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Ted Rogers, Biologist
Office of Pest Management Policy
Agricultural Research Service
U.S. Department of Agriculture
1400 Independence Avenue, SW
Room 3871-South Bldg., Mail Stop 0315
Washington, DC 20250-0315

Subject: Dimethoate: 2010 Uses

The following information is provided to you from the Western Integrated Pest Management Center regarding your request for information on uses of dimethoate that remain critical to Pacific Northwest (PNW) agriculture. This response covers dimethoate use in a six state region of Alaska, Idaho, Montana, Oregon, Utah, and Washington.

In your request of December 17 you asked for information about the crops where dimethoate was still used, what percentage of the crop was treated, where and when dimethoate is used, and for some comment as to how critical dimethoate is in crop production. As you are likely aware, since 2002 we have provided USDA and EPA with eight responses to issues concerning dimethoate use. (These responses are all available online at http://www.wsprs.wsu.edu/USDAEPAInfo.html.) I reviewed the previously submitted information and have focused my efforts on gathering information for the crops that have previously been addressed. Below is a summary of the information that I was able to gather.

Alfalfa
Dimethoate continues to be used in forage alfalfa, however, responses varied as to the extent of the use. Although one person reported never using dimethoate, others reported treating between 50% and 75% of alfalfa acreage with dimethoate. Dimethoate remains an important tool in alfalfa production, particularly in years of high aphid pressure.

Alfalfa Seed
Dimethoate remains an important insecticide for use in alfalfa seed production. Dr. Doug Walsh with Washington State University has recently surveyed Washington alfalfa seed producers. (In 2009 there were 14,000 acres of alfalfa seed grown in Washington.) From this effort we know that dimethoate was used on more than 60% of Washington's alfalfa seed acreage. Dimethoate is typically applied in late May and is used for broad-spectrum control of lygus bug, cowpea

aphid, spotted alfalfa aphid, and alfalfa weevil. Dimethoate continues to be a very important tool for alfalfa seed producers.

Asparagus
According to Alan Schreiber of the Washington Asparagus Commission dimethoate use on asparagus has recently become much more important. Please contact him for further details.

Bean, Succulent
Dimethoate is used on lima beans grown in NE Oregon and in the Columbia Basin. In some areas dimethoate is used on 50% of the lima bean acreage; however, other areas report 100% use. Dimethoate is applied once just after bloom (July to early September, depending upon planting date) then again two weeks later. Lima beans might also receive a third dimethoate application a week before harvest if adult lygus bugs are found in the fields. (Adult lygus bugs sting pods which blemishes the beans.) In general dimethoate can be applied to lima beans from July into early October. The use of dimethoate on lima beans is viewed as critical.

Cherry, Tart
In Utah's tart cherry production (approximately 2900 acres) dimethoate is no longer being widely used. In Oregon (725 acres) growers use dimethoate as their primary fruit fly control. It is estimated that 95% of Oregon's tart cherries are treated with dimethoate. Dimethoate is applied as a single application in early June.

Cherry, Sweet
The use of dimethoate in sweet cherries varies by growing region. Dimethoate is no longer widely used in Utah's sweet cherry production (500 acres). It is estimated here that dimethoate is now used on less than 5% of the cherry acreage. In Oregon's Willamette Valley dimethoate is still widely used for the pre-harvest control of cherry fruit fly. Here it is estimated that 95% of Oregon sweet cherries (approximately 3300 acres) are treated with dimethoate where it is applied as a single application, typically near the first week of June. In cherry growing regions east of the Cascade Mountains in Idaho, Oregon, and Washington (53,000 acres total) growers are moving away from their previous single post-harvest application of dimethoate. Research has found alternatives (imidacloprid, acetamiprid) for this application which was used to control cherry fruit fly larvae in unharvested fruit. It is estimated that now only 10% of this acreage is treated with dimethoate.

Grass Seed
The extent of the use of dimethoate in PNW grass seed production varies by region. For example, there are 10,000 acres of grass seed grown in central Oregon and between 80 and 90% of these acres are treated with dimethoate. However, across the PNW it is estimated that 25% of the grass seed acreage is treated with dimethoate in a single year. Dimethoate is applied in the fall in October or November and/or in the spring in March or April. Dimethoate is used to control mites, aphids, mealy bugs, and Hemipteran causal agents of silver top syndrome. The use of dimethoate in grass seed production in the PNW is uniformly viewed as critical.

Lentil and Dry Pea
Dimethoate continues to be important in the production of PNW dry peas and lentils. Additional information is being gathered by Todd Scholz of the USA Dry Pea and Lentil Council.

Lettuce
Dimethoate continues to be used in Alaska lettuce production. Although the acreage is small the use is considered important. Dimethoate is used to control aphids. It is applied as a single application to 75% of the acreage.

Pea, Succulent
Dimethoate is used on succulent peas grown in NE Oregon and in the Columbia Basin. 100% of the succulent pea acreage is treated with dimethoate. Across the PNW dimethoate is used to control pea aphid with applications starting in March and extending to early July. One application is made to succulent peas and occurs when the crop is at 10% bloom. Dimethoate use is critical to succulent pea production in our region. Those involved in the industry have stated that the loss of this use would mean the end of succulent pea production in the PNW.

I hope you find this information useful. I am also attaching a contact list for your use should you have further questions.

Sincerely,

Jane M. Thomas

Jane M. Thomas
Pacific Northwest Workgroup Comment Coordinator
Washington State Pest Management Resource Service
Washington State University Tri-Cities
2710 University Drive
Richland, WA 99354
phone: 509-372-7493 fax: 509-372-7491
e-mail: jmthomas@tricity.wsu.edu

Contact Sheet
Dimethoate: 2010 Uses

Crop	First Name	Last Name	Phone	Email	Organization	Title
alfalfa	Howard	Deer	(435) 797-1602	howard.deer@usu.edu	Utah State University	Pesticide Coordinator
alfalfa	Ronda	Hirnyck	(208) 364-4046	rhirnyck@uidaho.edu	University of Idaho	Pesticide Coordinator
alfalfa	Tom	Lyon	(208) 459-1631	tlyon@wecon.com	Wilbur-Ellis	Crop Advisor
alfalfa seed	Howard	Deer	(435) 797-1602	howard.deer@usu.edu	Utah State University	Pesticide Coordinator
alfalfa seed	Ronda	Hirnyck	(208) 364-4046	rhirnyck@uidaho.edu	University of Idaho	Pesticide Coordinator
alfalfa seed	Jim	Barbour	(208) 722-6708	jbarbour@uidaho.edu	University of Idaho	Research Entomologist
alfalfa seed	Ernie	Johnson	406-357-4182	ana_bell_lee@hotmail.com	Montana Alfalfa Seed Growers Association	President
alfalfa seed	Tom	Lyon	(208) 459-1631	tlyon@wecon.com	Wilbur-Ellis	Crop Advisor
alfalfa seed	Doug	Walsh	(509) 786-9287	dwalsh@wsu.edu	Washington State University	IPM Coordinator
asparagus	Alan	Schreiber	(509) 266-4305	aschreib@centurytel.net	Washington Asparagus Commission	Administrator
bean, succulent	Steve	Boyd		steven_boyd@smithfrozenfoods.com	Smith Frozen Foods	Field Manager
bean, succulent	Todd	Druffel	(509) 766-0793	tdruffel@nationalfrozenfoods.com	National Frozen Foods	
cherry	Mike	Willett	(509) 453-3193	willett@nwhort.org	Northwest Horticultural Council	Vice President for Scientific Affairs
cherry	Diane	Alston	(435) 797-2516	diane.alston@usu.edu	Utah State University	Extension Entomology Specialist
cherry	Lynn	Long	(541) 296-5494	lynn.long@oregonstate.edu	Oregon State University	Extension Horticulturist
cherry	Tom	Lyon	(208) 459-1631	tlyon@wecon.com	Wilbur-Ellis	Crop Advisor
cherry	Jeff	Olsen	(503) 434-8915	jeff.olsen@oregonstate.edu	Oregon State University	Extension Horticulturist
cherry	Tim	Smith	(509) 667-6540	smithtj@wsu.edu	Washington State University	Tree Fruit IPM Specialist
grass seed	Rich	Affeldt		rich.affeldt@oregonstate.edu	Oregon State University	Extension Professor
grass seed	Dave	Bragg	(509) 843-3701	braggd@wsu.edu	Washington State University	Extension County Director, Garfield County
grass seed	Marvin	Butler	(541) 475-7107	marvin.butler@oregonstate.edu	Oregon State University	Extension Specialist
grass seed	Howard	Deer	(435) 797-1602	howard.deer@usu.edu	Utah State University	Pesticide Coordinator
grass seed	Glenn	Fisher	(541) 737-5502	fisherg@science.oregonstate.edu	Oregon State University	Entomology Extension Specialist
lentil	Todd	Scholz	(208) 882-3023	scholz@pea-lentil.com	US Pea & Lentil Council	Director of Information & Research
lettuce	Paula	Giauque	(907) 745-4017	pgiauque@mtaonline.net	Grower	Grower
pea, dry	Dave	Bragg	(509) 843-3701	braggd@wsu.edu	Washington State University	Extension County Director, Garfield County
pea, dry	Todd	Scholz	(208) 882-3023	scholz@pea-lentil.com	USA Dry Pea & Lentil Council	Director of Information & Research
pea, succulent	Steve	Boyd		steven_boyd@smithfrozenfoods.com	Smith Frozen Foods	Field Manager
pea, succulent	Marty	Coble		mcoble@wecon.com	Wilbur-Ellis	

State Contacts	Jacobse	Barry	Montana State University	Western IPM Center State Liaisons/Representatives	(406) 994-5161	uplbj@montana.edu
	Daniels	Catherine	Washington State University		(509) 372-7495	cdaniels@wsu.edu
	Deer	Howard	Utah State University		(435) 797-1602	howardd@ext.usu.edu
	Hirnyck	Ronda	University of Idaho		(208) 364-4046	rhirnyck@uidaho.edu
	Jahns	Tom	University of Alaska Fairbanks		(907) 262-5824	trjahns@alaska.edu
	Jenkins	Jeff	Oregon State University		(541) 737-5993	jenkinsj@ace.orst.edu