cerning the life cycle of this insect. Both nymphs and adults have been collected on the ground under the tree. In the laboratory they readily fed on young fruit and produced injury identical to that found in the field. Field injury, severe enough to involve 30 to 40 percent of the entire crop, occurs before the fruit reaches the size of a pea and may be found on late bloom fruit as well as on normal spring bloom fruit.

The use of toxaphene, chlordane, lindane or aldrin at the time of petal fall and at dosages similar to those for grasshoppers was found to reduce the amount of injury.

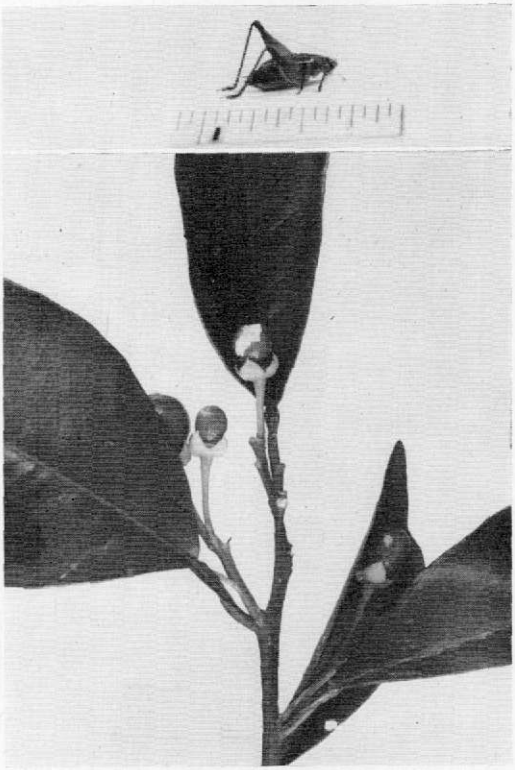

Fig. 76.—Top: The restless bush cricket. Apparently, this insect can injure fruit severely. Bottom: Fruit just after it was injured by the restless bush cricket or a katydid.

MOTHS AND BUTTERFLIES

Numerous species of moths and butterflies are occasionally found on citrus trees. Some of these are sufficiently common to be classed either as pests or as insects, arousing sufficient questions to be worthy of mention here.

ORANGE-DOG

The orange-dog, *Papilio cresphontes* Cramer, is often a pest of young citrus trees. As an adult, this species is a large black and yellow butterfly. The larva grows to a length of 1½ inches and is an ugly brown and white individual with some yellow markings. The coloration is such that the larva often resembles a bird dropping on the foliage. Two black spots on the thorax