Update on Medfly Suppression Activities in Kula
G. McQuate

Following the successful persimmon season in 2001, several research trials have been conducted to assess Medfly suppression strategies in loquat and peach – the two major bridge hosts that help to maintain the Medfly population outside of persimmon season. In loquat, two suppression techniques were tested: (1) weekly sprays of GF-120 Fruit Fly Bait and (2) Biolure mass trapping at a density of one trap per tree. Both techniques kept the Medfly population fairly low (typically less than 1 fly/trap/day) during the first half of the loquat season (mid-January through March), but the Medfly populations in both treatment areas went up in the second half of the season (April through June). Loquat infestation in the mass trapping area steadily increased through the course of the season, and was consistently more than in the area treated with GF-120. The estimate for loquat infestation rate at the end of the season was 22% for the GF-120 area, 32% for the mass trapping area, and 37% for the control area. Both techniques tested provided some level of suppression, but neither technique, on its own, was able to prevent a Medfly population build-up. One problem that contributed to the population build-up was a lack of sanitation. Sanitation is a term that describes prompt removal and disposal of fruit from beneath the trees. Adequate sanitation can be a problem with loquat because overripe fruits often will remain on the tree, rather than fall off, making collection of overripe fruits difficult, especially in the case where trees are large.

In peach, a trial was conducted in which three suppression techniques were employed simultaneously: sanitation, weekly sprays of GF-120 Fruit Fly Bait, and Biolure mass trapping. These techniques combined kept Medfly catches below 2 flies/trap/day and kept Medfly infestation below 10%. Further population (and infestation) reduction should be possible at this site when GF-120 can be sprayed on the coffee areas of the farm, also. It is hoped that an all crops label for GF-120 can be achieved by late 2003 at which point coffee plants could also be sprayed.

Finally, looking toward the 2002 persimmon season, it is interesting to note that the Medfly population peaks this year are hitting at the same time this year as they did last year. Those peaks, with the help of the Biolure mass trapping, are now dropping off considerably, as they did last year, and there seems cause for optimism for another low Medfly infestation year in persimmon.
Maui Melon Fly Suppression Update
R. Mau

A plague of mice ravaged fruiting vegetables during the past month. Mice were everywhere at low elevation farms. The hungry mice consumed cucumber and zucchini fruit at early developmental stages greatly reducing harvests. We empathize with growers who experienced substantial income that continues as we make this report.

As indicated by Figure 1, male melon fly trap catches continue at low levels, 0.1 to 5 flies per trap day. Discounting the mice factor, we are confident that male annihilation trapping in addition to the bait spray and sanitation tactics is responsible to further decreases in melon fly populations. The picture should become clearer by October. This is well before the expected end-of-year population increases.

![Maui Catch Per Trap Day Using Cue-lure](image-url)
Rodent-Infested Produce in Maui