



Two new high-altitude subspecies of *Tapinopterus* (*Tapinopterus*) *cognatus* (Dejean, 1831) (Coleoptera: Carabidae: Pterostichinae) from Serbia

SREČKO ĆURČIĆ^{1,3}, NASTAS ILIĆ², NIKOLA VESOVIĆ¹ & DRAGAN ANTIĆ¹

¹Institute of Zoology, University of Belgrade - Faculty of Biology, Studentski Trg 16, 11000 Belgrade, Serbia.

E-mail: srecko@bio.bg.ac.rs

²University of Belgrade - Faculty of Sport and Physical Education, Blagoja Parovića 156, 11000 Belgrade, Serbia

³Corresponding author

The genus *Tapinopterus* Schaum, 1858 currently comprises around 60 species belonging to eight subgenera, inhabiting mostly the Balkan Peninsula and Asia Minor (Schatzmayr 1942, 1943; Bousquet 2003; Ćurčić *et al.* 2008; Arndt *et al.* 2011; Lohaj *et al.* 2012). The taxa live in limited geographic areas and are mostly montane (Trautner & Geigenmüller 1987; Guéorguiev & Guéorguiev 1998). The territory of Serbia is inhabited by two species of *Tapinopterus*, *T. (T.) cognatus* (Dejean, 1831) (recorded in Bulgaria and Romania as well) and *T. (T.) miridita* (Apfelbeck, 1904) (recorded in Albania and the Republic of Macedonia as well), as well as by the three subspecies, *T. (T.) cognatus cognatus* (Dejean, 1831) (known from Mt. Suva Planina in Serbia and from Bulgaria), *T. (T.) cognatus winkleri* Mandl, 1936 (known from the Svrljiške Planine Mts. and Mt. Stara Planina in both Serbia and Bulgaria), and *T. (T.) miridita miridita* (Apfelbeck, 1904) (known from Mt. Šar Planina in both Serbia and the Republic of Macedonia), respectively (Mandl 1936; Schatzmayr 1942, 1943; Guéorguiev & Guéorguiev 1995; Drovenik & Peks 1999; Bousquet 2003; Ćurčić *et al.* 2007; Guéorguiev & Giachino 2008). In our opinion, *T. (T.) cognatus cognatus* does not live in Bulgaria (as was previously reported) (Bousquet 2003), while the older Schatzmayr's (1943) record "Klisura" should refer to the Iron Gate Gorge in SW Romania and NE Serbia, not to any Bulgarian place. The other mentioned locality, i.e., Mt. Suva Planina in Serbia, is situated far from the type locality (Iron Gate). Since nearly all *Tapinopterus* taxa are regional or local endemics, this southernmost record in SE Serbia for *T. cognatus cognatus* seems unlikely. In view of the high diversity of *Tapinopterus* on the Balkan Peninsula, it is expected that new taxa exist in border areas of the distribution in Serbia. During the last years, the first (SĆ), second (NI) and fourth author (DA) of the paper investigated a number of epigeal montane habitats in SE and C Serbia in order to confirm such an assumption, by collecting a series of ground beetles at high altitude sites. After careful examination of the samples, we identified two *Tapinopterus* subspecies new to science.

Sources of material are the following collections:

IZFB Institute of Zoology, University of Belgrade - Faculty of Biology, Belgrade, Serbia

cNI Coll. Nastas Ilić, Belgrade, Serbia

Other abbreviations used in the text: BL—body length measured from apex of clypeus to apex of elytra; BW—maximum body (elytra) width; M—mean value; R—range of performed measurements; HL—length of head measured from apex of clypeus to anterior pronotal margin along midline; HW—maximum width of head at eye level; Mt(s)—mountain(s); SW—southwestern; SE—southeastern; NE—northeastern; C—central; PL—pronotal length along midline; PW—maximum width of pronotum; PB—pronotal width at the base; EL—elytral length along suture; EW—maximum width of elytra; p—printed label.

Other examined taxa. *Tapinopterus* (*Tapinopterus*) *cognatus winkleri* Mandl, 1936: 1 ♂, from leaf litter in a beech forest, Babin Zub peak, Mt. Stara Planina, 1,580 m a.s.l., SE Serbia, 10.VII.2014, leg. D. Antić (IZFB).

Tapinopterus (*Tapinopterus*) *cognatus vlasinensis* Ćurčić and Ilić, ssp. n. (Figs. 1–6)

Type locality. Village of Vlasina Rid, Vlasina Lake Plateau, Mt. Čemernik, 1,200 m a.s.l., Surdulica, SE Serbia.

Type material. Holotype ♂, village of Vlasina Rid, Vlasina Lake Plateau, Mt. Čemernik, 1,200 m a.s.l., Surdulica, SE Serbia, 02–16.VIII.2014, from pitfall traps, leg. S. Ćurčić (p) HOLOTYPE *Tapinopterus* (*Tapinopterus*) *cognatus vlasinensis* ssp. n. Ćurčić & Ilić, 2015 (red p) (IZFB) (Fig. 1).