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MĀNOA

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1200 Pennsylvania Ave. NW.  
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Subject: **Docket ID Number EPA-HQ-OPP-2013-0360**

Comments in Response to *Abamectin Registration Review: Draft Human Health and Ecological Risk Assessments*

The following comments are being submitted in response to the December 15, 2017 *Federal Register* notice announcing the availability of and seeking public comment on EPA's draft human health and ecological risk assessments for the registration review of abamectin and the February 1, 2018 memorandum subject: "Authorization to extend the public comment period for certain registration review dockets." These comments are being submitted on behalf of the Western Integrated Pest Management Center and provide input on the use of abamectin in the production of **avocado, bulb onions, fruiting vegetables (eggplant, peppers and tomatoes), citrus and cucurbits (summer squash and cucumbers)** and in **turf and landscape maintenance** in Hawai'i.

#### **Avocado**

In Hawai'i, abamectin is used to control avocado thrips on avocado. The typical application rate is 0.012-0.023 lb ai/A. Two (2) applications are typically applied in one (1) year, with the first application after fruit set. The application interval is typically 14-28 days.

#### **Bulb Onions**

On bulb onions, abamectin is used to control onion thrips and leafminer. The typical application rate is 0.010-0.019 lb ai/A. Three (3) applications are typically made per crop per season. Abamectin is applied when scouting indicates the onion thrips population has reached a threshold of 0.5 thrips/plant. The typical interval between two (2) consecutive abamectin applications is seven (7) days; an alternative chemistry is applied between two consecutive applications of abamectin and the third abamectin application. Alternatives to abamectin for bulb onions are spirotetramat and spinetoram.

#### **Fruiting Vegetables (Eggplant, Peppers and Tomatoes)**

Abamectin is used to control broad mite, *Liriomyza* leafminers, spider mites, *Thrips palmi*, tomato pinworm and tomato russet mite on eggplant, peppers and tomatoes. The typical application rate to control these pests is 0.010-0.019 lb ai/A. The typical interval between two (2) consecutive abamectin applications is seven (7) days. Three (3) applications are typically made per crop per season; alternatively a total

maximum of 0.056 lb ai/A per crop per season is applied. When three (3) applications of abamectin are applied in a season, an alternative chemistry is applied between two consecutive applications of abamectin and the third abamectin application. Abamectin is applied when scouting indicates the presence of any of these pests on the plants. For thrips and tomato pinworm, alternatives to abamectin are spirotetramat and spinetoram. For mites, alternative insecticides are spiromesifen or sulfur.

### **Citrus**

Abamectin is used to control citrus leafminers, spider mites, Asian citrus psyllid and broad mites. The typical application rate is to control these pest is 0.010-0.019 lb ai/A. The typical interval between abamectin applications is seven (7) days. Three (3) applications are typically made per crop per season; alternatively a total maximum of 0.057 lb ai/A per crop per season is applied. In Hawai'i, the crop year for citrus is one (1) year. Abamectin is applied when scouting indicates the presence of any of these pests on the plants. Horticulture oils and sulfur are alternatives to control spider mites.

### **Cucurbits (Summer Squash and Cucumbers)**

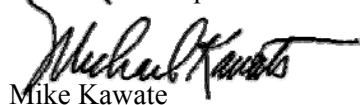
Abamectin is used to control leafminers and spider mites on summer squash and cucumbers. The typical application rate is to control these pest is 0.010-0.019 lb ai/A. The typical interval between abamectin applications is seven (7) days. Three (3) applications are typically made per crop per season; alternatively a total maximum of 0.056 lb ai/A per crop per season is applied. When three (3) applications of abamectin are applied in a season, an alternative chemistry is applied between two consecutive applications of abamectin and the third abamectin application. Abamectin is applied when scouting indicates the presence of any of these pests on the plants. Spiromesifen, horticulture oils and sulfur are alternatives to control spider mites.

### **Turf and Landscape**

Insecticide products containing abamectin as the sole active ingredient and abamectin co-formulated with bifenthrin are commonly use in turf and landscape scenarios in Hawai'i. Pests managed with abamectin products include ants (big-headed ant and tropical fire ant); and mites (bermudagrass mite and zoysiagrass mite). A product co-formulated with bifenthrin will be used in a trial to control golf course frit fly.

Comments were received from Extension personnel of the College of Tropical Agriculture and Human Resources of the University of Hawai'i at Mānoa.

Comments complied and submitted by:



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