

**Case 3439*****Xantholinus gracilis* Sperk, 1835 (Insecta, Coleoptera): proposed conservation of prevailing usage by the designation of a neotype**

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**Abstract.** The purpose of this application, under Article 75 of the Code, is to conserve the usage of the specific name of the staphylinid *Xantholinus gracilis* Sperk, 1835 (currently *Scopaeus gracilis*). The holotype of *Xantholinus gracilis* is lost and the originally published characters differ from those of *Scopaeus gracilis* as currently understood. It is proposed that a neotype that is in accord with the current use of the name be designated.

**Keywords:** Nomenclature; taxonomy; STAPHYLINIDAE; *Scopaeus*; *Xantholinus*; *Scopaeus gracilis*; *Xantholinus gracilis*; staphylinid beetle; Palaearctic.

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1. The description of *Xantholinus gracilis* Sperk, 1835 (p. 152) was based on a single specimen from Nezhin in what is now Ukraine. Although it is impossible to refer the species to a genus using the characters in the original description (Frisch, 2007, p. 202), Kraatz (1862, p. 299) assigned it to *Scopaeus* Erichson, 1839 without examining the type; but, with few exceptions (for example see the combination *Xantholinus gracilis* in Gemminger and Harold, 1868, p. 602), the species has since been treated as belonging to *Scopaeus*. The name *Scopaeus gracilis* (Sperk, 1835) was used by most 19th century authors, but Marseul (1883, p. 134) and Fowler (1888, p. 311) inexplicably cited it as an invalid synonym of the younger name *Scopaeus erichsonii* Kolenati, 1846, currently the next oldest synonym of *Scopaeus gracilis*, while Heyden (1880, p. 76) cited it as a junior synonym of *Scopaeus breviventer* (Sperk, 1835), originally described as *Xantholinus* Dejean, 1821 and currently in *Gabrius* Stephens, 1829. The only use of *S. erichsonii* in the 20th century was apparently by Edmonds (1931, p. 273), who copied Fowler (1888) but admitted that 'It seems now to be generally agreed that *gracilis* Sperk is the correct name...'. *Scopaeus gracilis* is a well-known, commonly collected, western Palaearctic species (Frisch, 2007, pp. 200–201) that in the last 50 years has been cited as a valid name in at least 89 articles by 81 authors (a list of these 89 references is held by the Secretariat).

2. In his revision of the species, Frisch (2007, pp. 197–203) concluded that *Xantholinus gracilis* and *Scopaeus gracilis*, as currently understood, were different



species because the characters in the original description of the former contradict those of the currently accepted, long-held concept of the latter. According to Sperk's (1835, p. 152) description, *X. gracilis* has a cylindrical, pitch-black pronotum, which is more strongly punctured than the head. These characters do not exist in *Scopaeus* which is characterized by an oval pronotum, which is much more finely punctured than the head. Moreover, Central European specimens of *Scopaeus gracilis* have a brown pronotum. *Xantholinus gracilis* and *Scopaeus gracilis* also occupy different habitats. Sperk (1835, p. 153) reported *Xantholinus gracilis* from peaty areas of the lowlands of northern Ukraine. Frisch (2007, pp. 200–201) pointed out that *Scopaeus gracilis* was known only from gravelly shores of rivers and streams in mountainous regions, that no specimens had been collected from the northern lowlands of Ukraine or central Europe, and that in Ukraine the species is known only from the Carpathians and the Crimea.

3. By 1845 the Sperk collection had been incorporated into the collection of Krynicki at the University of Kharkov (Motschulsky, 1845, p. 42). A. Drogvalenko, head of the Department of Invertebrates at the Natural History Museum of Kharkov University, in correspondence with Frisch, reported that the holotype of *Xantholinus gracilis* had been lost a long time ago, but that the name was included in the handwritten catalog of the Sperk collection and in the printed 1854 catalog of the University of Kharkov collection (Frisch, 2007, p. 202). Ten years earlier, in response to a query from Frisch, Alexander Kirejtshuk (Zoological Institute, St. Petersburg), who comes from Kharkov, had also reported that the holotype was missing.

4. Because *Xantholinus gracilis* and *Scopaeus gracilis* evidently represent different species, the prevailing use of the latter name could be threatened should the original specimen of the former be found or should someone decide to revise the concept of the species using the originally published characters. A neotype is hereby designated for *Xantholinus gracilis* to stabilize the prevailing use of *Scopaeus gracilis*. Provisions of Articles 75.3.5 and 75.3.6 requiring that the neotype be consistent with the original description and that it come as nearly as practicable from the original type locality cannot be met. Should the original specimen be found and should it in fact be a species different from one currently in use, then Article 75.8 applies, unless the Commission rules that the neotype is to be retained as the name bearing type.

5. To stabilize the current use of the name involved (see Appendix) we propose that the following specimen be designated as the neotype of *Xantholinus gracilis* Sperk: a male mounted on a card with the aedeagus, tergite and sternite VIII, segment IX, and tergite X dissected and mounted on the same card; beneath the card are two labels as follows. Label 1: 'Greece, Central Macedonia/Sithonia: Sarti/10m/N 40°05'51" E 023°58'49"/06.07.2006, leg. J. Frisch'. Label 2: '*Scopaeus* Erichson 1839/*gracilis* (Sperk 1835)/det. J. Frisch'. The specimen is deposited in the Natural History Museum of the Humboldt-University, Berlin, Germany. Characters that distinguish *Scopaeus gracilis* (Sperk) in its current interpretation from all congeners and from the original description are published in Frisch (2007, pp. 196–203).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for *Xantholinus gracilis* and to designate as neotype the specimen deposited in the Natural



History Museum of the Humboldt-University, Berlin, Germany, as specified in para. 5;

- (2) to place on the Official List of Specific Names in Zoology the name *gracilis* Sperk, 1835, as published in the binomen *Xantholinus gracilis*, as defined by the neotype designated in (1) above, with the endorsement that the neotype designated by the Commission is to be retained as the name-bearing type should the original specimen be found.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).





*Xantholinus gracilis* Sperk, neotype, Greece. The total length is 3.4 mm (excluding the separately mounted genital and sclerites).



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