



Integrated Plant Protection Center
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Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington DC 20460-0001

Re: EPA-HQ-OPP-2008-0351-0097, Draft Human Health Risk Assessment for the
Registration Review of Diazinon

The following comments are submitted in regard to EPA's open comment period on the draft human health risk assessment for the registration review of diazinon. These comments are submitted on behalf of the Western IPM Center, and provide input from the Pacific Northwest.

Diazinon

Diazinon continues to be used in some crops in the Pacific Northwest. It is used sparingly in some tree fruits (apple, pear, cherry), generally during dormancy, but also as late season control for spotted wing drosophila (SWD) in cherries. In apples, pre-bloom applications of diazinon offer effective control for wooly apple aphid, and control for this pest is said to be challenging without it. With the alternative, spirotetramat, efficacy is based more on tree phenology rather than insect phenology, which makes it more difficult for growers to use effectively. Spirotetramat also has lower efficacy on established pest populations.

In pear, efficacy varies depending on the pest, but it's not widely used as it's considered to be disruptive to pollinators and natural enemies. However, some growers might use a pre-bloom application to control San Jose scale.

Diazinon is not widely used in small fruit production, but is valued by small fruit growers in controlling pests that are only marginally controlled by other registered pesticides, or for which no other pesticide is registered. Raspberry crown borer is a sporadic but serious pest found in raspberry and blackberry fields that can cause weakened plant growth or even plant death with serious infestations. On infested caneberry acres, diazinon is commonly used as a crown drench in early spring. In blueberries, diazinon is often mixed with a dormant oil to help control winter moth; the oil and diazinon work together to penetrate the overwintering winter moth eggs, and provide efficacious control. In strawberries, diazinon is the only registered product for control of cyclamen mites, a very small eriophyid mite that is difficult to control deep inside the folds of the plant crown; endosulfan and dicofol were the preferred products for cyclamen mite control, but their use will no longer be allowed after the 2016 field season. Diazinon is applied as a crown drench after strawberry harvest, when strawberry plants have been renovated (Oregon practices perennial strawberry production, and mows the plants about two weeks after last harvest).

Diazinon is also used in carrots, applied to soil before planting to control seed corn maggots, which can cause significant damage to stand quality and yield if not properly controlled.



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While diazinon is registered for onion, it is not widely used in this crop, as other products show better efficacy and less toxicity.

Diazinon has been designated a pesticide of interest for surface water by a state inter-agency team that includes the Oregon Department of Environmental Quality, Oregon Department of Forestry, Oregon Department of Agriculture, Oregon Watershed Enhancement Board and Oregon Health Authority. The Oregon Department of Environmental Quality (DEQ) has been regularly monitoring for diazinon in surface waters since 2005 as part of multiple pesticide and toxic chemical assessment programs. While the overall detection frequency across all monitoring locations is low, diazinon is detected consistently in some individual streams and stream segments. In addition, there has been a notable increase in diazinon detections in western Oregon watersheds over the past two years, with many of these detections exceeding the lowest EPA aquatic life benchmark.

For more information on any of the comments included here, please free to contact me.

Respectfully,

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Katie Murray is a research assistant in the Integrated Plant Protection Center (IPPC) and is the Western IPM Center's EPA Comment Coordinator for the Pacific Northwest. Katie has expertise in agricultural stakeholder engagement and assessment methods related to understanding pesticide usage and pesticide compatibility with IPM.

The IPPC is the hub for Oregon's statewide IPM program, and the main IPM resource in Oregon for farmers, researchers, and extension agents. The expertise represented in the IPPC is highly interdisciplinary and includes toxicology, entomology, horticulture, adult education, public health, and anthropology, all with an IPM focus. Within the IPPC, we have a collective expertise in understanding the use of pesticides within IPM programs with a goal of protecting the economic, environmental and human health interests of our stakeholders.

To compile comments, input is actively solicited from stakeholders throughout the Pacific Northwest in an effort to convey use patterns, benefits, potential impacts, and the availability and efficacy of alternatives. These comments largely reflect agricultural stakeholder feedback and do not imply endorsement by Oregon State University or the Western IPM Center.