Olive Fly Update

Olive fly populations continue to grow in Glenn and Tehama Counties. The California Olive Council sponsored traps recorded 38 flies at 3 sites in Glenn County and 412 flies at 5 sites in Tehama County in 2003. As of Aug. 27, 2004, these same sites had recorded 83 for Glenn County and 712 for Tehama County for this year. Fruit already infested with olive fly has been discovered in both counties. At this time, I think it would be difficult to find any trees in the two counties which are not at risk of being infested by harvest time. In Glenn County, Hamilton City and Orland have been identified as “hot spots” for infestation.

This year we have been comparing the efficacy of two different types of traps in three orchards, one in Tehama County and two in Glenn County. The traps are the McPhail trap, a water trap baited with Torula yeast dissolved in water, and the yellow sticky trap baited with ammonium carbonate and a sex pheromone (spiralketal). The graphs show the data compiled for all three locations. Catches in both traps increased at the end of May, peaked by the third week in June, declined to low levels by the second week in July, began to increase by the first week of August and have recently declined. Note the different scales on the different trap types. During peak activity the McPhail traps caught approximately six times as many flies as the sticky traps. About 90 percent of the flies caught in the sticky traps were males, while only about 2/3 of the flies caught in the McPhail traps were males. These results are similar to what has been seen in other areas such as Butte County. From this, the McPhail trap appears to be a more reliable indicator of olive fly populations than the sticky traps, at least for activity during the late spring and early summer. Below is a list of where you can get olive fly trapping materials including McPhail traps and Torula yeast.

When fly catches declined in July coinciding with high temperatures, growers were tempted to stretch out their spray interval. While this seems logical, we are not sure what the flies are doing during this time and there is no research that shows this is safe. We know that olive flies are adversely affected by high temperatures. Ongoing research is showing that olive flies without food or water will survive for a short period of time at temperatures of 95 degrees or higher.
If water is available, survival is greatly increased and the addition of food (honey) further increases the percent and length of survival. This helps explain why olive fly populations are generally much greater in irrigated versus non-irrigated orchards. Honeydew from Black Scale infestations most likely would be an excellent food source.

As the weather cools, increased catches are to be expected. Treatments should be applied on a regular schedule through harvest.
Sizing Fruit
Most area Manzanillo orchards appear to have a good crop. In some cases it may be a little too good and achieving good fruit size may be a little difficult. The money will be in the larger sized fruit. Proper irrigation and harvest timing will help insure that the olives achieve their maximum potential for sizing.

Make sure that your orchards are adequately watered through harvest. Any water stress at this time may result in smaller fruit.

Don’t get in too big of a hurry to harvest your olives. Olives fruit growth is rapid initially, slows in mid summer and accelerates again in late summer. While it is important not to harvest fruit with too much color (ripe fruit), canners penalize deliveries which exceed 7% culls. Heavy loaded trees will be slow to develop color and can be left on the tree to size for a longer period than lighter cropped trees. Pick blocks with lighter crops first and leave heavier loaded blocks for later.
Olive Fly Damage

See inside newsletter for an olive fly update.

Infested Sevillano olive, outward appearance

Exposed damage, showing cast pupal skin