

The first records of *Amorphacephala coronata* (Germar, 1817) and *Amorphacephala piochardi* (Bedel, 1878) (Coleoptera: Curculionoidea: Brentidae) in Iraq

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ABSTRACT

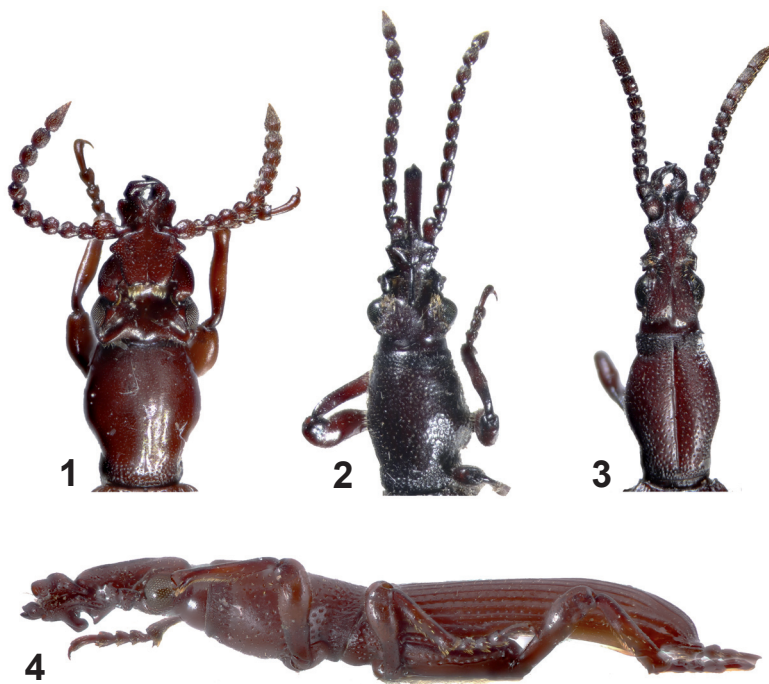
Amorphacephala coronata and *A. piochardi* are newly recorded from Iraq. A checklist and a key for the Brentidae species recorded from Iraq and a distribution map are given.

KEYWORDS: Biodiversity, beetles, Brentidae, identification key, Iraq, Middle East, new record.

The first record for the family Brentidae *auctorum* from Iraq was the original description of *Symmorphocerus beloni* Power, 1879. Based on this record, Rye (1880), Heyden (1889) and Semenov-Tian-Schanskij (1892) cited this species as occurring in Iraq. Nearly 40 years later, a second species—*Symmorphocerus consequens* Kleine, 1926—was described from Iraq. Shalaby *et al.* (1968) recorded this latter species, without mentioning the first one. W. Schedl (1970), in his work on the West Palaearctic Brentidae, quoted only *S. beloni* as occurring in Iraq, overlooking the works of Kleine (1926) and Shalaby *et al.* (1968), but later he corrected his mistake listing both species from this country (W. Schedl 1975). Damoiseau (1989), while recording geographical areas for all *Symmorphocerus* Schoenherr, 1847 species known to him, listed only *S. beloni* from Iraq. Subsequent works (Sforzi & Bartolozzi 2004; Sforzi 2011; Alonso-Zarazaga *et al.* 2023) listed both *Symmorphocerus* species in Iraq.

Among three brentid specimens obtained from the Erbil Museum Insect Collection (Erbil, Iraq), *Amorphacephala coronata* (Germar, 1817) and *A. piochardi* (Bedel, 1878), two species never recorded before from this country, were identified.

The label data are transcribed verbatim with a slash denoting a line break. Under the male of *A. coronata*, the following data are reported in handwriting: “Iraq, A.M. Shkafta / 30.7.2003, L.T. / mountain meadow / A.S. Belbas”. Under the female of *A. piochardi*, the handwritten data read: “Iraq, A.M. Erwan / 27.7.2003, L.T. / mountain meadow / R.T. Khoshnaw”. Both specimens were collected using



Figs 1–4. Brentidae in Iraq, habitus: (1) *Amorphocephala coronata* male, head and pronotum, dorsal view; (2) *Amorphocephala piochardi* female, head and pronotum, dorsal view; (3) *Symmorphocerus beloni* male, head and pronotum, dorsal view; (4) *Symmorphocerus consequens* male, habitus, lateral view. Photos courtesy A.-L.-L. Friedman (1–3) and M. Barclay and K. Matsumoto (4).

a light trap, in the Erbil (=Arbil, Irbil) Governorate, Mergesor District. The two species, like the other two which are already known from Iraq, belong to the tribe Eremoxenini Semenov-Tian-Schanskij, 1892, most members of which are known to be associated with ants (K.E. Schedl 1961).

The third examined specimen, with the same collecting data as the *A. piochardi* above, was identified by us as *Symmorphocerus beloni*, a species recorded so far only from Mosul, in the Nineveh Governorate (Power, 1879). Therefore, the new location widens the distribution of *S. beloni* to the Erbil Governorate. The three specimens are temporarily deposited in the collection of the first author.

The existence of *Amorphocephala coronata* and *A. piochardi* in Iraq is unsurprising, since both are recorded also from countries adjacent to Iraq. The former is known from Turkey, Lebanon, Israel, Syria and Iran, and the latter is recorded from Turkey, Lebanon, Israel, Jordan and Syria (Orbach 2020; Alonso-Zarazaga *et al.* 2023). Thus, the following brentid species are currently known to occur in Iraq:

Amorpocephala coronata (Germar, 1817) (new country record) (Fig. 1)

Amorpocephala piochardi (Bedel, 1878) (new country record) (Fig. 2)

Symmorphocerus beloni Power, 1879 (Fig. 3)

Symmorphocerus consequens Kleine, 1926 (Fig. 4)

Geographically, all these species are recorded from the highlands of the northern and northeastern parts of Iraq (Fig. 5), with an average altitude of about 2400 m. *Symmorphocerus beloni* is the only brentid species known also from the lower elevation, about 220 m, in the area of Mosul.

The first author studied the male lectotype of *Symmorphocerus beloni* deposited in the Muséum National d'Histoire Naturelle (Paris, France). A very good photograph of the paralectotype male of *Symmorphocerus consequens* from the Natural History Museum (London, UK), shows a striking similarity between the two

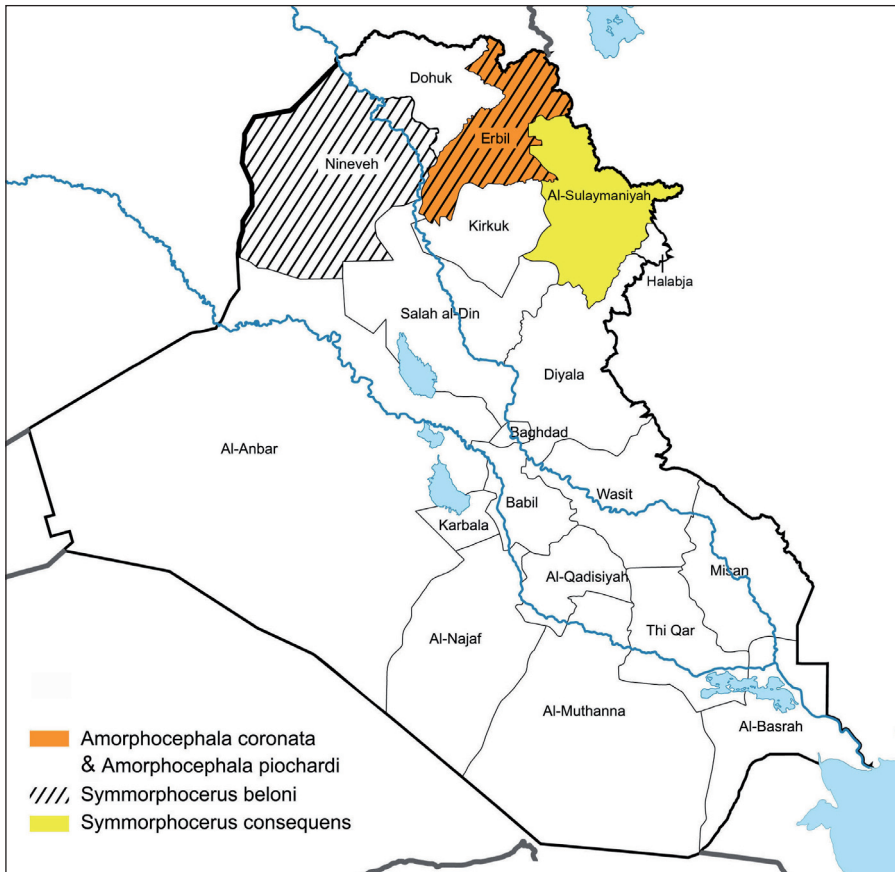


Fig. 5. Distribution of the Brentidae in Iraq.

species. Moreover, among the 11 known *Symmorphocerus* species, only *S. beloni*, *S. consequens* and *S. minutus* Power, 1879 bear a unique structure projecting under the rostrum (Fig. 4). In the first two, this structure looks identical, but its form is slightly different in *S. minutus*, in addition to other morphological characters that can easily separate this species from *S. beloni* and *S. consequens*: base of head slightly rounded vs. base straight with external edges strongly diverging outwards; base of head ventrally with strong punctuation vs. base of head ventrally smooth; prothorax and elytra glabrous vs. prothorax and elytra with small erect hairs; abdominal plate shiny and glabrous, evenly punctuated vs. abdominal plate matt medially, with very small nearly evanescent punctuation and very short hairs; tegmen and parameroid lobes narrow and long vs. tegmen and parameroid lobes shorter and wide (in *S. beloni*, genitalia of *S. consequens* not studied). The original descriptions of *S. beloni* and *S. consequens* do not allow differentiating them. Only after future study of the type material of *Symmorphocerus consequens* in the Natural History Museum it will be clear whether this two species should be synonymized under *S. beloni*, or the two taxa should remain valid.

We find it useful to supply a key to the genera of the Iraqi Brentidae and to the species of *Amorphocephala* Damoiseau, 1966, in order to assist future research of the Brentidae of this country.

Key to the Brentidae of Iraq

- 1 Head connected to mesorostrum with longitudinal elevated narrow carina
..... *Symmorphocerus*
- Head not connected to mesorostrum with such a carina, metarostrum with deep depression (*Amorphocephala*) 2
- 2 Mesorostral plate dorsally with median vertical ridge partially extending over metarostral depression..... *Amorphocephala piocharidi*
- Mesorostral plate without such a ridge *Amorphocephala coronata*

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