A New Species of the Genus *Thymalus* (Coleoptera, Cleroidea, Thymalidae) from Taiwan

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**Abstract**  A new species of the genus *Thymalus*, *T. yamasakoi* sp. nov., is described from Taiwan. This is a distinct species in the genus in having the large and flattened body. This is the first record of Thymalidae from Taiwan.

**Introduction**

The genus *Thymalus* Latreille, 1802 (Thymalidae, Thymalinae; sensu GimmeL et al., 2019) is distributed in the Holarctic Region (Kolibáč, 2013), and is represented by nine species from China (1 sp.), Caucasus (1 sp.), Europe to North Africa (2 spp.), North America (1 sp.), and Japan (4 spp.) (Kolibáč, 2013; Miyatake, 1985).

In this paper, we describe a new species of the genus from Taiwan, as the first representative of the family Thymalidae from the region.

**Material and Methods**

The examined specimens are preserved in the Ehime University Museum, Matsuyama, Japan (EUMJ) and Taiwan Agricultural Research Institute, Taipei, Taiwan (TARI).

The methods of general observation and dissection follow Yoshitomi and Lee (2014). Microstructures of dissected parts were studied in pure glycerin under a compound microscope (Olympus BH-2). After observation of each specimen, the dissected parts were mounted on the same card with the specimen. Photographs (Fig. 1 a–c) were taken under a microscope (Leica S8APO) combined with camera (Nikon DS-Fil-L2). Some structures (Fig. 1 d–e) were observed with a digital microscope (HiROX KH-1300) and images were captured with the 2D measurement software (SHX-13M ver. 2.9.0). The photographs of male genital structures (Fig. 2) were taken under a compound microscope (Olympus BH-2) combined with camera (Nikon DS-Fil-L2). The terminology refers generally to Kolibáč (2005) and Yoshitomi (2014).

Abbreviations used in this paper are as follows: EL (length of the elytra along the suture); EW (maximum width of the elytra); PL (maximum length of the pronotum); PW (maximum width of the pronotum); TL (total length: PL+EL).

**Taxonomy**

*Thymalus yamasakoi* sp. nov.

**Type material.** Holotype (EUMJ): male, “[TAIWAN] Siyang, Alt. ca. 2,300-3,200m, Haiduan Township, Taitung County 台東縣海端鄉向陽 26, VI, 2014 J Yamasako leg.”. Paratypes (EUMJ &
TARI): 8 males, “[TAIWAN]: Siangyang-shan (Mt.), Haiduan Township, Taitung County, Alt. ca. 2900 m. 台東縣海端鄉向陽 18. VI, 2015, Y. Hara leg.”

Description. Male (Fig. 1 a, b). Body semicircular, slightly convex dorsally, flat ventrally. Coloration of body brown in dorsal, black in ventral, without metallic luster; lateral margin of pronotum and elytra reddish brown; antennomeres 1–2 brown; antennomeres 3–11 black; setae colorless.

Head (Fig. 1 a, b) finely and sparsely punctate, hidden by pronotum dorsally in most part; vertex convex. Eyes relatively large. Antennae (Fig. 1 c) eleven-segmented, relatively long; antennal sockets and antennomere 1 invisible dorsally; antennal club relatively large; antennomere 11 sharply pointed; approximate ratio of each antennomere (n = 1) as 6.20 : 1.23 : 1.43 : 1.32 : 1.35 : 1.20 : 1.00 : 1.00 : 3.53 : 3.72 : 4.00. Pronotum (Fig. 1 e) irregularly, finely and densely punctate, with short setae irregular and sparse in mesal portion; lateral margins weakly upturned, bearing many setae; anterior angles rounded, gently curved in distal portion; PW/PL 2.22–2.67 (2.41). Elytra (Fig. 1 d) roughly and regularly punctate, widest at middle; lateral margins upturned, rounded in distal portion, bearing many setae; anterior corner weakly projecting; EL/EW 1.04–1.23 (1.13), EL/PL 3.05–3.79 (3.47), EW/PW 1.21–1.32 (1.28), TL/EW 1.38–1.57 (1.46). Tergite VIII (Fig. 2 a) well sclerotized, trapezoidal, rounded at the apex, densely bearing short and long setae in distal portion. Sternite VIII (Fig. 2 b) moderate-
ly sclerotized, subtriangular, closely covered with short setae in distal portion. Segments IX–X (Fig. 2 c) spoon-like in shape, covered with short setae and punctures in distal portion. Tegmen (Fig. 2 d–f) long, a little shorter than phallus; median strut V-shaped; parameres gently curved dorsally, densely bearing short setae in apical portion. Phallus (Fig. 2 g) long, straight, pointed at apex, rounded in basal portion, widest in basal 1/3.

Female. Unknown.

Measurements. Male (n = 9): TL 7.00–8.11 (7.49) mm; PW 3.63–4.32 (4.03) mm; PL 1.50–1.93 (1.68) mm; EL 5.50–6.22 (5.80) mm; EW 4.70–5.65 (5.14) mm.

Remarks. This is a very remarkable species, and easily distinguishable from the other species by the flat and large body. Superficially this species is similar to *Thymalus laticeps* LEWIS, 1894 in having reddish coloration of body without metallic luster and finely punctate pronotum, but differs from it by the following characteristics: elytra slightly convex dorsally (strongly convex in *T. laticeps*), body larger (smaller, 6.0–7.5 mm in *T. laticeps*, after MIYATAKE, 1985), antennomere 11 sharply pointed (rounded in *T. laticeps*), and phallus larger and sharply pointed at apex (smaller with rounded apex in *T. laticeps*).
Etymology. The specific name is dedicated to Dr. Junsuke Yamasako of the Institute for Agro-Environmental Science, NARO, Tsukuba, Japan (NIAES), who is a collector of the holotype.

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要約

浅川大喜・吉富博之: セダカコクヌスト属 Thymalus (鞘翅目セダカコクヌスト科) の 1 新種の記載。
——— 台湾から Thymalus yamasakoi sp. nov. を命名、記載した。本種はたいへん顕著で、本属他種とは体が大きく扁平であることから容易に区別できる。本種の発見によりセダカコクヌスト科が台湾から初めて記録されたことになる。

References


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