

BUG BIZ

Pest Management and Insect Identification Series



Mole Crickets

Mole crickets cause millions of dollars in turf and grass damage each year. Their burrowing in the soil breaks up the soil and causes roots to dry out. They also feed on the young grass roots, causing grasses to die. The most severe injury occurs in the summer and early fall, when the young are maturing and actively looking for food.

Identification

The adult mole cricket is one to one and one-half inches long and gray to light brown. The front legs are spadelike and well adapted for digging tunnels. The prothorax is enlarged and heavily sclerotized (hardened) for mounding and packing the soil in the tunnels.

Although similar at first glance, the different species in Louisiana can be separated by several characteristics such as the tibial dactyls (finger claws) (Figure 1) used in digging and the length of the trochanter blade (Figure 2).

The Northern mole cricket, *Neocurtilla hexadactyla*, has four distinct dactyls (claws), which are sclerotized in a fan-shaped pattern and do not move. The trochanter has no bladelike sclerotization.

The Southern mole cricket, *Scapteriscus abbreviatus*, has two dactyls (claws); they are separated by a space almost as large as the width of one claw and U-shaped. The trochanter blade covers about one-half of the trochanter.

On the Tawny or Changa mole cricket, *Scapteriscus vicinus*, the tibial dactyls almost touch at the base and the space is V-shaped. The trochanter blade covers the entire length of the trochanter.

Life Cycle

Adults begin emerging from overwintering burrows in late February and March. Peak activity is in late March, April and May. Activity begins on the soil surface at dusk and stops at dawn. Mating occurs, and females lay about 35 eggs in each of three to five chambers beneath the soil. Hatching occurs in 15 to 20 days. Peak nymphal activity on the soil surface occurs in July, August and September. Overwintering occurs when young adults or older nymphs burrow deep in the soil.

Adults and nymphs are alike, but the nymphs have no wings and are sexually immature. The last two nymphal instars have wingbuds, and they are also sexually inactive.

Control

Treatment for control of mole crickets is directed at the adults in the spring by using early baiting or spray applications. Nymphal control in the summer and fall is best obtained by using baits that can be bought or made at home. For proper chemicals and timing, follow the recommendations from the Pest Management Guide found on our LSU AgCenter Web site at www.lsuagcenter.com.

Figure 1. Tibial dactyl characteristics

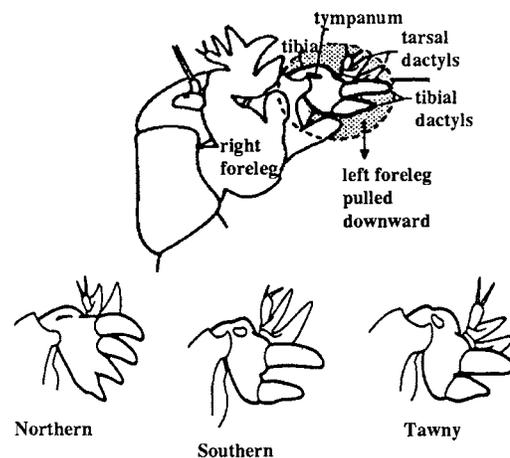
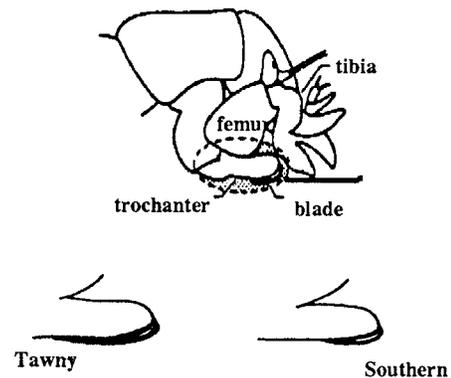
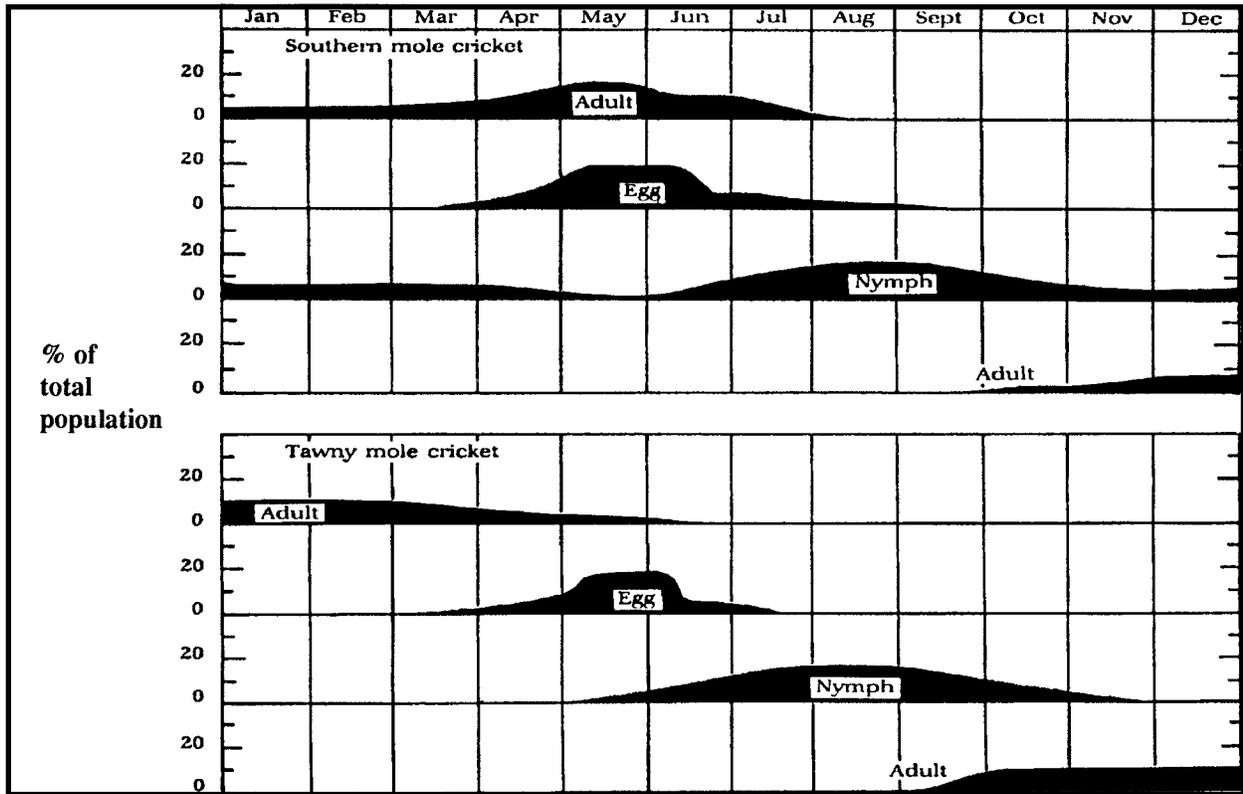


Figure 2. Trochanter blade lengths



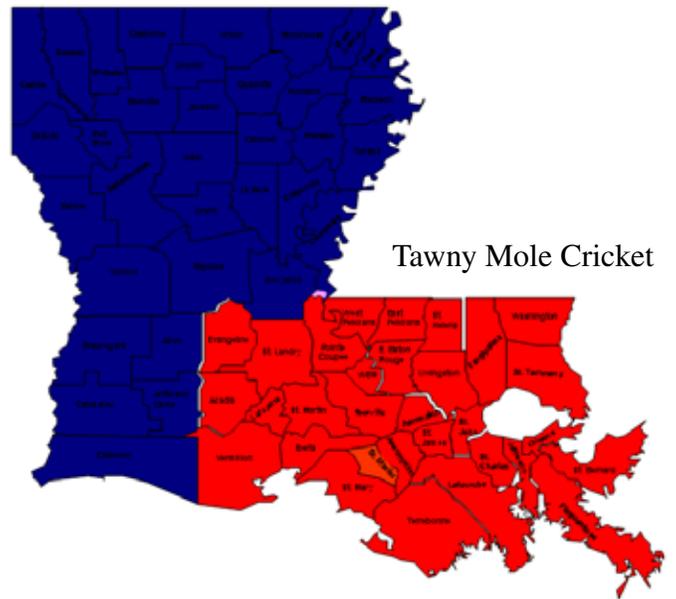
Life Cycles of the Southern and Tawny Mole Cricket



Distribution of Mole Cricket Species in Louisiana



Southern Mole Cricket



Tawny Mole Cricket

Northern Mole Cricket

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