WASHINGTON STATE UNIVERSITY
TRI-CITIES

November 13, 2003

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The following information is provided to you from the Western Region Integrated Pest Management Center regarding the use of ziram in the six-state Pacific Northwest (PNW) region comprised of Alaska, Idaho, Oregon, Montana, Utah, and Washington. This information is being sent in response to your request to the Integrated Pest Management Center Directors on October 22, 2003. Attached to this response is a contact list should you require any additional information.

The most important use of ziram in our region is in pears. We have significant comments regarding this use as well as ziram use in apples and caneberries. The remaining crop information is presented in alphabetical order.

Pear: In our region, the most critical use of ziram is for the control of storage decay in pears. It is estimated that 85% of the winter pears grown in the Pacific Northwest receive a pre-harvest ziram application. (Bartlett pears are grown on 25 to 30% of the PNW pear acreage. Because these pears have a shorter storage life, the control of storage decay is not an issue.) Typically, in our area ziram is applied twice per season to winter pears. Pears are treated once in June for the control of bull's-eye rot and again in August, close to harvest, for the control of other storage decays.

Ziram is an important part of integrated decay control programs for pears. In addition to ziram, other fungicides are also applied post-harvest for the control of storage decay. The pre-harvest use of ziram improves the effectiveness of these post-harvest fungicide applications. The use of ziram is critical in Pacific Northwest pear production because, at this time, it is the only effective orchard-applied fungicide for the control of storage decay. While other fungicides such as trifloxystrobin (Flint) may be used on pears, these control a narrower spectrum of fungi and do not control all of the storage decay causal organisms. Both pathologists and Extension personnel

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are concerned that reducing the application rate from 6.1 # ai/A to 4.6 # ai/A will be much less effective in controlling storage decay. One Extension Specialist, Tim Smith, with Washington State University, indicated that growers would likely use two pre-harvest applications if the lower ziram use rate that EPA has proposed goes into effect. This would result in growers applying 9.2 # ai/A pre-harvest rather than the 6.1 # ai/A that they currently use. We would like to propose that EPA retain the current use rate of 6.1 # ai/A and reduce the number of applications allowed per year from four to three.

Apple: Approximately 11% of Washington apples are treated with a single application of ziram for the control of both bull's-eye rot and apple scab. For apple scab control growers may make five or six fungicide applications per season. Retaining ziram use on apples is important because growers need a variety of fungicides among which to rotate for resistance management. As with pears, growers would prefer that the current use rate be retained and the number of applications be decreased.

We are pleased to see that EPA is planning to retain aerial application of ziram in the western United States for apples and pears. This application method is important in the successful production of both crops in the Pacific Northwest.

Caneberries: Currently the only caneberry use allowed on ziram labels is blackberry. Because of the use directions for blackberries, growers have also been able to use ziram on both loganberries and boysenberries; however, use on raspberries is not permitted with the current labeling. In our region there is some use of ziram for the control of fruit rot and canker in blackberries, boysenberries, and loganberries; however only about 5% of the acreage is treated per year. When used, ziram is applied at a rate of 2.28 # ai/A between mid-June and early July. Although the percentage of acreage treated is small, ziram remains an important tool for berry growers because it is used in rotation with other fungicides for resistance management. The proposed deletion of aerial application will not negatively effect berry production in the Pacific Northwest.

We are concerned about the intent of the tolerance revocations being proposed by EPA with respect to ziram on caneberries. In the list of tolerances proposed for revocation, EPA has included both boysenberries and loganberries making it unclear whether ziram will still be legal to use on blackberry hybrids. Joe DeFrancesco, Oregon State University, conducted ziram caneberry residue trials for IR-4 in 1992 (blackberry and raspberry) and in 1999 (raspberry). The intent of this work was to establish a ziram tolerance for the entire caneberry subgroup. It is unclear whether EPA is aware of these efforts or if the agency is planning to limit use of ziram to blackberries alone. Our goal is to have the ziram labels revised to allow use on caneberries. We would like to see EPA change the blackberry tolerance to a caneberry tolerance and to see the registrants add caneberry use directions to the ziram labels.

Apricot/Nectarine/Peach: Currently ziram is not widely used in our region in the production of apricots, nectarines, or peaches. When used, it is applied post-petal fall for the control of Coryneum blight. However, recent research at Oregon State University indicates that ziram is a very effective control for peach leaf curl when it is applied at the delayed dormant stage. As this becomes better known, ziram may become more widely used for this purpose.

Blueberry: Ziram is used in Pacific Northwest blueberry production to control Anthracnose ripe rot, Botrytis fruit rot, and mummy berry disease. Growers make one to two applications per year. It is estimated that 20 to 25% of blueberry acreage is treated with ziram each year. As with blackberries, ziram is used in rotation with other fungicides for resistance management. The application rate used by growers is 2.28 # ai/A. The deletion of aerial application is not viewed as critical in our region.

Cherry: Ziram is not commonly used in cherry production in our region.

Grapes: Ziram is not used extensively in wine or juice grapes nor is it used in the small table grape industry that is just getting started in our region.

I hope that you find this information useful. Feel free to contact me if I can be of further assistance.

Sincerely,

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Ziram Contact List

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