

## A New Species of the Genus *Trichophya* (Coleoptera, Staphylinidae) from Taiwan

**Yasutoshi SHIBATA**

Tsurukawa 3–8–13, Machida City, Tokyo, 195–0061 Japan

**Abstract** A new staphylinid beetle of the genus *Trichophya* hitherto unrecorded from Taiwan is described and illustrated under the name of *T. kurosawai*. It is closely related to *T. japonica* Y. WATANABE et Y. SHIBATA from Japan, but is readily distinguished by its larger and broader body, more closely and strongly punctured pronotum and elytra, and differently shaped male genitalia.

The genus *Trichophya* MANNERHEIM is a peculiar group among staphylinid beetles having the 3rd to 11th segments of antennae extremely slender, verticillate and with antennal insertion exposed dorsally.

Up to the present, fourteen species have been known from North America, Europe, Southeast Asia, China and Japan. Of these, seven species are distributed in India, one in Malaysia, two in China and three in Japan. However, none of the species of this genus have been recorded from Taiwan.

In the present paper, I am going to describe a new species collected from the temperate forests in the central mountainous areas of Taiwan.

Before going further, I wish to express my cordial thanks to Professor Yasuaki WATANABE of Tokyo University of Agriculture for his continuous guidance and encouragement, and to Dr. Shun-Ichi UÉNO for his kindness extended to me in various ways. Hearty thanks are also due to Mr. Itsuro KAWASHIMA for his assistance in preparing the illustration of whole insect inserted in the present paper.

### *Trichophya kurosawai* sp. nov.

(Figs. 1–9)

Body broad, tapered anteriorly and posteriorly, nearly parallel-sided and somewhat depressed above, surface densely covered with short yellowish brown pubescence. Colour reddish brown to brown, moderately shining, head black, pronotum blackish brown with the exception of yellowish brown postero-lateral part, mouthparts, antennae and legs yellowish brown to reddish brown.

Length: 2.8–3.2 mm.

Head subtriangular, narrowed anteriorly and weakly convex, and a little wider than length (greatest width of head, including eyes/ greatest length of head = 1.24); sur-

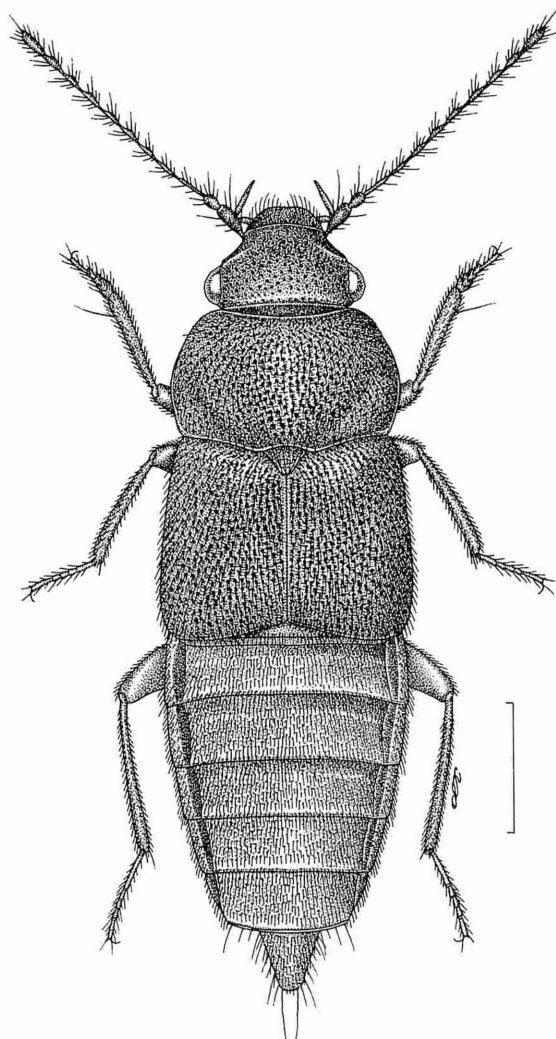


Fig. 1. *Trichophya kurosawai* sp. nov., ♂, from Alishan in Taiwan. Scale: 0.5 mm.

face sparsely and finely punctured, interspaces between the punctures are covered with microsculpture consisting of fine transverse meshes; eyes each situated at postero-lateral corner of head, relatively small but well convex. Antennae very slender, reaching anterior third of elytra, sparsely verticillate, 1st segment robust and broad, somewhat narrowed at base, 2nd globular, about as broad as 1st but distinctly shorter (length of 2nd segment/length of 1st segment=0.6), 3rd to 10th segments extremely slender and somewhat spindle-shaped, 11th elongated elliptical. Relative length of each antennal segment from base to apex as follows:— 11: 7: 10: 10: 10: 9: 9: 9: 9: 9: 12.

Pronotum gently convex above but deplanate postero-laterally, strongly transverse (greatest width of pronotum/length of pronotum measured along mid-line=1.65), slightly longer (length of pronotum/greatest length of head=1.09) but distinctly broader (width of pronotum/width of head=1.48) than head, widest just behind the middle; anterior margin broadly and arcuately emarginate, lateral margin rounded, posterior margin very weakly tri-sinuate, anterior angles narrowly angulate though not visible from above, posterior angles nearly rectangular, each lateral side somewhat deplanate and distinctly obliquely impressed in posterior half; surface rather closely covered with coarsely setiferous punctures, microsculpture as on head. Scutellum triangular, surface with dense punctures and sparse pubescence.

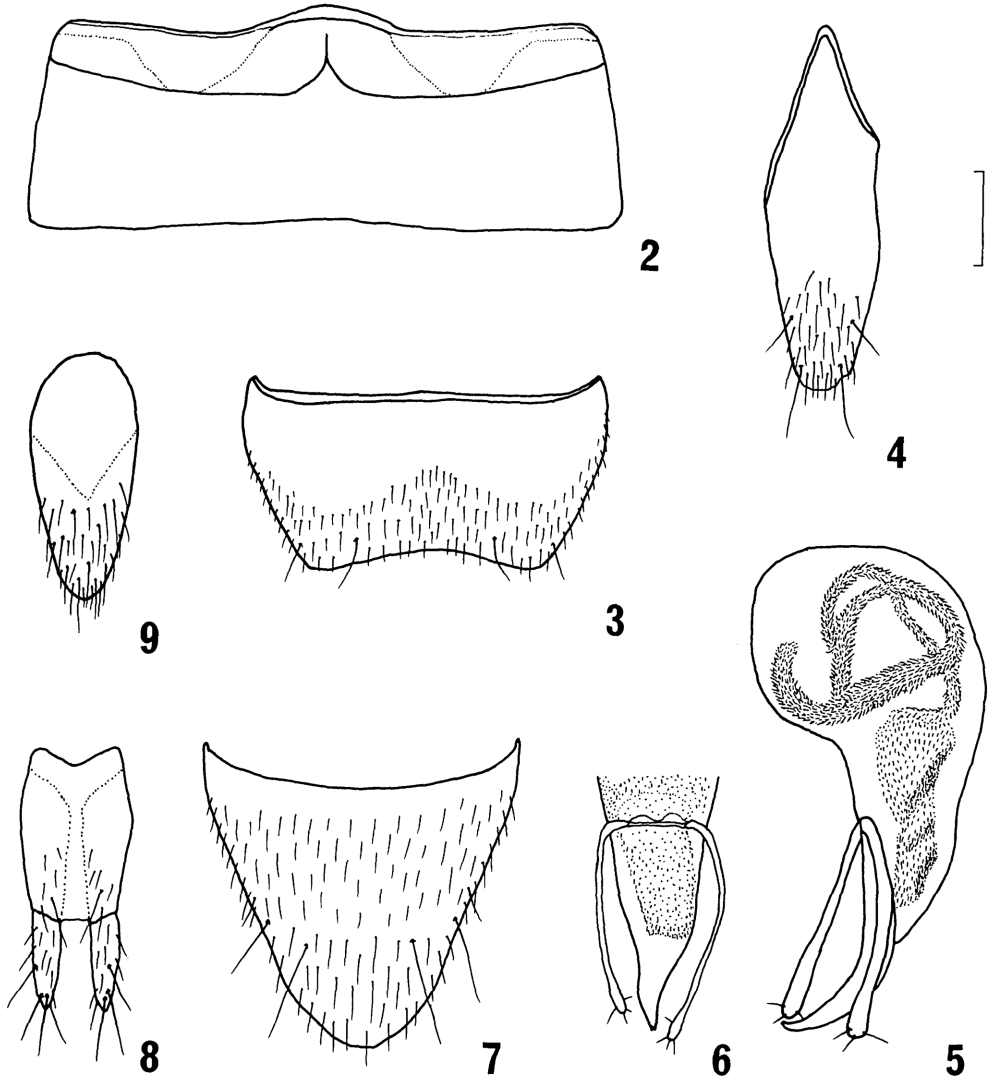
Elytra moderately convex above, subtrapezoidal and dilated posteriad, much broader (greatest width of elytra/greatest length of elytra=1.29) and almost as broad as pronotum; lateral side weakly rounded, posterior margin somewhat emarginate at the middle; surface closely but more roughly punctured than that of pronotum, interspaces of punctures devoid of microsculpture and almost smooth.

Abdomen broad, broadest at the 4th segment, side margins rounded, 3rd to 7th segments each with well developed and erect paratergites; surface stuffed with very fine, sparse and indistinct punctures and covered with shallow and sometimes indistinct microsculpture which consists of transverse meshes. Third sternite (Fig. 2) provided with a longitudinal, short, angulate median carina, with the sides shallowly concave for receiving hind coxae. Legs relatively slender, tibiae elongate.

Male. Protarsi each with basal four segments moderately dilated, mesotarsi with basal four segments slightly dilated, and with ventral face bearing tenent setae. Eighth sternite (Fig. 3) with two pairs of long, erect and black setae, posterior margin broadly and shallowly emarginate. Ninth sternite (Fig. 4) with somewhat asymmetrical basal portion, pubescent at apical portion, posterior margin rounded, with two pairs of black and erect setae and a pair of very long subtransparent setae. Aedeagus (Figs. 5, 6) asymmetrical, with basal part large and globular; viewed ventrally, median lobe gradually narrowed towards the acutely pointed apex, apical fifth asymmetrically curved to the right; viewed laterally, this part abruptly curved ventrad at the tip. Parameres elongate, one lobe a little shorter and the other lobe longer than median lobe, each more or less dilated in apical part and provided with four short setae at the apex. Internal sac long and coiled, its proximal portion narrow, of heavily sclerotized structure consisting of fine spines, distal portion broad, surface densely covered with extremely small teeth-like structure.

Female. Basal four segments of each protarsus slender and without distinct tenent setae. Eighth tergite (Fig. 7) long and wide, broadly rounded apically, surface covered with numerous fine setae, and with two pairs of long and strong setae near apico-lateral margin. Ninth sternite (Fig. 8) with coxite somewhat longer, sparsely setose, bearing a few long black setae at the apical margin. Tenth tergite (Fig. 9) oblong-ovate, posterior margin evenly rounded and with short setae in apical half.

*Type series.* Holotype: ♂, allotype: ♀, Alishan, about 2,100 m alt., Chiai



Figs. 2-9. *Trichophya kurosawai* sp. nov. — 2, Third abdominal sternite in male; 3, 8th abdominal sternite in male; 4, 9th abdominal sternite in male; 5, male genitalia in lateral view; 6, apical part of aedeagus in dorsal view; 7, 8th abdominal sternite in female; 8, 9th abdominal sternite in female; 9, 10th abdominal tergite in female. Scale: 0.2 mm.

Hsien, 7-VIII-1971, Y. SHIBATA leg. Paratypes: 13 ♂♂, 3 ♀♀, same locality and date as for the holotype.

The holo- and allotypes are deposited in the Laboratory of Insect Resources, Tokyo University of Agriculture, and the paratypes are preserved in the author's private collection.

*Further specimens examined.* 2 ♂♂, 2 ♀♀, near Tsuifeng, about 2,200 m alt.,

Nantou Hsien, 27-VII-1974, Y. SHIBATA leg.

*Distribution.* Taiwan.

*Notes.* The present new species is similar in general appearance to *T. japonica* Y. WATANABE et Y. SHIBATA from Japan, but can be readily distinguished from the latter by the following features: body larger and broader; pronotum and elytra more closely and more strongly punctured, the punctures not granular; 8th abdominal sternite in male provided with short setae in posterior half of sternite and with two pairs of long and erect black setae; male genital organ with median lobe abruptly curved ventrad in apical fifth in lateral view.

The type material was found from under fallen leaves accumulated at the margin of a broadleaved forest. All the specimens from Tsuifeng were collected from heaps of fallen leaves accumulated at the edge of the water of a narrow mountain stream.

*Etymology.* The specific name is given to the memory of the late Dr. Yoshihiko KUROSAWA, one of the leading coleopterologists in Japan.

## 要 約

柴田泰利：台湾から未記録のホソヒゲハネカクシ属の1新種。——ホソヒゲハネカクシ属は、単独で1亜科ホソヒゲハネカクシ亜科 (Trichophyinae) を形成し、ヒゲフトハカクシ亜科に近縁のものと考えられている。触角の3-11節がきわめて細長く輪状に細毛をそなえ、触角第1節の基部は頭部の前縁にあり、背面に露出しているなどの特徴により他属との区別は容易である。

ホソヒゲハネカクシ属は既知種14種の小さい属で、北米、欧州、東南アジア、中国、日本から知られている。東南アジア7種、中国2種、そして日本からは3種が記録されている。

今回、台湾の嘉義県阿里山 (標高 2,100 m) と南投県翠峰 (標高 2,200 m) から採集した種が新種と判定されたので、*Trichophya kurosawai* と命名記載した。本種は、頭部と胸部表面に強い皮革状の微細構造をもち、日本産の *T. japonica* Y. WATANABE et Y. SHIBATA ホソヒゲハネカクシに似ているが、やや大型で幅広、前胸と上翅の点刻 (顆粒状ではない) はより密で、より強いこと、雌雄の交尾節の構造、雄交尾器の形状が異なることなどによって区別される。なお、本種の学名は、長年にわたり日本の甲虫学の発展に尽くされた黒澤良彦博士に献名したものである。

## References

- ASHE, J. S., & A. F. NEWTON, JR., 1993. Larvae of *Trichophya* and phylogeny of the tachyporine group of subfamilies (Coleoptera: Staphylinidae) with a review, new species and characterization of the Trichophyinae. *Syst. Ent.*, **18**: 267-286.
- CAMERON, M., 1926. New species of Staphylinidae from India, Part III. *Trans. ent. Soc. Lond.*, **1926**: 171-191.
- 1932. Coleoptera, Staphylinidae III. *In the: Fauna of British India, including Ceylon and Burma.* xiii + 443 pp., 4 pls. Taylor & Francis, London.
- 1944. Descriptions of new Staphylinidae (Coleoptera). *Proc. r. ent. Soc. Lond.*, (B), **13**: 11-15.
- 1950. New species of Staphylinidae (Col.) from the Malay Peninsula. *Ann. Mag. nat. Hist.*,

- (12), **3**: 1–40.
- MIYASHITA, K., 1997. On the male of *Trichophya japonica* (Coleoptera, Staphylinidae). *Elytra, Tokyo*, **25**: 84.
- NAOMI, S., 1995. Description of a new species of the genus *Trichophya* (Coleoptera, Staphylinidae) from Japan. *Spec. Bull. Jpn. Soc. Coleopterol., Tokyo*, (4): 347–350.
- 1996. Two new species of the family Staphylinidae (Coleoptera) from Japan. *New Entomologist, Matsumoto*, (45): 69–73.
- WATANABE, Y., & Y. SHIBATA, 1962. Description of a new species of the genus *Trichophya* MANNERHEIM from Japan (Coleoptera, Staphylinidae). *J. agric. Sci. Tokyo Nogyo Daigaku*, **7**: 95–96.
- ZHENG, F.-K., 1987. A new species and a new record of genus *Trichophya* MANNERHEIM from China (Coleoptera: Staphylinidae, Trichophyinae). *Acta. ent. sin.*, **30**: 97–99. (In Chinese with English summary.)