

Maladera castanea Arrow 1913

Taxonomy

Sub family: Melolonthinae / Tribe: Sericini / Genus: *Maladera*

Distinguishing Features

Small oblong shaped beetles, body length 7-11mm. Body colouration brown, reddish brown to orange, with a iridescent sheen. Setae and scales absent on elytra. Antennae with 10 segments and a 3-segmented club. Clypeus with apex appearing rounded to subquadrate, heavily upturned. Labrum indistinct, fused to the apical margin of the clypeus. Mesocoxae widely separated, metasternal anterior border rounded medially and not projecting forward of coxae. Metacoxae greatly enlarged. Penultimate ventrite and propygidium separated by a suture. Metatibial apical spurs separated, so that tarsi can move between them. Tarsal claws with a median tooth.

Related and Similar Species

M. castanea is a member of the Sericini tribe which shares the following features: Generally small sized with a convex body shape. Labrum indistinct, attached to the front margin of the clypeus. Metacoxae large, projecting forward where metasternum would usually be, and commonly covering first two abdominal sternites. Widely separated mesocoxae. Metatibial spurs widely separated, so that the tarsi can pass between them.

A key to Australian Sericini can be found in Britton (1957). A key to North American genera is provided by Ratcliffe, Jameson and Smith (2002).

Other members of Sericini dealt within the key are the North American/Oriental/Ethiopian occurring *Serica*, and the native Australian *Phyllotocus*. *Maladera castanea* can be clearly separated from these Genera by having 10 antennal segments (*Serica* 8-9, *Phyllotocus* 8). The tarsal claws of *Phyllotocus* are simple, bifid in *Serica* and with a median tooth in *Maladera castanea*.

Biological Data

M. castanea, commonly called the Asiatic garden beetle, are considered a minor pest of horticultural crops and ornamental plants. Adult beetles feed on the foliage or flowers on a wide range of plants. They are nocturnal and attracted to lights. Larvae are root feeders that attack turf and a range of crops including sweet potato and beans.

Distribution

M. castanea is native to China and Japan. It is a longstanding introduction to North America, where it was first encountered around 1921. It is now present throughout many areas of the United States and Canada. The species is absent from Australia.

Useful Links

University of Florida Information page:
https://entnemdept.ifas.ufl.edu/creatures/ORN/TURF/asiatic_garden_beetle.htm

References

- Britton, E.B. 1957. A Revision of the Australian Chafers (Coleoptera: Scarabaeidae: Melolonthinae). London : British Museum Vol. 1 vii 185 pp.
- Held D.W., Ray C.H. 2009. Asiatic Garden Beetle *Maladera castanea* (Coleoptera: Scarabaeidae) Grubs Found in Damaged Turf in Alabama, Florida Entomologist 92(4), 670-672.
- Ratcliffe, B.C., Jameson, M.L., Smith, A.B.T. 2002. Chapter 34. Scarabaeidae Latreille1802, pp. 39–81 (in part). In: Arnett, R.H., Thomas, M. C., Skelley, P.E., Frank, J. H. (eds.), American Beetles, Volume 2. CRC Press, Boca Raton, FL. 861 pp.



Maladera castanea dorsal view

Photographer:

Pia Scanlon



Maladera castanea lateral view

Photographer:

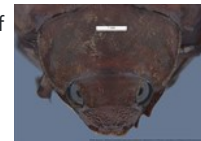
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Maladera castanea ventral view

Photographer:

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Maladera castanea clypeus

Photographer:

Pia Scanlon



Maladera castanea hind claw

Photographer:

Pia Scanlon



Maladera castanea hind claw lateral

Photographer:

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Maladera castanea head front

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