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MĀNOA

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

Subject: Docket ID Number EPA-HQ-OPP-2016-0417

Comments in Response to the opening of the registration review docket for
Metaflumizone (case 7446).

The following comments are being submitted in response to the November 3, 2016
Federal Register notice by EPA regarding *Registration Review; Conventional,
Biopesticide and Antimicrobial Pesticides Dockets Opened for Review and
Comment*. These comments are being submitted on behalf of the Western Integrated
Pest Management Center and provide input on the use of metaflumizone on turf,
landscapes, ornamental nurseries and citrus and nut production in Hawai'i.

In Hawai'i, metaflumizone is used to control ants, including little fire ants (*Wasmannia
auropunctata*) on turf (including sports turf), landscapes, ornamental nurseries and citrus and nut
production. LFA is an invasive species that was first identified in Hawai'i in 1999. LFA
infestations are widespread throughout the windward side of Hawai'i Island (the "Big Island"),
often in and around ornamental nurseries and properties that purchased plants from infested
nurseries. Localized infestations have occurred on other islands and other parts of Hawai'i Island.
These localized infestations have been the subjects of eradication efforts (utilizing insecticides
other than metaflumizone) and intensive monitoring.

When treating for LFA, it is normal practice to treat the entire site or crop, at maximum label
application rates. Label directions limit applications to four (4) times a year. For food crop
production situations, this is problematic because there are virtually no other products available
and at least eight (8) treatments annually are required to effectively control LFA. In turf and
ornamental sites, the recommendation is to alternate metaflumizone treatments with another bait
product to avoid exceeding four applications of metaflumizone per year. Ornamental nurseries
that grow a variety of potted plants including groundcovers, small and large shrubs, trees
(including monkeypods and Poinciana) and palms (including coconuts) report applying
metaflumizone at six-month intervals. Ornamental nurseries treat with metaflumizone to prevent
the spread of LFA to other locations, either on the same island

or inter-island. The Hawai'i Department of Agriculture (HDOA) has enacted quarantine regulations to prevent the shipment of potted plants infested with little fire ant from Hawai'i Big Island to other islands.

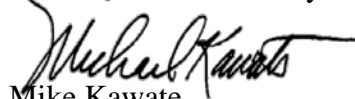
Hydramethylnon bait (used in turf, ornamentals and non-bearing fruit and nut trees) is highly attractive to LFA; however, rotating baits with different active ingredients is recommended, especially since the most effective protocol for infestations involves repeated applications over a two-year period. Research has indicated that, when applied alone, metaflumizone is highly attractive to LFA. Efficacy of metaflumizone achieved 90-100% by 14 days after continuous exposure in lab colonies, and residual activity is persistent even after exposure to rain, humidity and sunlight, which break down hydramethylnon.

Additionally, because LFA in arboreal nests may not descend to the ground to forage, there is a need for a bait that can be applied up in trees or on tree trunks. Metaflumizone retains residual activity even after absorbing moisture. Thus, metaflumizone may have the potential to be mixed with a carrier (eg., oil or peanut butter) for arboreal application. There is a pending IR-4 efficacy study for metaflumizone for this application on additional food crops. However, at the present time, the registrant is not supporting application into the canopy, i.e., they will support only the granular application to the ground. In Hawai'i, these crops would include tropical specialty crops: fruits, coffee, cacao, tea, lychee, rambutan, longan, papaya, and banana.

LFA are an important pest because they deliver a painful sting when disturbed. Welts can last for weeks. LFA infest agricultural fields and farms, where they damage crops and sting workers. Additionally, LFA promote plant pests such as aphids, white flies and scale insects, which secrete plant sap that the ants eat. In turn, the ants protect these insects from natural predators and parasites. LFA also infest houses, beds, furniture and food. They may sting, and even blind, pets such as cats and dogs. In the Galapagos, LFA have been known to eat tortoise hatchlings and attack the eyes of adult tortoises.

Comments were provided by a representative of the Hawai'i Ant Lab, a representative of an ornamental nursery, a sports turf manager and extension personnel at the College of Tropical Agriculture and Human Resources. Additional information about LFA can be found at the Hawai'i Ant Lab web site (<http://www.littlefireants.com>) and the Little Fire Ants on O'ahu and Maui web pages of the HDOA Division of Plant Industry (<http://hdoa.hawaii.gov/pi/main/lfainfo/>).

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