

## Integrated Plant Protection Center Katie Murray, Faculty Research Assistant

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

Re: EPA-HQ-OPP-2015-0653, Proposed tolerance revocation of chlorpyrifos

The following comments are being submitted in regard to EPA's proposed revocation of all tolerances for chlorpyrifos. These comments are being submitted on behalf of the Western IPM Center, and provide input on the use of chlorpyrifos in a number of important Pacific Northwest commodities.

Many food crop industries in the Pacific Northwest are concerned about the impacts to pest management based on EPA's proposed tolerance revocation of chlorpyrifos, including several minor crop groups with limited pesticide options. These industries include processed vegetables, strawberry, grass seed, mint, and cranberry. For many of these industries, chlorpyrifos has unique properties that make it an essential part of their IPM programs. It is also an important tool for resistance management. Several of these industries have conducted extensive research to identify effective alternatives to chlorpyrifos, but currently there aren't viable alternatives that match the efficacy and low risk of this product for managing a number of critical pests.

For the processed vegetable industry, there are a number of critical uses of chlorpyrifos, including brassica/cole crops, snap beans, and sweet corn seed production. Chlorpyrifos is critical in controlling cabbage maggot in brassica/cole crops. In this case, chlorpyrifos is uniquely effective as a soil-active insecticide that prevents the entry of larvae into root tissue, where they are very difficult to manage once present. There are currently no alternatives that provide this level of effectiveness of control in broccoli and cauliflower. Cabbage maggot has the potential to cause complete crop loss if not effectively controlled.

In snap bean and sweet corn seed varieties, chlorpyrifos is used as a seed treatment to control seed maggots and other seed predators. Stand losses can be upwards of 50% if treatments are not applied. In sweet corn production, chlorpyrifos is also used at seed planting to control cutworm and cucumber beetle larvae. The broad-spectrum and soil-active effectiveness of chlorpyrifos for controlling beetle, fly, and moth pests is currently not shared by other products labeled for use in these crops. The current uses of chlorpyrifos in these processed vegetable industries lead to minimal exposure, with very low risk to non-target species, including water and humans.

For strawberry production, chlorpyrifos is critical for controlling garden symphylans and strawberry corn moth larvae. There are currently no other alternatives for controlling these pests, which reside in the soil. Strawberry yields and fruit loss would be diminished, and plant death could occur without effective management of these pests. It is thought that the



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economic impacts to the strawberry industry based on the loss of this product would be considerable.

For the grass seed industry, chlorpyrifos is critical in controlling key pests such as aphid, crane fly, cutworm, armyworm, sod webworm, and orchardgrass billbug. In addition to controlling primary feeding insect damage, chlorpyrifos also controls aphids vectoring devastating diseases, such as the Barley Yellow Dwarf Virus complex, that results in significant economic loss.

The mint industry, which encompasses seven states across the West and Midwest, relies on chlorpyrifos to control major pests including mint root borer, cutworm, and garden symphylan. Yield losses would be significant without the effective control of these key pests.

Finally, while Oregon cranberry growers generally focus on using alternative chemistries for controlling insect problems, some growers are beginning to see resistance issues. The Oregon cranberry industry would ideally like to retain the option to use a chemistry such as chlorpyrifos in case of emergency, such as the recent scale outbreak, for which chlorpyrifos offered effective control.

A revocation of all chlorpyrifos tolerances would eliminate a number of low risk, critical uses in cases where few alternatives exist at present, and in many cases those alternatives (neonicitinoids, pyrethroids) would be less efficacious, more expensive, and have greater impacts on non-target species including pollinators and beneficial insects. Further, the economic impacts based on resulting crop damage would be substantial.

For more information, please fee free to contact me and I can connect you with representatives from each of the industries mentioned here, who have also written you individually.

Respectfully,

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