



Soil Biology Guide



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genus of Tychini from California
 1958b. A study of the North
 ae). *Pan-Pac. Entomol.* 34:187-
 Present status of the tribe May-
 a). *Pan-Pac. Entomol.* 35:117-
 nited States—Part II California.
 ew of the genera *Euplectus*, *Pyc-*
 ncluding Nearctic species north
 001. Two new blind beetles, of
 5-28.

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Insecta: Coleoptera Scarabaeidae Larvae

HARUO TASHIRO

The family Scarabaeidae, referred to as scarab or scarabaeid beetles, contain about 1280 North American species and vary greatly in size, color, and habits. The most distinguishing common feature in adults is the antennae, terminating in an oval or elongate club composed of three (rarely more) leaves or lamellae that can be folded closely together or spread apart to show the individual lamellae (Borror and DeLong 1970). This feature has given rise to the name lamellicorn beetles, and depending on their food habits, are divided into lamellicorn scavengers and lamellicorn leaf chafers (Comstock 1977). Another common feature is their fossorial front tibia adapted for digging in soil (Blatchley 1910).

The most distinguishing characteristic of scarabaeid larvae is their stout, wrinkled C-shaped configuration when at rest, with the tip of the abdomen touching the legs or nearly so. With exceptions in one subfamily there are three larval stages. Most descriptions refer to the third stage larvae but usually apply to the second stage as well (Ritcher 1966).

The superfamily Scarabaeoidea contains two other families that might be confused with Scarabaeidae since members of all three families occupy similar habitats and have similar appearances. Lucanidae have C-shaped larvae, but the adult antennae terminate in pectinate or comblike segments incapable of being folded into a compact club. Larvae of Passalidae are not C-shaped. Also, their metathoracic larval legs are rudimentary, whereas in most Scarabaeidae they are well developed.

