

**A NEW SYNONYM IN THE SUBFAMILY SCOLIINAE
(HYMENOPTERA: SCOLIIDAE)**

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Summary. Based on morphological comparison, *Campsomeriella annuloides* Yamane, 1999, known from males in Japan, is synonymized with *Bellimeris stoetznery* (Betrem, 1928).

Key words: *Bellimeris stoetznery*, *Campsomeriella annuloides*, morphology, genitalia, new synonymy, Asia.

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Резюме. На основании морфологического сравнения известного по самцам из Японии *Campsomeriella annuloides* Yamane, 1999, этот вид сведен в синонимы к *Bellimeris stoetznery* (Betrem, 1928).

INTRODUCTION

The genus *Bellimeris* Betrem, 1972, was originally established as a subgenus of *Megacampsomeris* Betrem, 1928, and was later raised to genus status within the tribe Megacampsomerini by Argaman (1996). Schulten *et al.* (2011) provided an in-depth description of female *Bellimeris* (the males were unknown), placing two species namely *Bellimeris bella* and *B. stoetznery* in the genus. Most recently, Kim (2021) described the male characteristics of the genus for the first time, based on *B. stoetznery* males confirmed by DNA barcodes (GenBank accession numbers MN650649 and MN650650) obtained from Korean specimens.

On the other hand, *Campsomeriella annuloides* was first described with males from three islands in the Southern Ryukyus of Japan by Yamane (1999b). Subsequently, males have been rarely but widely found in the southern Ryukyus and southwestern Japan (Uemori & Otsui, 2022; Kawano *et al.*, 2024).

Although Yamane (2022) and Kawano *et al.* (2024) suggested a possible sex association between *Campsomeriella annuloides* and *Megacampsomeris stoetznery*, the female of the former remained unspecified.

In this study, we conducted a morphological comparison between the males of the Korean *Bellimeris stoetznery* and the Japanese *Campsomeriella annuloides*. Unfortunately, molecular

data for the latter could not be reliably obtained due to the poor condition of the examined samples. However, external features, particularly the genitalia structure, revealed no discernible differences between the two. Consequently, *C. annuloides* is synonymized with *B. stoetzneri* as follows.

All the Korean materials herein are housed in Dongnam Health University (private collection of J-K Kim). Specimens were measured and photographed (with image stacking) using an image analyzer and a digital camera mounted on a Leica DMS 1000.

SYSTEMATIC ACCOUNTS

Family Scoliidae Latreille, 1802

Subfamily Scoliinae Latreille, 1802

Tribe Megacampsomerini Argaman, 1996

Genus *Bellimeris* Betrem, 1972

Bellimeris Betrem in Betrem & Bradley, 1972: 164 (as subgenus of genus *Megacampsomeris* Betrem 1928); Argaman, 1996: 213 (in key); Schulten *et al.*, 2011: 887 (♀, description); Kim, 2021: 508 (♀, ♂, description).

Type species: *Elis bella* Bingham, 1897, designated by Bradley (1972: 6).

Bellimeris stoetzneri (Betrem 1928)

Figs 1–4

Campsomeris (*Megacampsomeris*) *stoetzneri* Betrem, 1928: 139, ♀, ‘Kwanhsin, Szetchwan, China’ (coll. Schulthessi); Betrem, 1941: 53 (♀, in key), 64 (♀, diagnosis); Tsuneki, 1972: 7 (♀, diagnosis).

Megacampsomeris stoetzneri (Betrem): Yamane, 1999a: 393 (♀, in key), 397 (♀, diagnosis); Osten, 2005: 23 (in list, incorrectly spelled as *stoezneri*); Terayama & Nagase, 2007: 8 (♀, in key), 13 (♀, diagnosis); Kim 2009: 100 (♀, in key), 101 (♀, diagnosis); Terayama & Nagase, 2016: 249 (♀, in key), 253 (♀, diagnosis).

Bellimeris stoetzneri (Betrem): Schulten *et al.*, 2011: 892–895 (♀, holotype redescription), 896 (♀, in key); Kim, 2021: 205 (♀, ♂, description).

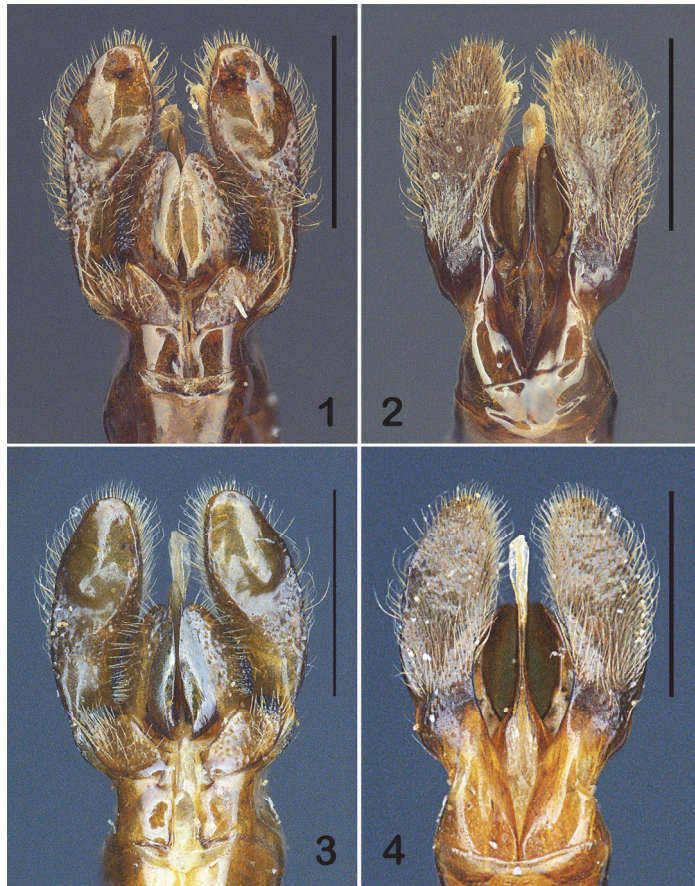
Campsomeriella annuloides Yamane, 1999b: 737, ♂, Japan: Yayeyama Yayema Is.: Iriomote-jima, Tarama-jima (Kitakyushu Museum of Natural History and Human History), **syn. n.**; Terayama & Nagase, 2007: 10 (♂, in key), 11 (♂, diagnosis); Terayama & Nagase, 2016: 249 (♂, in key), 253 (♂, diagnosis); Uemori & Otsui, 2022: 3–5 (♂, color images); Kawano *et al.*, 2024: 198–199 (description on body coloration).

MATERIAL EXAMINED. **South Korea:** 5♂ from Sinduri, Wonbuk-myeon, Taean (Kim, 2021); **Japan:** 3♂ (holotype and paratypes of *Campsomeriella annuloides*). Dissected specimens are specified in Figure legends.

DISTRIBUTION. China (Sichuan, Hangzhou, Hebei, Fujian, Anhui), South Korea (Chungcheongnam-do), Japan (Honshu, Shikoku, Kyushu, Yayeyama Islands), Taiwan (Orchid Island).

NOTES. As noted in Kawano *et al.* (2024), the color pattern of Japanese males of this species differs slightly between the populations of mainland Japan and the Ryukyu Islands. The Korean population is comparable to that of Japan proper exhibiting slightly melanistic traits: yellow markings on clypeus is limited to lateral margins, and those on scutellum and metanotum are smaller paired spots (Figs 1B–D in Kawano *et al.*, 2024 and Fig. 1C and E in

Kim, 2021). However, all other external features, including setae, punctures, and body structures, show no discernible differences between the Japanese and Korean specimens. Notably, their genitalia are also nearly identical as in Figs 1–4 herein. It is indubitable that the male of *Campsomeriella annuloides* is the same as the male of *Bellimeris stoetzneri*. Consequently, we synonymized the former with the latter.



Figs 1–4. Male genitalia. 1, 2 – *Campsomeriella annuloides* (♂, paratype, Haemida, Iriomote-jima, Yayeyama Is., Ryukyus, Japan, 20.VIII 1991, Sk Yamane). 3, 4 – *Bellimeris stoetzneri* (♂, Sinduri, Wonbuk-myeon, Taean-gun, Chungcheongnam-do, South Korea, 24.IX 2019, J-K Kim). 1, 3 – dorsal view; 2, 4 – ventral view. Scale bars = 0.5 mm.

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