

# The Mediterranean Fruit Fly

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The "Med Fly" pests prevent the successful growing of several types of fruit in areas having mild winters. The fly can attack citrus (oranges and grapefruit), peaches, nectarines, apples, pears, plums, quinces, coffee, and many other cultivated and wild fruits. The "Med Fly" was first discovered in Florida in 1929 and the state spent \$7 million to exterminate the pests. In 1956 Florida again spent millions to kill the pest. Recently in California a spraying program was initiated when large numbers were discovered.

In cool regions of the world, the fly can winter as either an adult or pupa, but in warmer regions where fruits grow year round, the reproductive activity is continuous. The adult female makes a small pinprick in the fruit and deposits from 2 to 10 eggs through this small hole. The hole is made in the rind of the fruit and

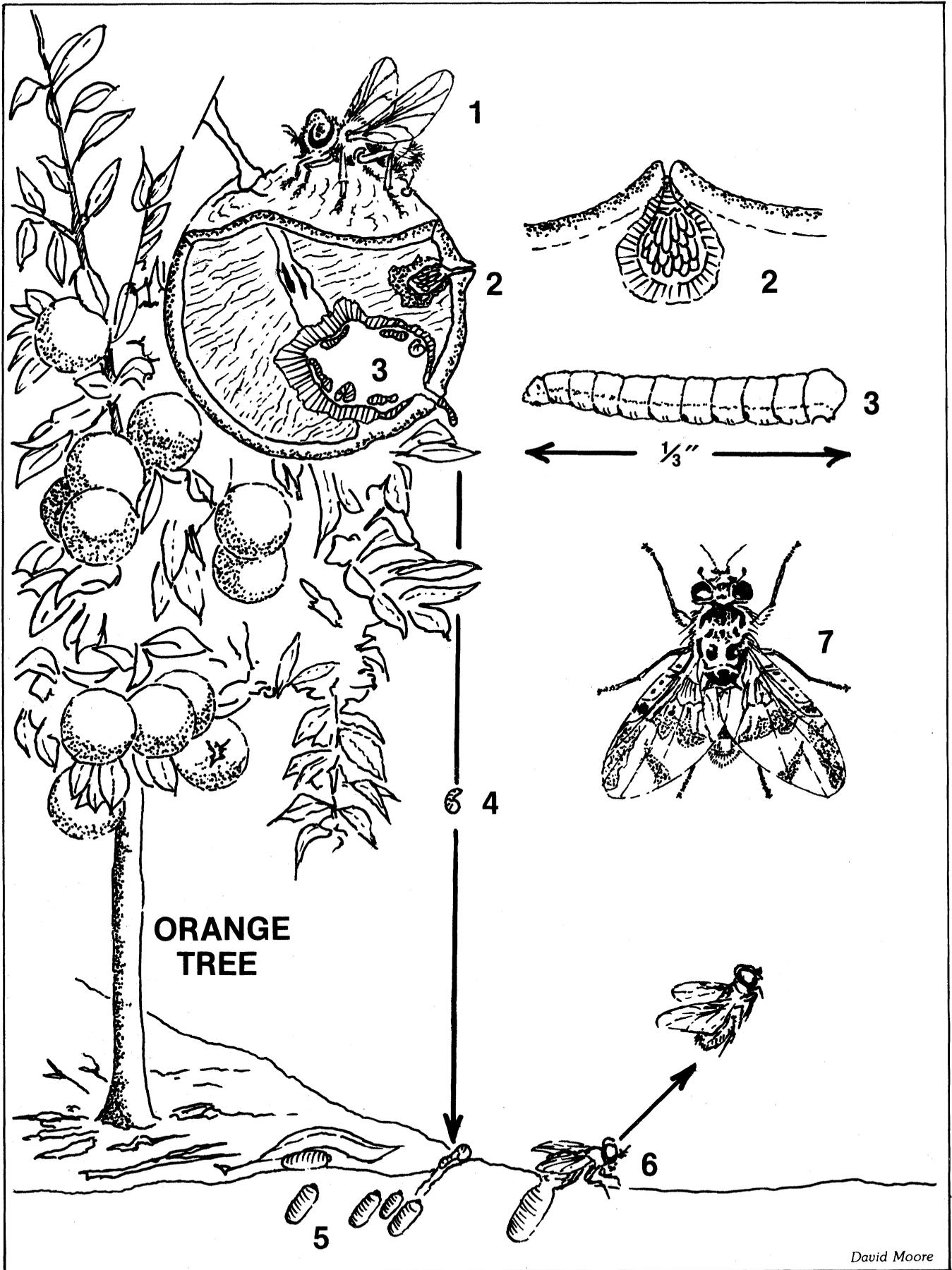
other females may deposit their eggs in the same hole. A single female "Med Fly" can produce 800 eggs. The eggs hatch in 2 to 20 days and the larvae burrow and eat their way through the pulp for 10 days to 6 weeks. In the process of burrowing, the larvae spread bacteria which produces a rotted area in the fruit. In strawberries, the larvae tend to destroy most of the fruit's interior, while in larger fruit such as peaches they will generally destroy only a portion of the fruit. At the end of this larval stage they are about  $\frac{1}{4}$ " long. The destroyed fruit either falls to the ground or the larvae fall from the infested area of the fruit to the ground where they form a "puparium" in the soil within 2 inches from the soil surface. They may also form this protective case under leaves or litter. Pupation is completed in 10 to 50 days when the adult emerges.

The adult is close to the size of the house fly. The thorax is black with a mosaic pattern of yellowish-white lines. The abdomen is yellowish with two silvery crossbands. The wings are banded and blotched with yellow, brown, and black.

#### Code:

1. Adult female depositing eggs in fruit.
2. Egg cavity in the rind of an orange showing cone-shaped swelling of the withering rind.
3. Cavity in the fruit made by the larvae. . . enlargement of the larvae on the right (anterior end to the left).
4. Larvae falling to the ground.
5. Formation of "pupariums" underground and under litter.
6. The adults hatching.
7. Adult male fruit fly.

# LIFE CYCLE OF THE MEDITERRANEAN FRUIT FLY



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