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**Comments on Effect of Proposed Mancozeb Mitigation Measures in Pacific Northwest**

Date: July 25, 2005

To: [Dhol Herzi](#)  
Agricultural Economist  
Office of Pest Management Policy, USDA

CC: [Rick Melnicoe](#)  
WIPMC Director

From: [Jane M. Thomas](#)  
Pacific Northwest Coalition Comment Coordinator  
Washington State University Tri-Cities

Attached please find the response from the Western IPM Center's PNW Workgroup regarding the proposed mancozeb mitigation measures.

[Jane M. Thomas](#)  
Pacific Northwest Coalition Comment Coordinator  
Pesticide Notification Network Coordinator  
Pest Management Resource Service  
Washington State University Tri-Cities  
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Richland, WA 99352  
Phone: (509) 372-7493  
Fax: (509) 372-7491

[PNW Response, Mancozeb](#) (PDF\* 40KB)  
[Initial request](#)

The Western IPM Center is headquartered in the UC Agriculture and Natural Resources Building at 2801 Second Street, Davis, CA 95618.

## Comments Sought for Mancozeb Mitigation Measures by July 20, 2005

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Date: June 29, 2005

To: Western IPM Center

From: [Rick Melnicoe](#)  
WIPMC Director

Dear Colleagues,

I received the [following request](#) for information from USDA. Would you please comment/answer questions where appropriate? Those of you in the Pacific Northwest should coordinate replies with Jane Thomas.

[Jane M. Thomas](#)

Pacific Northwest Coalition Comment Coordinator  
Pesticide Notification Network Coordinator  
Pest Management Resource Service  
Washington State University Tri-Cities  
2710 University Drive  
Richland, WA 99352  
Phone: (509) 372-7493  
Fax: (509) 372-7491

Please reply to me or directly to Dhol (with a cc to me) by **July 20, 2005**. It would be helpful in tracking these if you would let me know that this is not pertinent to your state and that no formal reply will be forthcoming.

As always, thank you for your assistance.

Regards and Happy 4th of July.

Rick

[Rick Melnicoe](#)

Director, Western Integrated Pest Management Center  
Director, Office of Pesticide Information and Coordination (UC Statewide Pesticide Coordinator)  
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Date: June 28, 2005

From: [Dhol Herzi](#)

USDA

Good Day!

EPA is looking at considering mitigation measures for mancozeb. For workers (applicators/handlers), they are considering the use of PPE (single layer and PF 5 respirator) for most crops. This is an improvement to the current double layer required on the label. For turf, they may require the use of water soluble packs and for seed treatments a closed capture system for dust formulations.

The current Re-Entry Interval (REI) is 24 hours for all crops. For most crops, they are proposing a change, for others they need your feedback to understand the cultural practices relative to mancozeb application.

Listed below are the suggested REIs, and questions, for each crop. If a crop is not listed, the REI will not be changed. Please let me know if there are activities growers need to do that this REI would inhibit.

#### Proposed REIs:

- **Greenhouse cut flowers:** 3 or 4 days (when do workers perform high contact activities?)
- **Cranberry:** 2 days
- **Banana:** 2 days
- **Tobacco (field):** 2 days
- **Apples:** What is the maximum feasible REI? What activities follow an application?
- **Christmas trees:** What is the maximum feasible REI? How soon after application do growers shear trees?
- **Turf:** When do workers need to enter? What activities?
- **Potatoes, Sugar Beets:** Is there any hand harvesting? What is the maximum feasible REI? What activities need to be done following an application?
- **Asparagus:** 1 day
- **Cucurbits:** What is the maximum feasible REI? What activities need to be conducted following an application of mancozeb?
- **Tomato:** 1 - 2 days
- **Grapes:** What is the maximum feasible REI? How soon after application do workers need to enter? What activities?

Let me know if you have any questions.

[Dhol Herzi](#)

Agricultural Economist

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July 22, 2005

Ref: 2005-8-1

Dhol Herzi  
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

The following information is provided to you from the Western Integrated Pest Management Center regarding EPA's proposed mitigation measures for the fungicide mancozeb. This response provides input from the six-state Pacific Northwest (PNW) region comprised of Alaska, Idaho, Oregon, Montana, Utah, and Washington and is being sent in response to your request to Rick Melnicoe, Western Integrated Pest Management Center Director, June 29, 2005. The information below is presented alphabetically by crop.

### **Apples**

Mancozeb use on apples grown in the PNW varies depending upon the climate of the specific growing region. In Washington, where apples are grown under somewhat drier conditions, mancozeb is not extensively used for apple scab control. Mancozeb is used more widely in Oregon where the climate in the Hood River and Willamette Valley districts is wetter during the spring and, consequently, scab is more of a problem. In this case workers require orchard access during the spring spray season for fertilizer applications, weed control, bee placement, fruit thinning, and insect control. Growers in the PNW would support extending the mancozeb apple re-entry interval (REI) to 2 days but feel that anything longer would hamper orchard operations.

### **Asparagus**

It is my understanding that Alan Schreiber, Administrator of the Washington Asparagus Commission, has responded directly to your request for feedback regarding the importance of the use of mancozeb on this crop.

### **Christmas Trees**

EPA's Richard Michell has also made inquiries about the use of mancozeb on Christmas trees and the possibility that extending the REI might hamper tree-shearing operations. Much of the following information has already been provided directly to him.

There are several different uses for mancozeb in the production of Christmas trees. In all cases, growers would be able to work with an extended REI.

Mancozeb is used in Christmas tree nurseries for the control of Botrytis gray mold in Douglas-firs, true firs, and pines. Because this use is limited to seedling nurseries where no tree shearing occurs, extending the REI presents no problems for growers.

This fungicide is also used to control several needle cast diseases in pines and in Douglas-fir. Mancozeb applications to Douglas-fir are made in the early to late spring; however, Douglas-fir are sheared in the summer through the late fall. Again, in this case, extending the mancozeb REI will not interfere with tree-shearing operations.

Cyclaneusma needle cast affects pines and they may require multiple mancozeb applications April through November. Pines have an early and relatively short shearing window, however, few pines are now grown for Christmas trees in our region. The pines that are grown in the PNW for Christmas trees are now primarily grown in the more arid growing regions where Cyclaneusma needle cast is less of a problem. Because of the limited overall production and the arid conditions, extending the REI will not hamper Christmas tree production in our region.

In general in our region, extending the REI for mancozeb will not be problematic to Christmas tree growers because of the species of trees grown here and their disease susceptibility.

### **Cranberry**

In cranberries, mancozeb is applied during period of fruit set. Growers have expressed concern regarding EPA's proposal to extend the REI for cranberries to 48 hours. In our region growers require field access in order to make fertilizer applications, which are made at about the same time as mancozeb is applied. Fertilizer must be applied to cranberries when the canopy is dry; however, the wet weather often occurs at this time. The concern expressed was that growers might lose an opportunity to make a fertilizer application if one of the few dry canopy windows falls during the proposed extended mancozeb REI. Other field activities that would be impacted by a longer REI are hand weeding and irrigation maintenance activities. While growers may be able to tolerate a 48-hour REI, their preference is to retain the current 24-hour REI.

### **Grapes**

Mancozeb is not extensively used on either wine or juice grapes in our region.

### **Greenhouse Cut Flowers**

Mancozeb is no longer used in the production of daffodils grown as cut flowers. No additional information about mancozeb use on greenhouse cut flowers was available.

## **Potatoes**

In PNW potato production, mancozeb is widely used as both a seed piece treatment and as a foliar treatment. Use across our region varies: in some areas mancozeb use is limited to seed piece treatment while potato producers in other areas routinely utilize both types of applications.

The issue of extending the REI does not apply to the use of mancozeb as a seed treatment; however, extending the REI will be problematic for the foliar use of this important fungicide in areas where center pivot irrigation is used.

In our region, foliar mancozeb applications typically begin in potatoes at row closure and continue (in rotation with other fungicides) until harvest. Most mancozeb is applied via chemigation. Where irrigation is via center pivot, the system will typically take 24 hours to cover one potato field. From the time that the mancozeb application begins growers already are kept out of potato fields for 48 hours: the 24 hours required to complete the mancozeb application and then another 24 hours for the current REI. Our growers are concerned that extending the current 24-hour REI will hamper PNW potato production. Field access is needed following a mancozeb application for both routine and non-routine irrigation activities, scouting, fertilizer applications (fertigation), and harvest. Fertilizer applications continue through the growing season and growers require field access to set up the fertigation equipment to make these applications.

Mancozeb is applied from row closure to harvest for blight control. If blight is present on foliage at the time of harvest it can be translocated into storage if not properly controlled. Current mancozeb labeling carries a 3-day pre-harvest interval (PHI) for much of the country while the PHI in the PNW is 14 days. Growers feel that because the current PHI already hampers their ability to use mancozeb near harvest in our region, extending the REI will further impede the use of this important fungicide in PNW potato production. We are asking that EPA retain the 24-hour REI for mancozeb on potatoes.

## **Sugarbeet**

There is not much use of mancozeb in sugarbeet production in the PNW. When it is used, it is used mid-season for the control of Cercospora leafspot. There is no hand harvesting done in sugarbeets. Workers do enter fields following an application for routine irrigation activities and as needed during harvest. Harvest activities include making adjustments to harvest equipment and foliar contact does occur. Because harvest does occur so long after a mid-season mancozeb application, extending the REI is not seen as a problem.

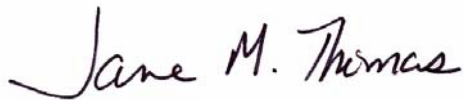
## **Turf**

Mancozeb is not used in commercial sod production in our region; however, it is used on residential lawns by commercial applicators for the control of leaf spot. In this case, because applicators arrive, make their application and then move on to the next job site, extending the REI will not be problematic.

Mancozeb is also used on golf course greens for the control of various foliar diseases. Here extending the mancozeb REI does pose a problem. During the growing season greens are normally mowed daily. If a green is mowed one morning and mancozeb is applied immediately after, current labeling allows re-entry for mowing the following morning. The turf grass specialist that I contacted felt that, if necessary, groundskeepers could tolerate a 48-hour REI but anything longer will present problems. Groundskeepers can skip mowing greens for one day (and thus could possibly tolerate a 48-hour REI); however, it is not feasible to skip more than one day of mowing during the growing season and be able to maintain a functional putting green. During winter, when it is common to use mancozeb for Fusarium patch disease, it might be feasible to skip a couple of mowings, at least some of the time, because play is lighter and growth is slower. We are asking that EPA extend the REI for mancozeb on golf courses to no longer than 48 hours.

Attached is a contact list should you have further questions. Thank you for giving us this opportunity to provide input into the reregistration process.

Sincerely,

A handwritten signature in black ink that reads "Jane M. Thomas". The signature is written in a cursive, flowing style.

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## Mancozeb Contact List

Crop:	Last Name:	First Name:	Organization:	Title:	Work Ph:	Email:	Responsible State:
apple	Smith	Tim	Washington State University	Tree Fruit IPM Specialist	(509) 667-6540	smithtj@wsu.edu	Washington
apple	Spotts	Robert	Oregon State University	Professor	(541) 386-2030	robert.spotts@oregonstate.edu	Oregon
asparagus	Schreiber	Alan	Washington Asparagus Commission	Administrator		aschreib@centurytel.net	Washington
Christmas tree plantation	Barney	Dan	University of Idaho	Extension Professor	(208) 263-2323	dbarney@uidaho.edu	Idaho
Christmas tree plantation	Chastagner	Gary	Washington State University	Plant Pathologist	(253) 445-4528	chastag@wsu.edu	Washington
cranberry	Patten	Kim	Washington State University	Extension Specialist	(360) 642-2031	pattenk@coopext.cahe.wsu.edu	Washington
flower	Tapio	Don	Washington State University	Area Agriculture and Community Horticulture Agent	(360) 482-2934	tapiod@wsu.edu	Washington
grape	Chambers	Kevin	Oregon Vineyard Supply	Grower/Consultant	(800) 653-2216	kevin@ovs.com	Oregon
grape	Scharlau	Vicky	Washington State Association of Wine Grape Growers	Executive Director	(877) 889-2944	scharlau@televar.com	Washington
grape	Walsh	Doug	Washington State University	IPM Coordinator	(509) 786-6927	dwalsh@wsu.edu	Washington
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potato	Esplin	Keith	Potato Growers of Idaho	Executive Director	(208) 785-1110	pgike@cableone.net	Idaho
potato	Kaspari	Phil	University of Alaska Fairbanks	Land Resources Agent	(907) 895-4215	fnpnk@uaf.edu	Alaska
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N/A	Blodgett	Sue	Montana State University	Western IPM Center State Liaisons/Representatives	(406) 994-2402	blodgett@montana.edu	Montana
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	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
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