



The weevil genus *Trigonopterus* Fauvel (Coleoptera, Curculionidae) and its synonyms—a taxonomic study on the species tied to its genus-group names

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Abstract

The genus *Trigonopterus* Fauvel, 1862 is briefly diagnosed. At present, four junior subjective synonyms of the genus exist: *Idotasia* Pascoe, 1871, *Eurysia* Pascoe, 1885, *Mimidotasia* Voss, 1960 (**syn. n.**), and *Microgymnapterus* Voss, 1960 (**syn. n.**). *Trigonopterus vossi* **nom.n.** is proposed as a replacement name of the secondary homonym *T. submetallicus* (Voss, 1960) nec *T. submetallicus* Marshall, 1921, and *T. micros* **nom.n.** to replace *T. minutus* (Voss, 1960: 327) nec *T. minutus* (Voss, 1960: 341).

Idotasia nasuta Pascoe is designated type species of *Idotasia*. Lectotypes are designated for the following names: *Eurysia fulvicornis* Pascoe, *Idotasia ebriosa* Pascoe, *Idotasia elliptica* Pascoe, *Idotasia inclusa* Pascoe, *Idotasia nasuta* Pascoe, *Idotasia scaphioides* Pascoe, and *Microgymnapterus minutus* Voss.

The type species of *Trigonopterus*, *Eurysia*, *Mimidotasia* and *Microgymnapterus*, as well as the five species included in Pascoe's original description of *Idotasia* are redescribed: *T. ebriosus* (Pascoe), *T. ellipticus* (Pascoe), *T. fulvicornis* (Pascoe), *T. inclusus* (Pascoe), *T. insignis* Fauvel, *T. micros* **nom.n.**, *T. nasutus* (Pascoe), *T. scaphioides* (Pascoe), and *T. vossi* **nom.n.** *Trigonopterus egenus* (Pascoe) is recognized as a junior synonym of *T. scaphioides* (Pascoe), **syn.n.** *Trigonopterus oblitus* **sp.n.**, is described based on specimens labeled as paratypes of *Microgymnapterus minutus*. *Douttia basimaculata* Voss 1960 is transferred to *Trigonopterus*: *T. basimaculatus* (Voss) **comb.n.**

Trigonopterus insignis Fauvel is endemic to New Caledonia, *T. fulvicornis* (Pascoe) to Sulawesi; the remaining species treated herein are restricted to parts of New Guinea and Maluku. The record of *T. egenus* (Pascoe) for New Zealand is incorrect.

Introduction

Trigonopterus Fauvel 1862 is a little-known genus of weevils distributed in the area between Sumatra, Samoa, the Philippines, and New Caledonia. Currently, there exist about 90 described species, but many more await discovery (Riedel, 2010). The center of its diversity appears to be New Guinea where 51 or more species can be found in a single locality (Riedel et al., 2010). Many of them are very similar to each other, but male genital characters allow a safe diagnosis.

Trigonopterus is part of the “Tylodina”, a presumably polyphyletic subtribe of flightless Cryptorhynchini containing numerous difficult and speciose genera (Alonso-Zarazaga & Lyal, 1999; Lyal, 1993). Like most other genera of this group, some *Trigonopterus* species are edaphic in the litter-layer, but there are also many species living predominantly on the foliage of rainforest vegetation. Members of these different life styles may look superficially different, but they must be kept together in one monophyletic genus. It is the purpose of the present paper to clarify the nomenclature of the genus name *Trigonopterus* and its synonyms, as a first step to provide a solid base for additional work on its taxonomy, morphology and phylogeny. Due to their external similarity, some type series consist of more than one species. It is necessary to designate lectotypes, and, in the case of *Idotasia* Pascoe to fix a type species to stabilize nomenclature.

Once the phylogeny of *Trigonopterus* is better understood, it may be possible to use all or some of the generic synonyms at the level of subgenera. However, at present the delineation of larger monophyletic units within *Trigonopterus* is yet impossible.