

A New Cavernicolous Species of the Tribe Batrisini (Coleoptera, Staphylinidae, Pselaphinae) from the Ryukyus, Southwest Japan

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Abstract A new cavernicolous species of Batrisini, *Tribasodes kamedai* is described from the limestone cave, Nisshû-dô, Kin-cho, Okinawajima Is., the Ryukyus. This is the first record of true cavernicolous pselaphine from the Ryukyus.

Key words: Pselaphinae, Staphylinidae, *Tribasodes*, cavernicolous, Okinawajima Is.

Up to the present, three cavernicolous species of the pselaphine tribe Batrisini have been known from Japan, *Speobatrisodes punctaticeps* Jeannel, 1958 from Ryûga-dô Cave in Kôchi Prefecture, *Batrisodellus cerberus* Tanabe et Nakane, 1990 from Gongen-dô in Kumamoto Prefecture, *B. coprea* Tanabe et Nakane, 1990 from Kugô-dô in Gifu Prefecture. No cavernicolous pselaphine has been known from the Ryukyus. All cavernicolous species of the tribe Batrisini from Japan belong to the genus group of *Batrisus* defined by Nomura and Idris (2003).

In the Chinese Continent, a cavernicolous species of Batrisini, *Batrisodellus carissimus* Nomura et Wang, 1991 has been known from Guilin, S China. It was described as a new species of *Batrisodellus*, though it was moved to a new genus, *Tribasodellus* by Yin *et al.*, (2011), because the species is not a member of the *Batrisus* group, but that of the *Tribasodes* group (Nomura and Idris, 2003).

Recently, a batrisine species was collected from the limestone cave, Nisshû-dô, Kin-chô, Okinawajima Is. in the Ryukyus (Fig. 1). It was not a member of the *Batrisus* group, but of the *Tribasodes* group. This species is described as a new species, *Tribasodes kamedai* in the present

study. The genus *Tribasodes* was defined by Jeannel (1958), it contains three species described from Japan.

Materials and methods

The material was examined by a scanning electron microscope (SEM: JEOL JSM-6380LV). For the SEM observations; all specimens were non-coated, and examined with a low acv 0.9 kV. Scale bars in all figures are in micrometres. Measurements of the body and parts were made with a stereo microscope (Leica MZ Apo).

The holotype and paratypes of this new species are deposited in the National Museum of Nature and Science, Tokyo (NSMT).

Tribasodes kamedai sp. nov.

[Japanese name: kura-hoso-munetoge-arizukamushi]

(Figs. 2–5)

Etymology. The new species is dedicated to the collector of all the type specimens, Mr. Y. Kameda, who is a scientist studying cavernicolous mollusca.

Holotype male, Nisshû-dô Cave, Kin-chô, Okinawajima Is., Okinawa Pref., 7. vii. 2008, Y.

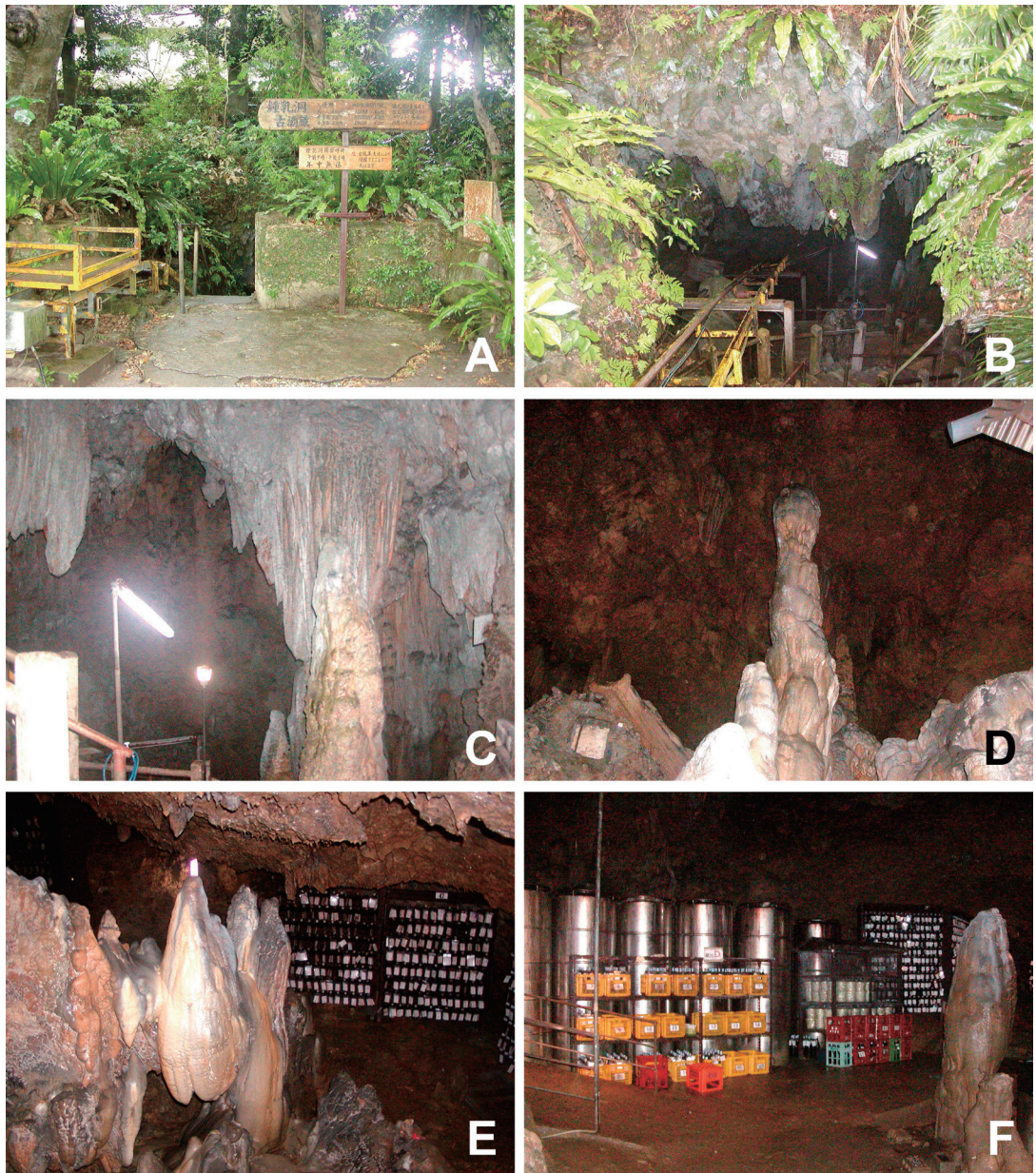


Fig. 1. The type locality of *Tribasodes kamedaï* sp. nov., the limestone cave, Nissshû-dô, Kin-chô, Okinawajima Is.

Kameda leg. Paratypes: 2 females, same data as holotype; 2 females, same locality as holotype, but 18. v. 2011, Y. Kameda leg.

Description. Male (Fig. 2A, B). Body length 2.20 mm, width 0.72 mm, large and very slender, weakly broadened in elytra and abdomen; color reddish brown, mat on dorsal surface.

Head wider than long, nearly rectangular (Fig. 3A), with a pair of lateral carinae just inside eyes; clypeus short, arcuate on anterior margin; frons weakly concave, vertex convex, with a pair of dorsal tentorial pits between eyes; postgenae slightly rounded. Eyes each small and ovoid, composed of about 20 facets. Antennae 1.46 mm

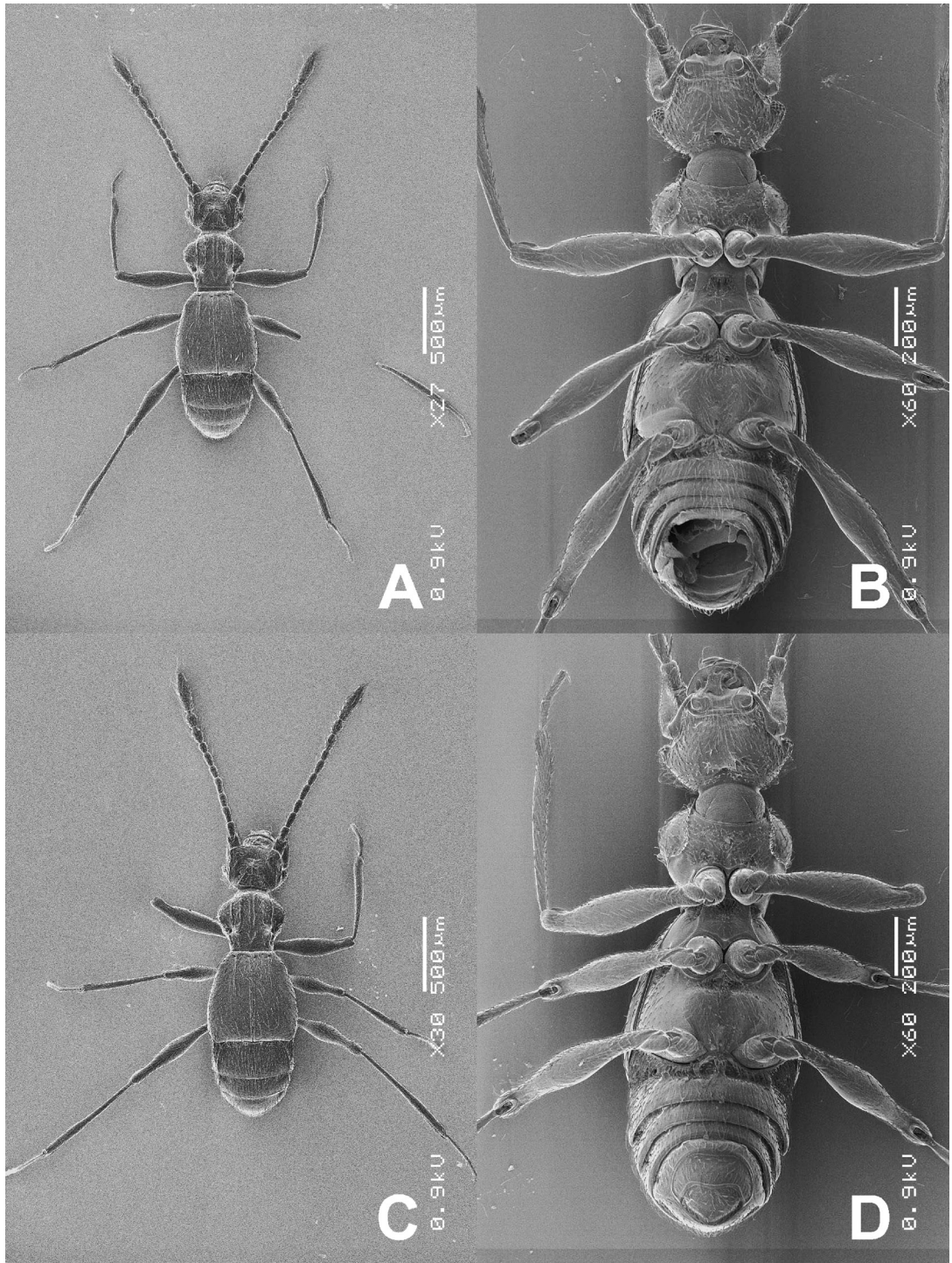


Fig. 2. *Tribasodes kamedai* sp. nov.: A, male habitus in dorsal view; B, ditto in ventral view; C, female habitus in dorsal view; D, ditto in ventral view.

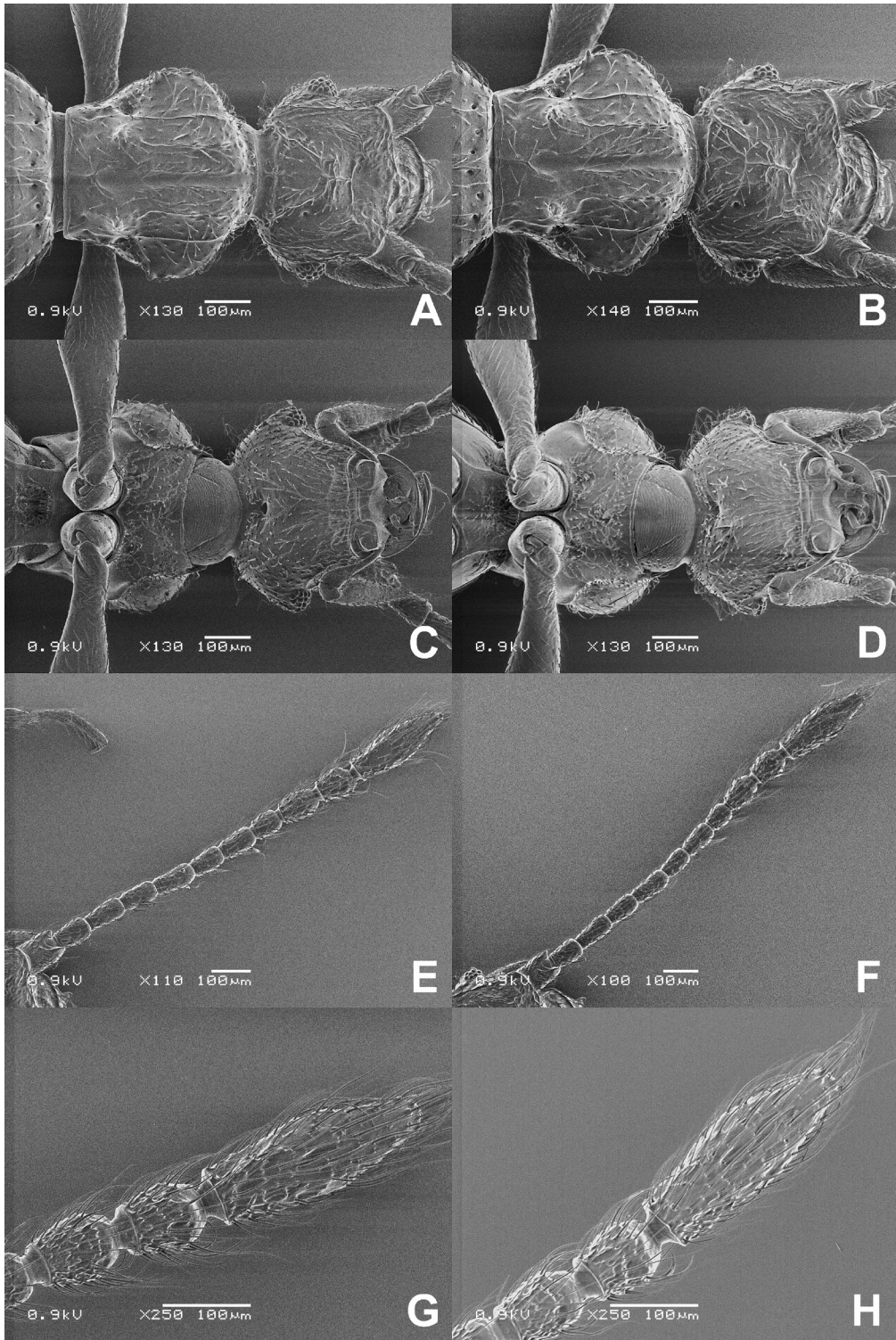


Fig. 3. *Tribasodes kamedai* sp. nov.: A, C, E, G, male; B, D, F, H, female; A, B, head and thorax in dorsal view; C, D, ditto in ventral view; E, F, antennae; G, H, antennal segments IX to XI.

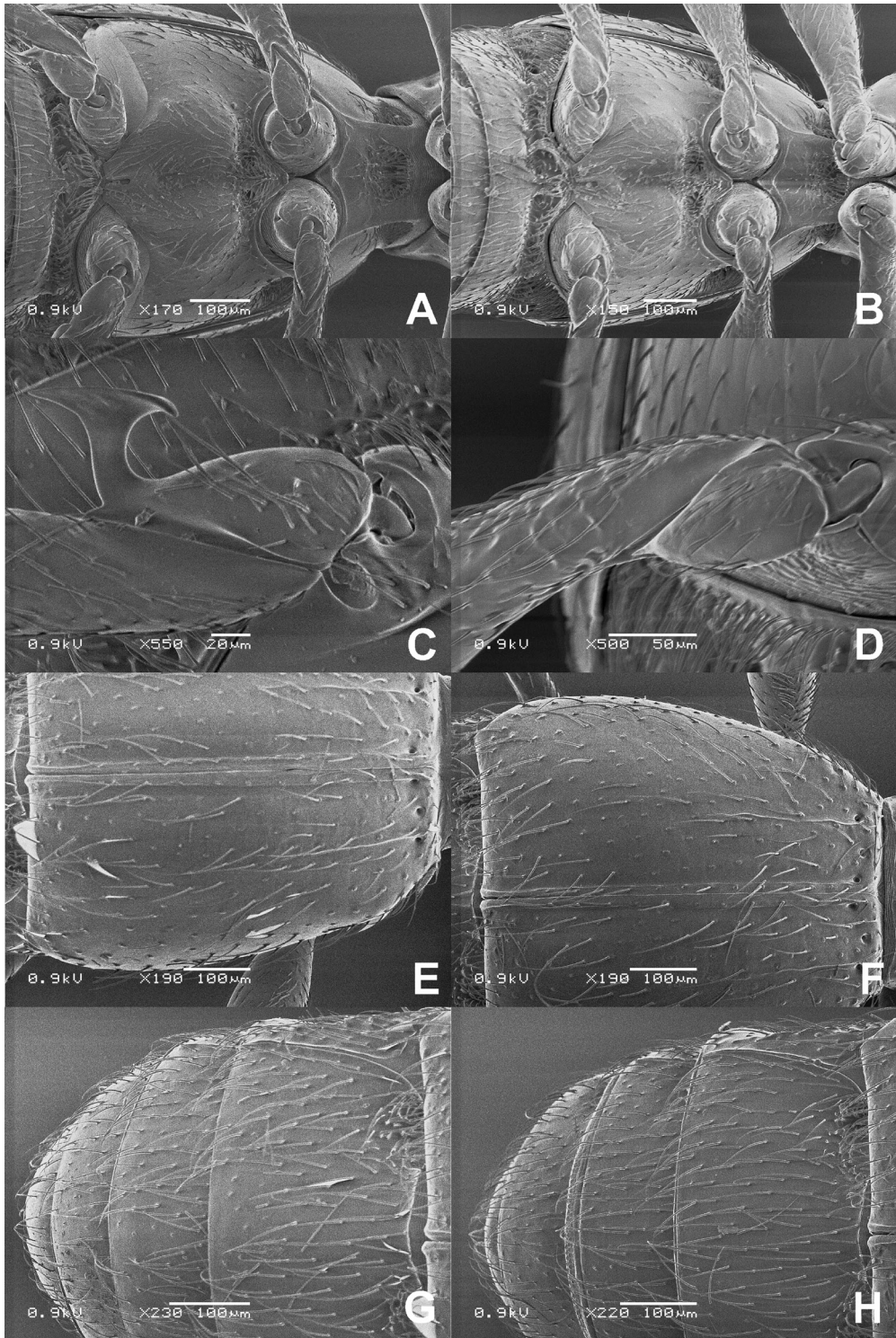


Fig. 4. *Tribasodes kamedai* sp. nov.: A, C, E, G, male; B, D, F, H, female; A, B, meso- and metathoraces in ventral view; C, D, hind trochanter in ventral view; E, F, elytra; G, H, abdomen in dorsal view.

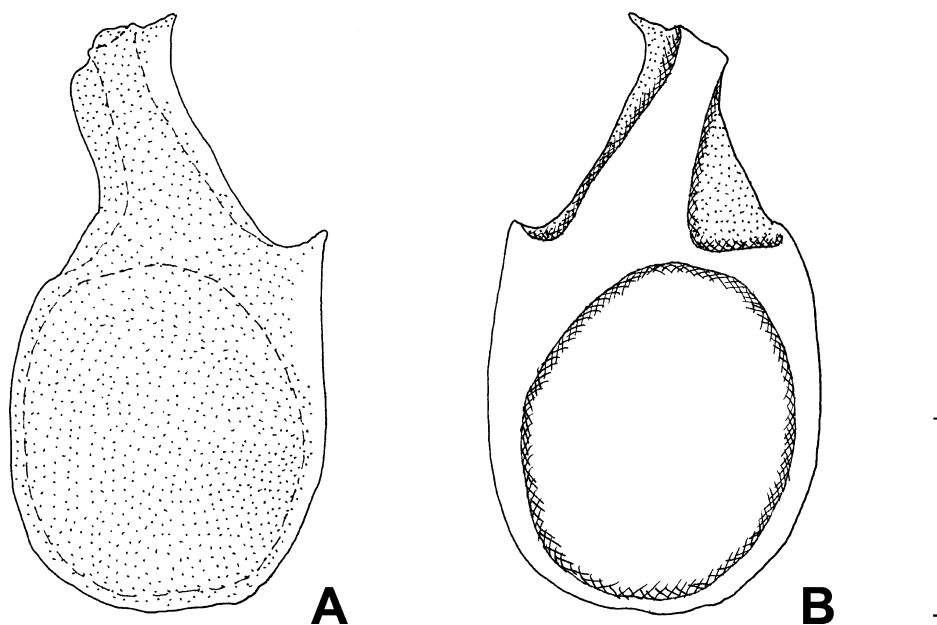


Fig. 5. *Tribasodes kamedai* sp. nov.: A, male genitalia in dorsal view; B, ditto in ventral view.

in length, very long and very slender (Fig. 3E); segment I thick, cylindrical, weakly angulate at internal and external apices; segments I to IV subequal in length, each subcylindrical; II to VIII subequal in width; V slightly longer than IV; VIII shorter than VII, ovoid, slightly longer than wide; IX to X subequal in width, each ovoid, longer than wide (Fig. 3G); XI the largest, slightly wider than X (Fig. 3G), slightly longer than IX+X, weakly constricted near base. Maxillary palpi each elongate and short (Fig. 3C); segment IV the largest, fusiform, about as long as I+II+III.

Pronotum slightly longer and slightly wider than head (Fig. 3A), wider than long, with a pair of short lateral spines near the middle; broadened before lateral spines, constricted just behind lateral spines, with a pair of large lateral foveae at basal 2/5, and a pair of weak conical dorsal denticles just inside lateral foveae; with two pairs of parallel longitudinal carinae, each inner carina running from anterior margin to lateral fovea, and each outer carina from anterior margin to dorsal denticle; and with a median longitudinal groove in anterior 4/5. Metasternum (Fig. 4A)

broad and transverse, with large triangular protuberance between meso- and metacoxae. Meta-trochanters each short and triangular, with a large and T-shaped spine at apex on posterior side (Fig. 4C). Elytra wider than long, trapezoidal, broadened posteriorly (Fig. 4E), each with three basal foveae, long adsutural and short lateral carinae.

Abdomen longer than elytra, slightly longer than wide (Fig. 4G), segments IV to VIII successively shortened posteriad; IV the largest, transverse, with a pair of narrow paratergite on both lateral sides, with a pair of large lateral foveae along basal margin, and with a pair of very shallow and indistinct concavities. Male genitalia weakly sclerotized (Fig. 5A, B); median lobe flattened dorso-ventrally, narrowed and nearly membranous in dorsoapical part; basal capsule very large and rounded, with a very large and ovoid basal foramen; ventral stalk short, narrowed distally.

Female (Figs. 2C, D, 3B, D, F, H, 4B, D, F, H). Body length 2.05–2.32 mm, width 0.65–0.71 mm, antennal length 1.37–1.47 mm. Very similar to male, but different in the following

characters: eyes smaller than in male, ovoid, each composed of about 15 facets; metasternal protuberance smaller than that of male (Fig. 4B); hind trochanter without spine at apex (Fig. 4D).

Distribution. Okinawajima Is.

Remarks. This new species is similar to the other members of the genus *Tribasodes*, but is separable by very slender body, very long antennae, the male trochanter with T-shaped spine, and very weakly sclerotized male genitalia with short ventral stalk.

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