



Revision of the genus *Achmonia* of Africa south of the Sahara (Coleoptera: Staphylinidae: Staphylininae)

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Abstract

A redescription of the genus *Achmonia* Bordon, 2004 is presented. Based on a revision of types and of additional material, seven species are recognized in Africa south of the Sahara and placed into two species groups. All species are described or redescribed and illustrated, four of them for the first time: *Achmonia carinata* **sp. nov.**, *A. kapangana* **sp. nov.**, *A. knirschi* **sp. nov.**, and *A. simulator* **sp. nov.** A lectotype is designated for *Xantholinus amabilis* Boheman, 1848, *Eulissus flavomarginatus* Bernhauer, 1929 and *E. congoensis* Bernhauer, 1932. These species are transferred to *Achmonia*. A lectotype is designated for *Eulissus semiflavus* Bernhauer, 1913, and *E. gerardi* Bernhauer, 1929 and the following synonymy is proposed: *Achmonia amabilis* (Boheman, 1848) = *Eulissus semiflavus* Bernhauer, 1913, syn. nov. = *Eulissus gerardi* Bernhauer, 1929, syn. nov. The distribution of the genus in Africa south of Sahara is mapped and a key to species is presented.

Key words: taxonomy, new species, new records, key, Coleoptera, Staphylinidae, Staphylininae, Xantholinini, *Achmonia*, Afrotropical region

Introduction

The family Staphylinidae is the largest family of the order Coleoptera with more than 58 300 species and nearly 3 500 genera grouped into 33 subfamilies (Grebennikov & Newton 2009, Solodovnikov *et al.* 2013).

The tribe Xantholinini is represented by many genera and a large number of species in all zoogeographical regions. No revision on the generic level using modern taxonomic procedures exists for Africa south of the Sahara. It is very difficult to start a revision of a particular genus from this region because of taxonomic confusion in descriptions, as similar species were originally described by authors in different genera. A global-level study investigating the monophyly and validity of several genera of Xantholinini lacking two dorsal lines of pronotal punctures (e.g., *Achmonia* Bordon, 2004, *Agerodes* Motschulsky, 1858, *Eulissus* Mannerheim, 1830, and *Thyrecephalus* Guérin-Méneville, 1844) of the world is needed but no revision of these genera yet exists for the Afrotropical and Neotropical regions.

As noticed by Janák (2010), Xantholinini from Africa south of Sahara without dorsal pronotal rows have been originally described in the genera *Xantholinus* Dejean, 1821, *Eulissus* Mannerheim, 1830 and *Thyrecephalus* Guérin-Méneville, 1844. Both of us had the opportunity to study types of all those species, except for *Thyrecephalus ater* (Laporte, 1835) and *T. coeruleipennis* (Quedenfeldt, 1881). For the latter two cases we followed the concept of classic authors based on specimens determined by them. Xantholinini without dorsal pronotal rows can be separated into two different groups, characterized by the following characters:

Group 1: superior line of pronotal hypomeron turning downwards well before middle, joining inferior line next to front margin of procoxae and continuing onto anterior margin of pronotum.

Group 2: superior line of pronotal hypomeron not turning downwards until close to anterior angle and not joining inferior line.

The present paper deals with group 2 from Africa south of the Sahara only, which, after a relatively long time

“Lectotypus *Eulissus congoensis* Bernh., Janák & Bordoni des. 2014” and “*Achmonia congoensis* (Bernh.), Janák & Bordoni det. 2014” were attached to this specimen.

Additional material examined. **BURKINA FASO:** 1 ♂: Haute Volta, Bobo-Dioulasso, vii–viii.1964, R. Siffointe (MRAC). **CÔTE D’IVOIRE:** 1 ♂, Bingerville, vii.1962, J. Decelle (MRAC). **DEMOCRATIC REPUBLIC OF CONGO:** 1 ♂: Lac Albert, Kasenyi, H. J. Brédo 15.v.1935 (MRAC); 1 ♀: Lac Albert: Kasenyi, 1.v.1935, H. J. Brédo (MRAC); 1 ♀: Kasenyi, i.1939, P. Lefèvre (MRAC); 1 ♂, 1 ♀: P. N. G., Miss. H. De Saeger, II/ec/4, 5.iii.1951, Réc. H. De Saeger (JJRC, MRAC); 1 ♂, P. N. G., Miss. H. De Saeger, II/me/4, 9.ii.1951, Réc. J. Verschuren (MRAC). **ETHIOPIA:** 1 ♂: N. O. Africa, Süd. Aethiop., Malo Fl., O. Neumann S. V. (JJRC). **GHANA:** 1 ♂: Northern Prov., Mole N. P., 18.vi.2006, S. Pokorný lgt. (JJRC). **GUINEA:** 1 ♂: Guinée, coll. Fauvel (IRSNB). **TOGO:** 1 ♀, Bismarckburg, L. Conradt S. (MFNB).

Description. Body length (Fig. 6) 13–19 mm; length from anterior margin of head to posterior margin of elytra: 8–10 mm. Head and pronotum black, elytra yellowish, scutellum and abdomen brown with slight bronze reflection, paratergites, sternites 3–5 and apical half of genital segment yellowish; antennae and anterior tarsi and tibiae reddish brown, middle and posterior tarsi and tibiae yellowish. Labrum quadrilobate, with only slightly prominent inner lobes (Fig. 68). Head and pronotum with very fine micro-punctuation. Head without postocular punctures (Fig. 68), punctures near posterior margin with light long setae. Protrusion near posterior angles of head distinct. Temples with variable number of fine punctures, from almost impunctate to about 30 punctures. Anterior margin of pronotum with several fine, long setae. Elytra as long as pronotum, posteriad, slightly dilated and slightly wider than pronotum, with rounded humeral angles. Surface with fine and sparse punctuation, arranged in three series; with additional punctures near posterior margin and some of these with very long, fine setae. Abdomen with very fine and dense, transverse micro-waves and fine and not sparse punctuation.

Male. Temples sparsely to densely punctured (from about 5 to 30 fine punctures). Tergite and sternite of the male genital segment as in Figs. 73, 74. Aedeagus length (Fig. 71) 1.60–1.85 mm; median lobe very long, with enlarged apex; parameres very large (Fig. 72); internal sac very narrow, covered by very fine and sparse scales.

Female. Temples smooth or at most sparsely punctured.

Ratios (n = 6): HL/HW: 0.82–0.87 (M 0.84); TeL/EyL: 1.71–1.92 (M 1.84); PL/PW: 0.98–1.06 (1.01); EL/EW: 0.86–0.96 (M 0.93); PW/HW: 0.88–0.98 (M 0.92); EW/PW: 1.02–1.09 (M 1.06); EL/PL: 0.95–0.99 (M 0.97); A5L/A5W: 0.50–0.57 (M 0.59); A10L/A10W: 0.50–0.62 (M 0.56).

Differential diagnosis. *Achmonia congoensis* differs from other Afrotropical species of the genus by the combination of brown, abdominal tergites with bronze reflections, yellowish pleurites and sternites 3–5, and by the shape of the aedeagus with a very long median lobe, even more enlarged apically than in *A. amabilis*.

Distribution. The species is distributed in Burkina Faso, Côte d’Ivoire, D. R. Congo, Ethiopia, Ghana, Guinea and Togo (Fig. 2).

Remarks. As the labrum of *Achmonia congoensis* is dark, completely chitinised and quadrilobate (Fig. 68), the species was transferred from *Eulissus* to *Achmonia*. In his description, Bernhauer (1932) mentioned the type localities Haut-Uele: Yebo Moto, and Tora. No specimens from Tora were available for study.

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