

Western Integrated Pest Management Center

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Docket Number: ID: EPA-HQ-OPP-2008-0331 Special Docket for Pyrethroids, Pyrethrins, and Synergist Moana Appleyard, 703-308-8175, appleyard.moana@epa.gov Pesticide Registration Review: Proposed Interim Decisions for Several Pyrethroids;

Pyrethrins (EPA-HQ-OPP-2011-0885), Bifenthrin (EPA-HQ-OPP-2010-0384), Cyfluthrin or beta-cyfluthrin (EPA-HQ-OPP-2010-0684), Lambda-cyhalothrin (EPA-HQ-OPP-2010-0480), Permethrin (EPA-HQ-OPP-2011-0039), Tau-fluvalinate (EPA-HQ-OPP-2010-0915), Cypermethrin, alpha-cypermethrin, zeta-cypermethrin (EPA-HQ-OPP-2012-0167), Esfenvalerate (EPA-HQ-OPP-2009-0301) and Tefluthrin (EPA-HQ-OPP-2012-0501)

Pyrethrins are used in organic production as well as conventional. Uses include ornamentals, cut flowers, cucurbits, coffee, turf and corn-soybean rotation. Ornamentals include; orchid, protea and poinsettia. Pyrethrins are an essential aspect in rotation for many of theses growers. In some cases there are no alternatives, such as coffee. Pyrethrins are used to control a variety of insects and mites including; aphids, mealybugs, thrips, hoppers, weavils, coffee borer, corn borer, armyworm and corn earworm. Tau-fluvalinate and cyfluthrin are used as part of rotation to prevent resistance, since Tau-fluvalinate and cyfluthrin are non-restrictive pyrethroids. Bifenthrin has reported use in seed crops, turf and specifically coffee. Bifenthrin is used for corn earworm, corn borers, armyworm, leaf hoppers and thrips in corn and soybean rotation. Bifenthrin is used on golf courses and turf in Hawaii in combination with imidacloprid and zeta-cypermethrin. I can report that turf armyworm appears to have developed tolerance to bifenthrin, the active ingredient in Talstar here on Oahu. Due to its effectiveness Bifenthrin along with Beauveria bassiana are the few pesticides that target Coffee Bean Borer. This pest is difficult to control, since the insect spends the majority of its life cycle inside the coffee berry. The only effective treatments that have been documented are rotation with pyrethrins and Beauveria bassiana as contact spray.

Cyfluthrin or beta-cyfluthrin are used in corn and soybean rotations in Hawaii to control corn borers, corn earworm, armyworm and thrips. Cyfluthrin is typically applied as a post-emergence in early stages.

Lambda-cyhalothrin has a range of uses in crops in Hawaii, such as seed crops and leafy vegetables. The main uses are in Chinese Cabbage, and bok choy to control bagrada bug. The use in corn-soybean rotation are for corn borers as well as Japanese beetle and aphids. Permethrin is used for pickleworm and leaf hoppers on cucurbits in Hawaii.

Tau-fluvalinate is used as a miticide and insecticide in orchids post-harvest. This is typically used as a dip-treatment, applied before shipment. It is also used as a spray in shade/greenhouse in ornamental production.

Cypermethrin, alpha-cypermethrin, zeta-cypermethrin, Esfenvalerate and Tefluthrin are used in corn-bean production for aphids, armyworms, corn earworms, japanese beetle, hoppers thrips and aphids.

The following comments are being submitted in response to the November 12, 2019 Federal Register notice announcing the availability of and seeking public comment on EPA's draft ecological risk assessment on EPA's Ecological Risk Mitigation Proposal for 23 chemicals classed as pyrethroids and pyrethrins. This represents the Agency's Proposed Interim Decision (PID) to address the potential ecological risks from the use of the pyrethroids as a group, and the resulting final decision will serve as the ecological risk mitigation component for each chemical-specific PID. These comments are being submitted on behalf of the Western Integrated Pest Management Center and provide input on the use of Pyrethroids, Pyrethrins, and Synergist in Hawaii.

Comments compiled and submitted by:

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