

Two New Species of the Genus *Paratrichius* (Coleoptera, Scarabaeidae) from Southern China

Kazuo IWASE

3–15–10, Shirasagi, Nakano-ku, Tokyo, 165 Japan

Abstract Two new trichiine beetles of the genus *Paratrichius* are described from China. *Paratrichius tigris* sp. nov. is related to *P. vitalisi* BOURGOIN from Vietnam. *Paratrichius riekoae* sp. nov. resembles *P. septemdecimguttatus* VOLLENHOVEN from Japan.

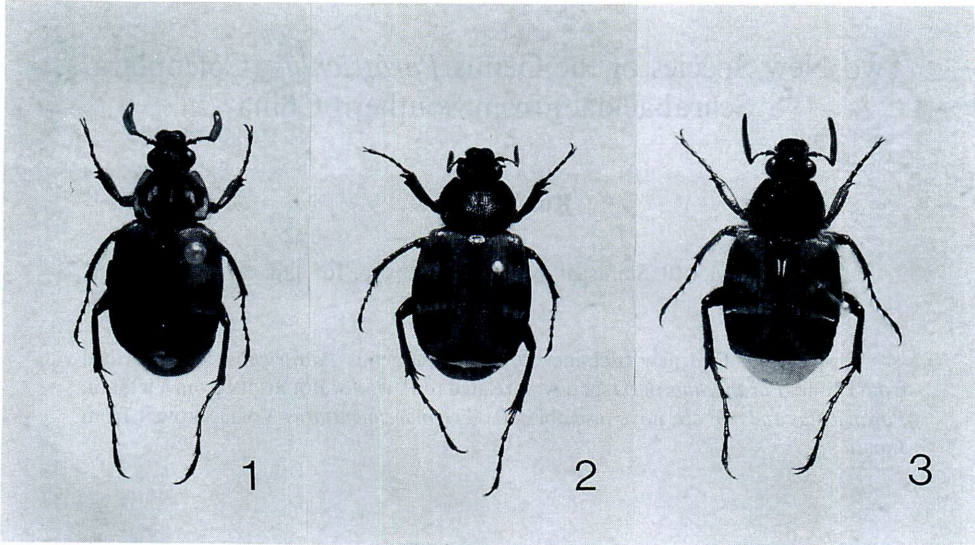
In this paper, the author describes two new *Paratrichius* species, *P. tigris* sp. nov. and *P. riekoae* sp. nov. from China. Generic definition is briefly written in IWASE (1993). The holotypes will be preserved in the National Science Museum (Nat. Hist.), Tokyo.

Paratrichius tigris sp. nov.

(Figs. 1–2, 4, 6–7)

Male. Elongate oval. Black, with antenna, palpi, posterior part of anterior femur, inner part of anterior tibia and anterior part of ventral face of middle femur light brown, elytron yellowish brown, with sutural, lateral and posterior margins and three spots black, three black spots situated along lateral border of elytron: anterior one the smallest, situated behind humeral calus, middle one not reaching lateral black border, posterior one the largest, reaching lateral border. Ventral surface, head, pygidium and legs shining, pronotum, scutellum and elytra opaque. Body decorated with yellow cretaceous markings: pronotal margination decorated along all borders, though interrupted before the middle of lateral margins, a short medial line on pronotum, shortened in front and behind, a pair of longitudinal spots on both sides of pronotal medial line, a short longitudinal line situated just behind scutellum on sutural interval of each elytron, most surface of pygidium, lateral spots of third to fifth abdominal sternites.

Clypeus wider than long ($L/W = 0.9$), widest at the middle, depressed at sides, weakly raised along anterior border; lateral border arcuate, anterior angle rounded, anterior border weakly emarginate; clypeal surface transversely reticulate, densely clothed with yellow long erect hairs. Frons longitudinally reticulate, rather densely clothed with yellow long erect hairs. Antennal club 1.6 times as long as footstalk,



Figs. 1-3. Dorsal aspect. — 1, *Paratrichius tigris* sp. nov., ♂; 2, ditto, ♀; 3, *P. vitalisi* BOURGOIN (Sapa, Vietnam).

inner surface of first lamella with a longitudinal groove.

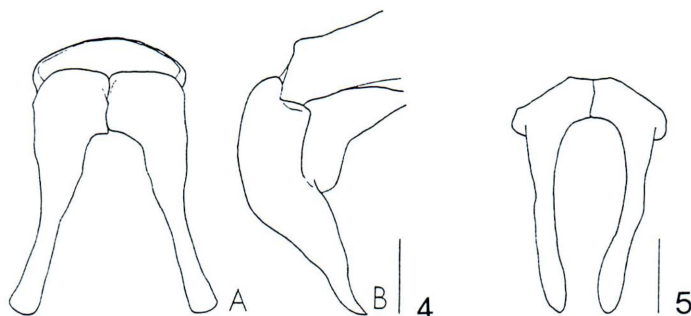
Pronotum weakly convex, wider than long ($L/W=0.9$), widest at the middle, narrowly marginate along anterior and lateral borders, rather widely marginate and thickened before scutellum; anterior angle produced with apex rectangular, lateral borders almost parallel in posterior half, obtusely curved at middle, and moderately convergent in anterior half, posterior angle obtuse, posterior border rounded and somewhat sinuate near posterior angles; surface rather densely, but not strongly punctate, densely covered with yellow long erect hairs.

Scutellum semicircular, wider than long ($L/W=0.8$), sparsely punctate, sides with scattered short hairs.

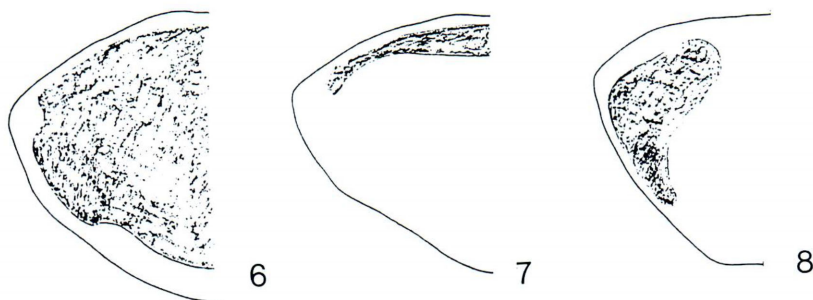
Elytra longer than wide ($L/W=1.1$), widest before the middle, lateral border weakly arcuate, posterior angle rounded, each elytron with posterior border rounded; surface of elytron with five striae between suture and shoulder, rather densely clothed with minute setae, hairy in front of shoulder; striae each with a row of small horseshoe-shaped punctures; most intervals weakly costate and impunctate, second one flat, wider than adjacent ones, rather densely punctate; shoulder prominent.

Pygidium wider than long ($L/W=0.8$), moderately convex, densely clothed with yellow hairs; greater part of surface covered with cretaceous materials, and the remaining surface along all borders aciculate.

Greater part of ventral surface aciculate and densely hairy, hairs especially long on metasternum.



Figs. 4-5. Male genitalia. — *Paratrichius tigris* sp. nov., A: caudal view, B: lateral view; 5, *P. vitalisi* BOURGOIN (Sapa, Vietnam), caudal view. (Scale: 0.5 mm.)



Figs. 6-8. Caudal view of pygidium, indicating marking of cretaceous materials. — 6, *Paratrichius tigris* sp. nov., ♂; 7, ditto, ♀; 8, *P. riekoae* sp. nov.

Anterior femur lacking longitudinal ridge on anterior face; anterior tibia with two external teeth, lacking terminal spur; posterior tarsus 1.5 times as long as tibia.

Genitalia as shown in Fig. 4.

Female. Different from male as follows: yellow cretaceous materials almost absent, only basal margin of pygidium covered with them; antennal club short, as long as footstalk; pronotum shining, more strongly convex and more strongly punctate; scutellum shining; elytral black spots larger; pygidium flattened near apex, pygidial hairs shorter; anterior tibia with a terminal spur.

Holotype: ♂, VI-1994. Qing Ling, 1,100 m above sea-level, Shaliangzi, Zhouzhi Pref., Shaanxi, China; paratype 1 ♀, same data as the holotype.

This new species resembles *Paratrichius vitalisi* BOURGOIN (Figs. 3, 5) from Vietnam (type locality: Lao Kay), but is different from the latter in the following points: clypeus not reflexed (strongly reflexed in the latter); pronotum decorated with yellow markings in male (lacking yellow marking in the latter); scutellum black (brown in the latter); external border of paramere of male genitalia almost straight just behind base (rather strongly emarginate in the latter).

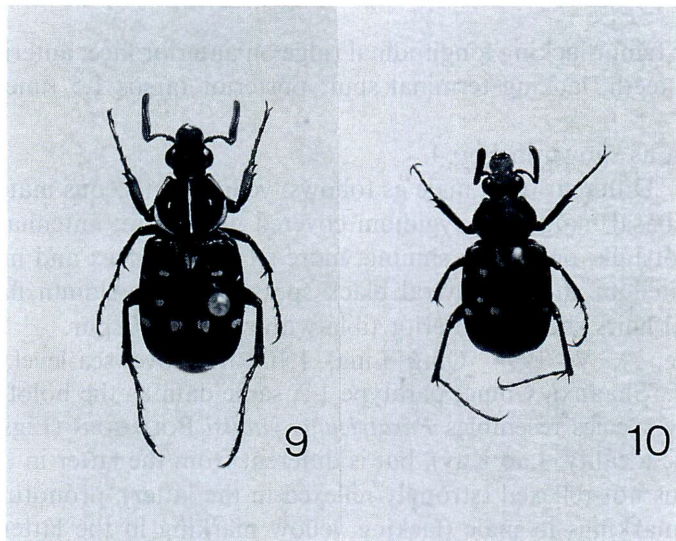
Paratrichius riekoae sp. nov.

(Figs. 8–9, 11)

Male. Elongate-oval. Black with antenna, posterior part of anterior femur, inner part of anterior tibia and anterior tarsus brown. Ventral surface, clypeus, elytral shoulders, pygidium and legs shining; frons, pronotum, scutellum and elytra except for shoulders opaque. Body decorated with pale yellowish cretaceous markings as follows: a median line, a pair of short discal spots and lateral marginal lines, which are interrupted at the middle on pronotum, six round spots on each elytron, a pair of large lateral spots on pygidium, greater part of anterior coxa, anterior part of prosternum, a pair of small spots on mesosternum, greater part of mesepisternum, mesepimeron and third to fifth abdominal sternites, lateral spots of second abdominal sternite, anterior part of sixth one.

Clypeus wider than long ($L/W=0.9$), widest at the middle, feebly depressed at sides, thickened along anterior border; lateral border arcuate, anterior angle rounded, anterior border obtusely emarginate; clypeal surface transversely reticulate. Frons longitudinally reticulate anteriorly, densely and finely punctate posteriorly. Antennal club 2.0 times as long as footstalk; inner surface of first lamella with a longitudinal groove.

Pronotum lightly convex, nearly circular, wider than long ($L/W=0.9$), widest just before posterior angles, narrowly marginate along anterior and lateral borders, rather widely marginate and thickened before scutellum; anterior angle distinctly produced anteriorly, with apex rectangular, lateral borders curved at the middle,



Figs. 9–10. Dorsal aspect. —9, *Paratrichius riekoae* sp. nov.; 10, *P. septemdecimguttatus* VOLLENHOVEN (Nagasaki, Japan).

almost parallel posteriorly, convergent anteriorly, posterior angle very obtuse, posterior border rounded; surface rather densely and sharply, but not strongly punctate, rather densely bearing short yellowish setae along anterior and lateral borders, setae becoming somewhat longer near posterior angles, median line weakly depressed.

Scutellum semicircular, wider than long ($L/W=0.6$), hairless, rather densely, but not strongly punctate laterally, impunctate medially.

Elytra longer than wide ($L/W=1.2$), widest at the middle, lateral border weakly arcuate, posterior angle rounded, posterior border of each elytron rounded; each elytron with five striae between suture and shoulder, rather sparsely clothed with minute setae; striae with a row of small umbilicate or horseshoe-shaped punctures; intervals weakly convex; shoulder prominent.

Pygidium wider than long ($L/W=0.7$), strongly convex behind the middle, concentrically aciculate, densely clothed with short yellowish setae, which become longer near apex.

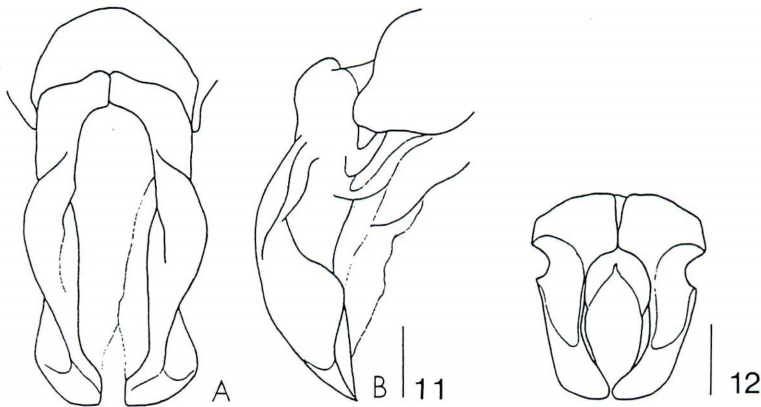
Ventral surface densely clothed with long yellowish setae, metasternum strongly convex ventrad, flattened and densely punctate medially, and transversely aciculate laterad. Abdominal sternites transversely aciculate except for posterior 1/3 of the sixth one, which is almost smooth.

Anterior femur with a longitudinal serrated carina on anterior face; anterior tibia with two external teeth, lacking terminal spur; posterior tarsus about twice as long as posterior tibia.

Male genitalia as shown in Fig. 11.

Holotype: ♂, VI-1994. Qing Ling Mountains, 1,100 m above sea-level, Shaliangzi, Zhouzhi Pref., Shaanxi, China.

This new species very closely resembles *Paratrichi* *septemdecimguttatus*



Figs. 11–12. Male genitalia. — 11, *Paratrichi riekoeae* sp. nov., A: caudal view, B: lateral view; 12, *P. septemdecimguttatus* VOLLENHOVEN (Nagasaki, Japan), caudal view. (Scale: 0.5 mm.)

VOLLENHOVEN (Figs. 10, 12) from Japan, though different from the latter in the following points: pronotum rather sharply and more finely punctate (indistinctly punctate in the latter); pronotal anterior angle rectangular (obtusely rounded in the latter). The shape of male genitalia is distinctly different between the two species, the dorsal face of paramere being flat in the latter. MA (1995) recorded *P. septemdecimguttatus* from China, and illustrated the male genitalia, which are different from those of the Japanese specimens, and also different from the new species. MA's *P. septemdecimguttatus* seems to be an undescribed species.

Acknowledgement

The author wishes to thank Dr. S.-I. UENO of the National Science Museum (Nat. Hist.), Tokyo, for reviewing the manuscript of this paper, and also M. FUJIOKA and R. MURAMOTO for various helps given in the course of this study.

要 約

岩瀬一男：中国南部産の *Paratrichius* 属の2新種。——コガネムシ科トラハナムグリ類の *Paratrichius* 属に属する2新種を記載した。*P. tigris* sp. nov. はベトナム北部を原産地とする *P. vitalisi* BOURGOIN に似ているが、小盾板の色彩で区別できる。*P. riekoae* sp. nov. は日本産のジュウシチホシトラハナムグリ *P. septemdecimguttatus* VOLLENHOVEN によく似ているが、雄の交尾器の形態はまったく異なる。

Literature Cited

- ARROW, G. J., 1938. Entomological results from the Swedish Expedition 1934 to Burma and British India. Coleoptera: Cetoniidae, collected by R. MALAISE in Burma. *Arkiv Zool.*, **30 B**(14): 1-4.
- BOURGOIN, A., 1915. Description de trois Trichiini nouveaux du Tonkin. *Bull. Soc. ent. Fr.*, **1915**: 85-89.
- IWASE, K., 1993. Notes on the genus *Paratrichius* (Coleoptera, Scarabaeidae) from Taiwan. *Elytra, Tokyo*, **21**: 59-66.
- MA, W.-Z., 1995. Coleoptera: Cetoniidae, Trichiidae and Valgidae. *Economic Insect Fauna of China*, (46): i-x-1-210, pls. 1-5. (In Chinese.)
- PAULIAN, R., 1961. Coléoptères Scarabéides de l'Indochine (Rutelines et Cétonines). *Annl. Soc. ent. Fr.*, **130**: 1-47.
- VOLLENHOVEN, S. C. S. VAN, 1864. Description de quelques espèces nouvelles de Coléoptères. *Tijdschr. ent.*, **7**: 145-170, pls. 9-12.