Apogonia Kirby, 1819

Taxonomy

Sub family: Melolonthinae / Tribe: Diplotaxini / Genus: Apogonia

Distinguishing Features

Small black to dark brown beetles, around 7-12mm. Some with an irridescent sheen dorsally. Apogonia ANIC sp.1 dorsal view Antennae and palps yellow/reddish. Clypeus broadly rounded, labrum globular, situated below the clypeus and not visible in dorsal view. Head, pronotum and elytra punctate. Pronotum anterior margin with a membraneous border. Elytra with two smooth slightly elevated costa. Apical half of lateral margin of elytra with a membraneous border. Propygidium fused with penultimate ventrite into a continuous ring around the pygidium. Tarsal claws bifid.

Related and Similar Species

There are around 380 described species within Apogonia. The genus is in desperate need of work, with no major revision ever completed and there is no simple means of providing reliable species level identification. The genus is thought to be extremely similar to Diplotaxis, a predominately nearctic and neotropic genus that ranges from Canada to Panama. Separation of the two is apparently only reliably done through male genitalia (distal ends of lateral lobes/parameres are twisted or at most assymetrical, and phallobase cylindrical in Apogonia, while in Diplotaxis the parameres are exactly similar and symmetrical Apogonia ANIC sp.1 ventral view and the phallobase flattened). Though geographic origin may help point toward either genus, care must be taken when not examining male genitalia.

There are three species of Apogonia present in Australia that can only be reliably separated by examination of the male genitalia. Representatives are held at the Australian National Insect Collection (ANIC), Canberra.

Biological Data

Biological information for most species is unknown.

Adults are known to feed on leaf tissue. A range of species within Apogonia have been noted or suspected as injurious to cultivated plants in Africa and Asia. These include Cacao, coffee, mung bean, soybean and sugar cane.

Apogonia destructor is recorded as a minor pest of sugar cane in Java. The larvae feed on decaying plant material, but can also feed on the roots of sugar cane and other grasses as they become more mature. Adult beetles are active at night, and are attracted to light.

Distribution

The genus Apogonia is primarily distributed through the Afrotropical and Oriental regions. Several species are known from southern Palearctic areas.

The three species known to Australia have limited geographic distributions. ANIC sp.1 has only been found around Darwin, NT, ANIC sp.2 has also only been recorded from the NT and ANIC sp.3 from Cape York, QLD.

ANIC sp.1 is conspecific with a species widespread across South East Asia (Thailand, Myanmar and Malaysia), indicating it has been introduced to Australia.

References

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Vaurie, P. 1958. A revision of the genus *Diplotaxis* (Coleoptera, Scarabaeidae, Melolonthinae). <u>Photographer:</u> 1. Bulletin of the American Museum of Natural History, 115(5), 263-396 Weir T.A., Lawrence J.F., Lemann C., Gunter N.L. 2019. 31. Scarabaeidae: Melolonthinae



Photographer: Pia Scanlon

Apogonia ANIC sp.1 lateral view Photographer:



Photographer:

Pia Scanlon



Apogonia ANIC sp.1 head front Photographer: Pia Scanlon



Apogonia ANIC sp.1 abomen lateral view Photographer: Pia Scanlon



Apogonia pygidium Photographer: Pia Scanlon



Apogonia ANIC sp.1 clypeus Pia Scanlon

Leach, 1819. In: Australian Beetles. Volume 2. Archostemata, Myxophaga, Adephaga, Polyphaga (part) (eds A Ślipiński & JF Lawrence) pp. 516-530. CSIRO, Clayton, Australia.

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