1,150	1.00	1.00	3.00