



May 22, 2006

Ref: 2006-10-1

Teung F. Chin, Ph.D.
Office of Pest Management Policy
Agricultural Research Service
U.S. Department of Agriculture
4700 River Road, Unit 149
Riverdale, MD 20737-1237

Subject: Malathion: Proposed Risk Mitigation Measures for ULV Formulations

The following information is provided to you from the Western Integrated Pest Management Center regarding your May 8 request for input on EPA's proposed mitigation measures for blueberry uses and for ULV malathion formulations. EPA has proposed changes regarding maximum single application rates, maximum number of applications allowed per year, minimum application intervals, pre-harvest intervals (PHI), and re-entry intervals (REI). This round of proposals covers the use EC, WP, and ULV malathion formulations on blueberries and the use of ULV formulations on other crops. EPA is also proposing buffers between fields and aquatic sites for malathion aerial applications. A 50-foot buffer is proposed for ULV formulations and a 25-foot buffer for EC and WP formulations. This response provides input from the Pacific Northwest (PNW) states of Alaska, Idaho, Montana, Oregon, Utah, and Washington. As in our earlier response for the WP and EC formulations, this response focuses on the malathion uses that were discussed in our initial malathion response of July 16, 2004.

Barley, Oats, Wheat

No objections were raised to EPA's proposals to require a 50-foot buffer, limit applications to two per season, or establish a 7-day retreatment interval for ULV malathion use on barley, oats, and wheat.

Blueberries

Growers are concerned about EPA's proposal to reduce the allowable application rate for EC and WP formulations of malathion on blueberries. When malathion is used in a tank mix the lower rate is not a problem; however, in some situations, malathion is used alone for aphid control. When the product is used alone, growers require a use rate of 2 # ai/A. In their experience, the 1.2 # ai/A rate being proposed by EPA is not efficacious for aphid control in blueberries when used alone. Adequate control of aphids is essential because aphids transmit viruses to blueberries. No comments were received on EPA's proposals to limit applications to three per season, to establish a 7-day retreatment interval, or to require a 25-foot buffer for aerial applications. Growers are asking that 2 # ai/A be allowed for the use of EC and WP formulations of malathion on blueberries.

Cherries

As we stated in our earlier malathion responses, malathion is used in PNW cherries for the control of cherry fruit fly. Malathion use patterns in cherries vary across the region. Over the past two years many Washington growers have transitioned to using spinosad (GF-120 Naturalyte Fruit Fly Bait) for the control of cherry fruit fly and are not relying so heavily on malathion ULV formulations as in previous years. The situation is different in Oregon where growers utilize weekly malathion applications for cherry fruit fly control. In Oregon's cherry-growing areas, malathion applications begin within seven days of cherry fruit fly emergence in mid- to late May and last until the end of harvest. There is much interest in the PNW in producing later-ripening cherry varieties. The fruit of these varieties softens and becomes susceptible to cherry fruit fly at about the same time as 'Bing' cherries (an early ripening variety). Once the fruit has softened it must be protected from cherry fruit fly until it is harvested. While Bing cherries can be adequately protected with five malathion applications per season, 'Sweetheart' cherries (a later-ripening variety) require nine or ten applications per season and 'Staccato,' the latest-ripening cherry now being commercially produced in Oregon on about 800 acres, may require as many as eleven malathion applications per season for adequate cherry fruit fly control, depending upon when cherry fruit flies first emerge. Thus, as more late-ripening cherry varieties enter the marketplace and the acreage increases, the number of malathion applications needed increases rather than decreases. We are asking that EPA allow up to eleven malathion applications for cherries.

Extension personnel commented that the proposed 7-day retreatment interval was workable except in the case of unexpected rain immediately following an application. In this case, for growers to assure cherry fruit fly control, they need the ability to immediately reapply malathion.

None of the personnel that I contacted raised any objection to the 50-foot buffer being proposed by EPA for the ULV malathion formulations.

Pasture/Rangeland

USDA-APHIS has researched the use of lower rates of malathion for the control of grasshopper. They have found that malathion used at rates lower than the current 0.92 # ai/A can control grasshopper but only in very specific circumstances. At the use rates being proposed by EPA, malathion will control grasshoppers if the treatment is made to younger instars and if the treatment is made in areas where foliage is neither tall nor dense. Most malathion applications made for grasshopper control are made when the grasshoppers are older instars or adults because the insects are only particularly noticeable when they have matured. Also APHIS has determined that if rangeland foliage is tall or dense or both, at the lower use rates insufficient malathion will reach the insects to be effective on grasshoppers at any life stage. At the lower rates being proposed by EPA, malathion will likely still provide control for other rangeland and pasture pests such as black grass bugs but it will not provide adequate grasshopper control. As stated in our earlier letter, lowering the allowable use rate for malathion will virtually eliminate its use on pasture and rangeland. We are asking that EPA retain the current 0.92 # ai/A use rate for pasture and rangeland.

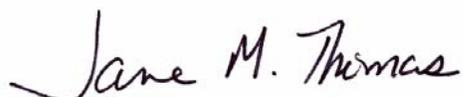
There were no comments received specific to EPA's proposal to limit ULV malathion applications to pasture/rangeland to one per year and there were no comments relevant to EPA's proposals for buffers. While it was unclear what other restrictions EPA intends with respect to pasture and rangeland use of malathion ULV formulations, it was noted that a 1-day PHI, such as was proposed for the EC and WP formulations, would be a problem. If the possible 1-day PHI equates to a 1-day grazing restriction, this will be a major obstacle for malathion use on rangeland because it is impractical to remove cattle from rangeland when treating insects.

Trees Grown for Pulp

The use of ULV malathion for grasshopper control in cottonwood/poplar plantations in the PNW is provided by two Special Local Needs registrations: OR-000016 and WA-960004. Although this use was not addressed on EPA's *Table 2: Supported Maximum and Typical Use Patterns Compared to Changes Proposed by EPA For the ULV and RTU Formulations*, from our discussion I understand that EPA has no concerns supporting this use as currently specified on the Washington SLN registration. Because the Washington SLN was revised in April to include new use restrictions, I wanted to verify that the new restrictions were not problematic to the industry. The newly revised SLN allows for use of ULV malathion at 0.92 # ai/A, limits use to three applications per year, and imposes a 7-day retreatment interval. According to an industry contact, use under these restrictions is satisfactory as is the 50-foot ULV proposed buffer.

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
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 List: Malathion Blueberry and ULV Risk Mitigation Proposals

Crop:	Last Name:	First Name:	Organization:	Title:	Work Ph:	Email:	Responsible State:
barley	Burns	John	Washington State University	Extension Agronomist	(509) 335-5831	burnsjw@wsu.edu	Washington
blueberry	Cieslar	Brian	Whatcom Farmers Co-Op	Agronomist	(360) 354-2418	BrianC@wcoop.com	Washington
blueberry	DeFrancesco	Joe	Oregon State University	Senior Faculty Research Assistant	(541) 737-0718	defrancj@hort.oregonstate.edu	Oregon
cherry	Long	Lynn	Oregon State University	Extension Horticulturist	(541) 296-5494	lynn.long@oregonstate.edu	Oregon
cherry	Riedl	Helmut	Oregon State University	Entomologist	(541) 386-2030	helmut.riedl@oregonstate.edu	Oregon
cherry	Smith	Tim	Washington State University	Tree Fruit IPM Specialist	(509) 667-6540	smithtj@wsu.edu	Washington
cherry	Walenta	Darrin	Oregon State University	Extension Agent - Union County	(541) 963-1062	darrin.walenta@oregonstate.edu	Oregon
oat	Burns	John	Washington State University	Extension Agronomist	(509) 335-5831	burnsjw@wsu.edu	Washington
pasture/rangeland	Abbott	Greg	USDA/APHIS	Entomologist	(435) 896-4772	Gregory.C.Abbott@aphis.usda.gov	Multiple
pasture/rangeland	Kitchen	Boyd	Utah State University	Vice President for Extension	(435) 781-5452	boydk@ext.usu.edu	Utah
wheat	Burns	John	Washington State University	Extension Agronomist	(509) 335-5831	burnsjw@wsu.edu	Washington
N/A	Bierman	Peter	University of Alaska Fairbanks	Western IPM Center State Liaisons/Representatives	(907) 745-3639	ffpmb@uaf.edu	Alaska
	Blodgett	Sue	Montana State University		(406) 994-2402	blodgett@montana.edu	Montana
	Daniels	Catherine	Washington State University		(509) 372-7495	cdaniels@tricity.wsu.edu	Washington
	Deer	Howard	Utah State University		(435) 797-1602	howardd@ext.usu.edu	Utah
	Hirnyck	Ronda	University of Idaho		(208) 364-4046	rhirnyck@uidaho.edu	Idaho
	Jahns	Tom	University of Alaska Fairbanks		(907) 262-5824	fftrj@uaf.edu	Alaska
	Jenkins	Jeff	Oregon State University		(541) 737-5993	jenkinsj@ace.orst.edu	Oregon