Olive Fruit Fly Integrated Pest Management Options

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We Need an Areawide Approach

In the North Coast Region, high olive fruit fly populations can occur in unmaintained and/or ornamental landscape olive trees, which provides a significant source for invasion of nearby commercial olive orchards. We need to work together at a regional scale to help reduce olive fruit fly populations.

Fruitless Varieties

For ornamental purposes, consider planting fruitless varieties such as Majestic Beauty, Wilsonii, Swan Hill, & Little Ollie.

Fruiting Prevention

Naphthaleneacetic acid (NAA) products such as Olive Stop effectively thins fruit. At a small scale, a high-pressure water spray during bloom can help reduce fruit set.

Sanitation

After harvest, remove old fruit on trees & destroy fruit on the ground by burying them at least 4 inches deep or disposing of them.

Harvest Early

Harvesting early, removing the fruit from the orchard promptly, and pressing fruit quickly after harvest reduces the amount of time the crop is exposed to olive fruit fly and can help minimize reduction in quality.

Sources

UC IPM Olive Fruit Fly
UC IPM Olive Fruit Spray Thinning
UC IPM Pest Notes
UC ANR Olive Production Manual

Scouting & Monitoring

In late winter & spring, look for larvae in fallen fruit. During the growing season, McPhail, Olipe, or yellow sticky traps can be used to monitor adult fruit flies. By March 1, place traps mid-canopy in the shade in fruiting trees. Record the number of flies trapped weekly. This number will decline during a hot summer & increase as weather cools. For more information on monitoring traps, see UC IPM Guide for Olives.

Deterrent Sprays

Kaolin clay (such as Surround WP) coats the leaves & fruit with a white powder that repels flies & creates a physical barrier.

Insecticides

The conventional option is Danitol (Fenpropathrin), and the organic option is GF-120 Naturalyte Fruit Fly Bait (Spinosad). When trap captures start to increase during pit hardening, follow label instructions to begin insecticide sprays. Olive fruit flies wait until olive fruit is soft to start laying eggs in the fruit. If flies are found in the spring & the orchard has a history of damage, plan on starting insecticide treatments at the beginning of pit hardening.