



## Medflies Infest Florida Fruit

**Florida enacts an emergency eradication program to rid trees of the worst Mediterranean fruit fly infestation in more than a decade.**

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Courtesy USDA/ Scott Bauer

The Florida Department of Agriculture and Consumer Services began an eradication program in June to target the Mediterranean fruit fly, a global pest known for infesting citrus fruit trees. The Mediterranean fruit fly is making another appearance in the U.S. this season. After infestations in California led to the quarantine of farms in San Diego County last November, the Medfly is now wreaking havoc on fruit and vegetable farms in Florida.

The Medfly has made continual appearances in the U.S. since 1929, when the first Medfly eradication program was implemented in Florida. Since then, the Medfly has reappeared in Florida, California and Hawaii, though it has not had the advantage of establishing itself in the long-term. This year's outbreak in Palm Beach County, Fla., is the first major Florida infestation since 1997 and 1998, according to a press release from the Florida Department of Agriculture and Consumer Services.

"Many dollars and much effort on the part of various state and federal agricultural regulatory agencies and international cooperation with other ministries of agriculture are expended to ensure that any introductions do not occur and do not establish when [Medflies] are able to slip in undetected," says David Dean, an entomologist at the Florida agriculture department's fruit fly laboratory.

The Medfly originates from sub-Saharan Africa, but derives its name from its established residency in the Mediterranean. While the Medfly got its bad reputation for infesting citrus fruits, because of its ability to endure a wide range of climates, tropical to temperate, it can infest more than 250 other crops as well, such as apples, nuts and some vegetables.

"The Medfly is recognized as one of if not potentially the worst agricultural pest on a worldwide basis," Dean says. "It can reproduce in such a wide variety of unrelated host plant fruits—and even in weedy hosts—attacking the fruit while still on the plant."

Florida's agriculture department began an emergency Mediterranean fruit fly eradication program on June 10, 2010, to contain and eliminate the current infestation, Dean says. The Florida eradication program includes: deploying 100 Medfly detection traps in each square mile where Medflies are identified  
deploying 250,000 sterile male Medflies in each square mile where Medflies are identified. (Known as the sterile insect technique, this took place after the first two weeks of the eradication program.)  
stripping fruit off trees at sites testing positive for Medflies, examining the fruit for infestation and destroying it  
treating the soil of positive sites with a foliar bait spray

The Medfly eradication program will continue for three life cycles of no new Medfly finds.

"Because we were able to make detection early and were able to implement rapid eradication efforts while the infestation was still very small, we have only had a few small commercial mango growers quarantined and unable to ship or sell fruit outside the area," Dean says.

However, small farmers and home gardeners in Florida should keep alert to Medfly infestations in their crops. Under optimal conditions, the Medfly can reproduce rapidly.

"Once the female has injected the fruit with eggs, then it is nearly impossible to save the fruit from damage done by the larvae or fruit maggots," Dean says.

Medflies spend much of their lives—from egg to maggot—inside the fruit, making it difficult for farmers to detect an infestation. Because of their resiliency, the Medflies may stay alive even after the fruit is picked and is transported or traded.



If you suspect a Mediterranean fruit fly infestation in your area, contact your state's agriculture department or agricultural regulatory agency for identification and appropriate response.