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A new concept of *Absoloniella* (=*Ruffodytes* syn. n.) for five blind Mediterranean species (Coleoptera: Brachyceridae: Erirhininae)

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Abstract

A hundred year-long taxonomic ambiguity surrounding two mysterious species originally described as *Caulomorphus reitteri* Müller, 1912 and *Absoloniella cylindrica* Formánek, 1913, both known from single specimens believed to be lost, is resolved. This is achieved by designation of their neotypes based on the same specimen collected together, and considered conspecific, with the holotype of *Ruffodytes hellenicus* Osella, 1973, the latter the type of the genus *Ruffodytes* Osella, 1973. This action triggers the following nomenclatorial and taxonomic changes: (1) the generic name *Ruffodytes* Osella, 1973 **syn. n.** is a junior subjective synonym of *Absoloniella* Formánek, 1913; (2) the names *cylindrica* **syn. n.** and *hellenica* **syn. n.** are junior objective and subjective synonyms, respectively, of the name *reitteri* for the species *Absoloniella reitteri* (Müller, 1912); (3) the genus *Absoloniella* currently comprises five species: *A. reitteri* (Müller, 1912), *A. italica* (Osella, 1976) **comb. n.**, *A. pacei* (Osella, 1976) **comb. n.**, *A. servadeii* (Osella, 1982) and *A. nitidipennis* (Osella, 1989) **comb. n.** Puzzling distribution of blind and wingless Mediterranean *Absoloniella* is briefly discussed.

Key words: synonymy, neotype, Karel Absolon

Introduction

The Mediterranean Region is home to a number of remarkable radiations of subterranean beetles. These organisms normally bear unmistakable morphological features of highly specialized endogean dwellers such as the loss of eyes, the loss of hind wings and depigmented body. Many species-rich beetle families have at least one clade inhabiting this niche in the Mediterranean. Trechini (Carabidae) and Leptoditini (Leiodidae), each with many hundreds of subterranean species, are perhaps the most diversified and well known among them (see Faille *et al*. 2010, Fresneda *et al*. 2011, respectively). Several unrelated weevil lineages have independently colonized the underground habitats in the Mediterranean. For example, within the Curculionidae are the various and perhaps unrelated (see Hlaváč 2011) species of *Otiorhynchus* Germar historically attributed to *Troglorhynchus* Schmidt (see Osella 1979) or four genera of Cryptorhynchinae: Torneumatini (Stüben & Astrin 2010, Stüben *et al*. 2013). The possibly non-monophyletic Raymondionyminae (Grebennikov 2010) is the most diverse and best known edogean group of the Mediterranean Brachyceridae. The latter family, however, harbours two additional nominative endogean Mediterranean genera, on which the present paper is focused.

A long overlooked nomenclatorial issue pertains to two nominal genera and seven nominal species currently assigned to *Absoloniella* Formánek, 1913 and *Ruffodytes* Osella, 1973, some of which were suspected to be conspecific. Unlike *Ruffodytes* with five well-documented species described during the last 40 years, *Absoloniella* has been erected to accommodate two mysterious species described in 1912 and 1913, respectively, and both known only from the holotypes, which are long believed to be lost. Recently, two specimens collected on Corfu likely prior to the World War II and bearing historical identification labels of *Absoloniella cylindrica* Formánek, 1913, the type species of the genus, have been discovered in the Senckenberg Naturhistorische Sammlungen, Dresden. Circumstantial evidence suggests that the specimens were authoritatively identified and, therefore, represent the best possible existing representation of the nominal species most suitable for neotype designation. This, in turn, suggests that the identity of this mysterious species and genus could be at last resolved. Both

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series suggest an acute lack of data. Alternative hypothesis might be direct salt water crossing by eyeless and wingless beetles passively rafting in soil attached, perhaps, to roots of fallen trees. This seemingly unorthodox means of transportation was favoured by Charles Darwin in his "Voyage" when explaining the origin of stones on coral atolls of Cocos (= Keeling) Islands. Additionally, this method seems plausible to account for Anillini (Carabidae) naturally dispersing across the straits of the Gibraltar (Ortuño & Gilgado 2011), or even colonizing the Galapagos Islands from the nearby South America (Peck 1990).

The last question deserving elucidation is whether *Absoloniella* populations sampled before 1913 for the lost holotypes of *reitteri* and *cylindrica* (dots 1 & 2 on Fig. 2F) are indeed conspecific with the neotype of *A. reitteri* from Corfu. The answer is presently unknown, however considering how narrowly endogean and subterranean beetle species are normally distributed, such a supposition does not appear as likely. If these populations are still extant and their representative can be eventually re-sampled, they might perhaps be named as new species. No additional specimens from both historical localities were sampled since the original discovery was made some hundred years ago. This extraordinary specimen rareness is, in fact, one of the decisive factors why it became finally desirable to settle the nomenclatorial issues surrounding both names and designate the neotypes, as herein executed.

Catalog of the genus *Absoloniella* Formánek, 1913

Original generic combinations are in round brackets, new taxonomic and nomenclatural acts are in bold.

Absoloniella Formánek, 1913
gender feminine, type species *Absoloniella cylindrica* by monotypy

= *Ruffodytes* Osella, 1973 **syn. n.**
gender masculine, type species *Ruffodytes hellenicus* by monotypy

Species:
- *reitteri* Müller, 1912 (*Caulomorphus*) **neotype designated herein,** in MTD
  = *cylindrica* Formánek, 1913 **syn. n., neotype designated herein,** in MTD
  = *hellenica* Osella, 1973, **syn. n.** (*Ruffodytes*), holotype in MSNM
- *italica* Osella, 1976 **comb. n.** (*Ruffodytes*), holotype in MSNV
- *pacei* Osella, 1976 **comb. n.** (*Ruffodytes*), holotype in MSNV
- *servadeii* Osella, 1982 **comb. n.** (*Ruffodytes*), holotype in MSNV
- *nitidipennis* Osella, 1989 **comb. n.** (*Ruffodytes*), holotype in MHNG

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