



September 5, 2006

Ref: 2006-13-1

Office of Pesticide Programs
Regulatory Public Docket (7502P)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001

Re: Docket ID Number OPP-2005-0084
Subject: Comments on the Dimethoate IRED

In the Dimethoate Interim Reregistration Eligibility Decision (IRED) document, announced in the July 12 *Federal Register*, EPA indicated that future use of dimethoate on cherries will be limited to one application per year at a maximum application rate of 0.33 # ai/A. The Pacific Northwest Workgroup of USDA's Western Integrated Pest Management Center, representing the states of Alaska, Idaho, Montana, Oregon, Utah, and Washington, is providing comment on the dimethoate IRED.

In Washington, dimethoate plays an important role in the control of cherry fruit fly, a quarantine pest with a zero tolerance for larvae in picked fruit. Here dimethoate is now applied to cherry trees as a single application seven to ten days after harvest. The goal of this post-harvest application is to control cherry fruit fly larvae in any unpicked fruit. This control is critical to overall cherry fruit fly control programs because larvae in unharvested fruit, once the fruit falls, will pupate in the soil and emerge the following season as egg-laying adults. Dimethoate is the only product that can control larvae developing inside the fruit.

In the IRED, EPA acknowledges the existence of a Special Local Need (SLN) registration that allows for the use of dimethoate on cherries at 1.0 # ai/A. The purpose of this letter is to inform you that neither the 0.33 # ai/A nor the 1.0 # ai/A SLN rate are sufficient for post-harvest control of cherry fruit fly.

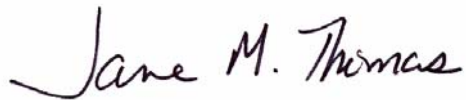
Tim Smith, WSU Extension Educator, has recently conducted efficacy trials for post-harvest treatments for cherry fruit fly control. The attached Project Report concludes that while the 1.0 # ai/A rate suppressed the number of emerging cherry fruit fly larvae, it was insufficient for effective control. Adequate control was achieved, however, using the 1.33 # ai/A rate.

The use that Washington sweet cherry growers wish to retain is for a single application of 1.33 # ai/A dimethoate to orchards following harvest. Because harvest dates vary depending upon

orchard elevation and variety, cherries are generally picked in Washington from mid-June through mid-August. This post-harvest dimethoate application occurs at a time when there is little activity in the orchard. Worker do require orchard access following this dimethoate application for activities such as irrigation but none of the orchard tasks conducted at this time entail foliar contact. Workers return to the orchard to prune trees four to seven months after dimethoate application.

We are asking that EPA revise the dimethoate IRED to allow for a single post-harvest application to cherries at 1.33 # ai/A for the control of cherry fruit fly. Controlling cherry fruit fly in unpicked fruit is critical in the management of this quarantine pest.

Sincerely,

A handwritten signature in black ink that reads "Jane M. Thomas". The signature is written in a cursive, flowing style.

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Introduction and Justification

Cherry fruit fly was identified as the top priority in the TFRC Cherry Research Committee yearly priority setting sessions. The objective of this project has been to develop safe and highly effective new control material options, as the carbamate and organophosphate class insecticides available at the inception of this work were (and continue to be) under regulatory pressure. Alternative methods and chemistries will provide growers a choice of products, insecticide classes, and control methods, leading to highly effective control.

Post-harvest Treatments:

Summary:

The recommended rate of Dimethoate (1.33 lb. ai / A or 4 pints of the 2.67 lb/gal. formulation) prevented the emergence of larvae from infested fruit. The lesser rate of Dimethoate, (1.0 lb./ai/A), suppressed the number of larvae that emerged, but was not sufficiently effective.

Methods:

Portions of a unharvested cherry tree were treated with the two test rates of dimethoate on a date that would have been "post-harvest," under normal conditions. The test rates were applied in a volume of water that lead to "full drip," which we judged to be equivalent to about 300 gallons per acre. At the treatment date, some of the larvae in the fruit were late in their third (and final) instar, and were soon to emerge, as they had cut the characteristic breathing and emergence holes in some of the fruit. Most of the larvae are in the third and second instar at this stage of population development. One day after treatment, 250 fruit were harvested from each treatment and suspended over sand. The larvae were allowed to emerge at room temperature over the next three weeks. Larvae emerged from the untreated fruit most rapidly during the first five days after treatment, when 72 percent of the total emerged. After that time, emergence rapidly tapered off, and was complete by the 11th day.

Judging by the number of larvae that emerged from the untreated fruit, about 30 percent of the fruit on the test tree was infested.

Results:

Table 1. Post harvest "Clean-up" Spray Options:

Product	Rate	Fruit Sample	Larvae Emerged
Dimethoate 267	64 oz./300 gal./A 1.33 lb. ai/Acre	250	0
Dimethoate 267	48 oz./300 gal./A 1.0 lb. ai/Acre	250	9
Untreated	0	250	76