

The Great Lakes Entomologist

Volume 7
Number 4 -- Winter 1974 Number 4 -- Winter
1974

Article 1

December 1974

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Recommended Citation

Moore, Ian 1974. "Notes on *Phaleria Rotundata* Leconte with Description of the Larva (Coleoptera: Tenebrionidae)," *The Great Lakes Entomologist*, vol 7 (4)
DOI: <https://doi.org/10.22543/0090-0222.1233>
Available at: <https://scholar.valpo.edu/tgle/vol7/iss4/1>

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NOTES ON *PHALERIA ROTUNDATA* LECONTE
WITH DESCRIPTION OF THE LARVA
(COLEOPTERA: TENEBRIONIDAE)

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In 1956 I presented a discussion of the Coleoptera indigenous to the seashore of Pacific North America. I divided the fauna into zones and subzones based on type of shore and reach of tide. Among the genera listed were two of the family Tenebrionidae, *Epantius* (now called *Apsena*) and *Phaleria*. Each of these is represented in southern California by a single species in decaying seaweed on sandy beaches. The first of these, *Apsena obscura* LeConte, is found only in the dry or nearly dry seaweed left on the berm of the beach by the highest tide of each tidal period (Moore's Zone 2, subzone A). *A. obscura* is sometimes common but not nearly as common as the second species, *Phaleria rotundata* LeConte. *P. rotundata* is unusual among the Coleoptera of this fauna in that it is one of the few species to be commonly encountered in two separate subzones. It is often abundant in both decaying seaweed and dry seaweed (Moore's subzones 2A and 2B). It is one of the most common insects of the southern California seashore.

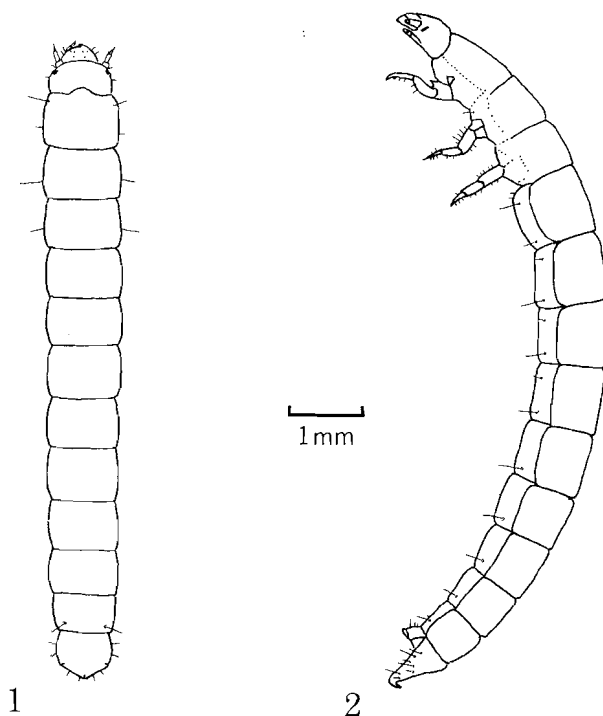
Phaleria rotundata is a medium sized stout, oval beetle of a color very near that of seaweed, a moderately pale brown. Some specimens are darker particularly in the center of each elytron. Populations of certain beaches tend to be consistently darker than those of other nearby beaches. Such a dark population exists at La Jolla Shores, San Diego County, California. That beach has been kept so clean of seaweed by the County Park Department for so many years that the population is endangered. Limitation of such populations to small restricted beaches indicates that gene flow in this species may be slow along the coast. The distribution of *rotundata* is from an unknown distance south in Baja California to at least middle California. It appears to be replaced in the north by *P. globosa* LeConte (Hatch, 1957).

With adults of *rotundata* are often found the larvae of a tenebrionid. Because these larvae are abundant and are found in both subzones 2A and 2B it seems clear that they are not larvae of *Apsena obscura*. They most probably are larvae of *rotundata*.

Larvae of tenebrionids, often called false wireworms, are known to feed on vegetable matter in the form of roots of small grains, stored grains and fungus (Peterson, 1957). Presumably both adults and larvae of this species feed on seaweed. Larvae of a few Nearctic species of tenebrionidae have been described and illustrated by Böving and Craighead (1931) and Peterson (1957).

LARVA OF *PHALERIA ROTUNDATA* LECONTE

Length 10.0 mm (largest specimens). Body (Figs. 1, 2) elongate, slender, parallel sided; in lateral view a slender crescent shape. Color pale brown with the dorsum of the thorax somewhat paler and the mandibles black at apices. Head oval, a little wider than long with a black eye spot on each side, without distinct ocelli. Epicranial suture absent. Labrum gently arcuate with a few fine setae at apical margin. Antennal fossae located at sides of head above the bases of mandibles. Antennae (Fig. 3) three-segmented; first segment about as long as wide; second segment slightly wider and not quite twice as long as first; third segment little more than one-third as wide as second, about as long as wide. Mandibles (Fig. 4) symmetrical, massive, with a tooth on the well developed mola and three heavy teeth at apex, arcuate at outer edge. Maxillary palpus (Fig. 5) three-segmented; first segment widest, about as wide as long, second segment a little narrower, about as wide as long; third segment slightly narrower than second, one and one-half times as long as wide, apex rounded. Mala elongate-oval with a series of curved setae at

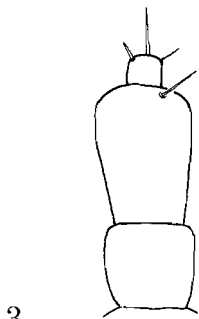


Figs. 1-2. Habitus, larva of *Phaleria rotundata* LeConte. Fig. 1. Dorsal view. Fig. 2. Lateral view.

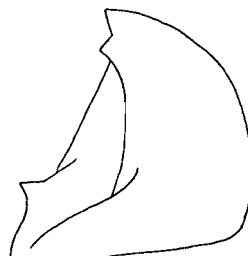
apex and along the inner edge. Labial palpus (Fig. 6) two segmented; first segment about as long as wide, second segment a little narrower and slightly longer than first, narrowed at apex. Pronotum quadrate, slightly longer than wide, anterior margin with a short anteriorly directed lobe in central third, sides and base straight with angles minutely rounded. Mesonotum and metanotum quadrate with apices, sides and bases straight. Abdominal tergites each quadrate, about as wide as long. Abdomen very slightly narrowed from base to apex, last segment (Figs. 7, 8) trapezoidal with a deflexed apical tooth and a small tooth at each outer apical angle, without urogomphi.

Many specimens from La Salina, Baja California Norte, Mexico, August 13, 1971, taken among decaying seaweeds, Ian Moore collector.

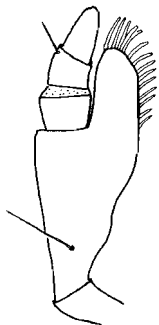
The most outstanding character of this larva is the shape of the terminal abdominal segment which distinguishes it from known tenebrionid larvae and will probably help to distinguish it from other such larvae when these become known.



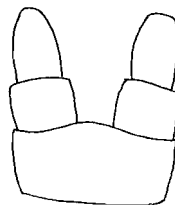
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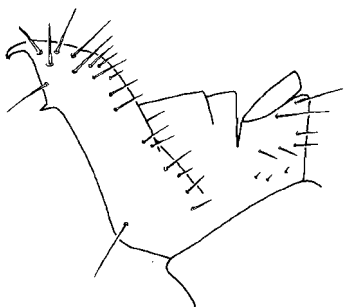


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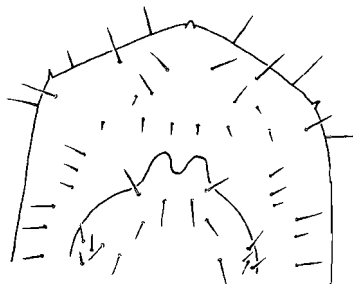


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Figs. 3-6. Larva of *Phaleria rotundata* LeConte. Fig. 3. Antenna. Fig. 4. Mandible. Fig. 5. Maxilla. Fig. 6. Labium.



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Figs. 7-8. Terminal abdominal segment, larva of *Phaleria rotundata* LeConte. Fig. 7. Lateral view. Fig. 8. Ventral view.

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