

**Notes on the Species of Staphylinidae (Coleoptera) from Asia, IV.
Three New Species of the Genus *Hesperosoma* from Sapa District
in Northern Vietnam**

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Abstract Three new species, *Hesperosoma vietnamense* T. ITO, sp. nov., *H. yasuhikoi* T. ITO, sp. nov. and *H. hasuoi* T. ITO, sp. nov. are described from Sapa District in northern Vietnam.

The genus *Hesperosoma* was established by SCHEERPELTZ in 1964 and has recently been reviewed by HAYASHI in 1993, 2002. HAYASHI (1993 b, 2002) described subgenera and some new species based on a considerable number of material from various localities, namely, Myanmar, China, Taiwan, India, Borneo, Sumatra, etc. (record of *H. excellens* from Japan is doubtful). I am going to describe three new species of the genus *Hesperosoma* from Vietnam. These new species are sympatrically distributed in Sapa District in northern Vietnam, and also together with *Anisolinus masumotoi* T. ITO.

Before going further into detailed descriptions, I would like to express my hearty thanks to Dr. Shun-Ichi UÉNO of the National Museum of Nature and Science, Tokyo, for his review of the manuscript, to Mr. Yasuhiko HAYASHI (Hyôgo Pref.) for his kindly giving me some useful suggestions and encouragement to my study on the Staphylinidae, to Mr. Yasutoshi SHIBATA (Tokyo Metr.) for his kind help in various ways and also to all the members of the collecting trip to Sapa District in 2009 for their pleasant acquaintance and friendly support, especially to Dr. Yoshihisa KUSUI (Wakayama Pref.) and Mr. Atsushi HASUO (Ibaraki Pref.) for offering me useful specimens of the Staphylinidae from Sapa District.

***Hesperosoma (Paramichrotus) vietnamense* T. ITO, sp. nov.**

(Figs. 1–3 a–c)

Body moderate-sized, robust and black, more or less dull except for mouth parts somewhat shiny; labrum, labial and maxillary palpi and legs (except for dark coxae) yellowish brown; mandibles, basal two segments of antennae, basal three segments of abdomen, metasternum and its episterna reddish brown; apical four segments of antennae, apico-marginal area of 7th abdominal segment narrowly and mainly basal area of 8th and its apex whitish yellow; elytron sordid red and with a macula which holds most areas except humeral parts, each macula not extending at suture as well as lateral and apical margins and bearing a bluish tinge on apical half; pubescence on body yellowish to blackish brown. Length: 11.1–11.7 mm (except for mouth parts and 9th abdominal segment).

Head hemiorbicular, distinctly wider than long (1.40 : 1), weakly convex above but deplinate on frons, very closely and somewhat umbilicatedly and reticulately punctate, the reticulation isodiametric; median line indistinct, hardly discernible; mandibles very long and apparently longer



Fig. 1. *Hesperosoma vietnamense* T. ITO, sp. nov. — Habitus.

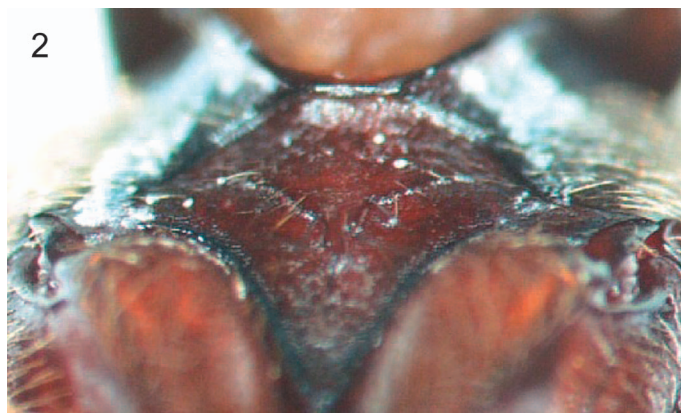


Fig. 2. *Hesperosoma vietnamense* T. ITO, sp. nov. — Mesosternum.

than head; eyes somewhat large, prominent laterad, longitudinal diameters shorter than postgenae which are arcuately narrowed toward neck; antennae rather slender, extending beyond the middle of pronotum, 1st to 8th and 11th segments each longer than wide, 9th nearly as long as wide, 10th slightly wider than long; segments from base to apex with the following relative lengths:— 65 : 32 : 40 : 27 : 26 : 26 : 25 : 24 : 22 : 21 : 30. Under side of head much sparsely with fine punctures on basal half and wholly with microsculpture. Gular plate wide at apex but rapidly narrowed basad and very narrow in basal half.

Pronotum oblong, longer than wide (1 : 0.84), clearly narrower than (0.77 : 1) and longer (1 : 0.78) than head; widest at about apical third, thence lateral margins almost invisible to base when viewed from above; disc well convex, closely punctate and with a median line which is

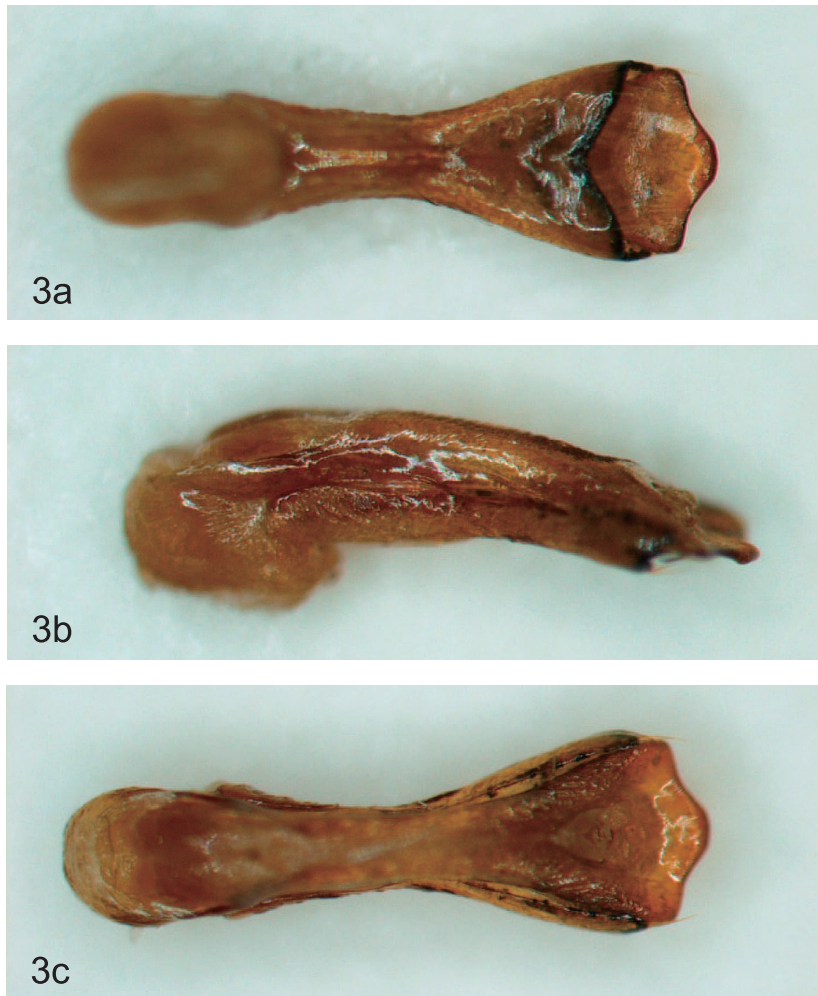


Fig. 3. *Hesperosoma vietnamense* T. ITO, sp. nov. — a, Aedeagus in ventral view; b, the same in lateral view; c, the same in dorsal view.

intermittently and hardly discernible; the punctures more or less longitudinally elongate-umbilicate, interstices of them without any microsculpture. Mesosternum without median carina at base and with a Y-shaped carina in middle (Fig. 2). Scutellum subdepressed, distinctly punctate as on head.

Elytra quadrate, as long as wide, slightly dilated apicad, widest at about apical fifth, distinctly wider (1.53 : 1) and longer (1.28 : 1) than pronotum; surface rather flattened and asperate-punctate, the punctures not umbilicate and shallower and finer than on head.

Abdomen subparallel-sided in three basal segments, then gradually narrowed apicad, with punctures rather fine and sparse and with a scratch-like microsculpture which weakens toward apical segments; basal three tergites strongly depressed at each base, the depression bearing medially a transverse and well defined fossa; 7th tergite clearly with a very thin and white seam at apical margin. In male 7th sternite furnished with a transversely suboval, large fovea behind the

middle, the fovea well defined basally with a tuft of long erect hairs at base, and with apical margin widely, shallowly emarginate; 8th sternite shallowly emarginate at apical margin; 10th tergite subtruncated at apical margin. Legs long and slender, protarsi clearly dilated.

Aedeagus (Figs. 3 a–c) symmetrical, fan-like, moderately sclerotized except for dorsal side of basal global part; median lobe webfoot-like, when viewed from ventral side, flattened and widened apically; lateral lobe widely forked, the prongs a little dorsally rolling the median lobe and not extending beyond its top, the inner root of the fork with a number of pegsetae on submarginal area and additionally with a considerable number of them on the back side (= dorsal side).

F e m a l e. Unknown.

Holotype: ♂, Tram Ton, alt. 1,900 m, Sapa District, Vietnam, 4–V–2009, Tateo ITO leg. (coll. to be eventually deposited in the Osaka Natural History Museum); **paratype:** 1 ♂, same data as the holotype.

Comments. According to the key given by HAYASHI (2002), the present species belongs to the subgenus *Paramichrotus* (= *Hemihesperosoma**) in the pattern of aedeagus, and it is allied to *Hesperosoma miwai* BERNHAUER from Taiwan in general appearance and the outline of aedeagus, but it is different from *H. miwai* by the elytra with different pattern of macula and with a bluish tinge, the aedeagus differently shaped, especially the root of forked lateral lobe sharply incised in middle, etc.

* cf. SCHILLHAMMER (2004).

Etymology. The specific name of this new species is derived from Socialist Republic of Vietnam in which the type locality is situated.

***Hesperosoma (Paramichrotus) yasuhikoi* T. ITO, sp. nov.**

(Figs. 4–6)

Body relatively small, slender and black, rather wholly dull except for mouth parts somewhat shiny; labrum, labial and maxillary palpi and legs (except for dark coxae) yellowish brown; mandibles, basal three segments of antennae, metasternum and its episterna, basal three segments of abdomen reddish brown; apical four segments of antennae, apical area of 7th abdominal segment narrowly and basal area of 8th one widely whitish yellow; elytra sordid red and each with a macula which holds most areas except for humeral parts, maculae not extending at suture as well as lateral and apical margins and bearing a bluish tinge on apical half; pubescence on body and appendices yellowish to blackish brown. Length: 10.4 mm (except for mouth parts and 9th abdominal segment).

Head suborbicular, wider than long (1.23 : 1), weakly convex above but deplanate on frons, very closely and more or less umbilicately and reticulately punctate, the reticulation isodiametric; median line indistinct, hardly discernible; mandibles long and as long as head; eyes prominent laterad, longitudinal diameters shorter than postgenae which are arcuately narrowed toward neck; antennae slender and gradually incrassate distally, 1st to 8th and 11th segments each longer than wide, 9th nearly as long as wide, 10th slightly wider than long; segments from base to apex with the following relative lengths:— 62 : 33 : 41 : 27 : 27 : 27 : 26 : 26 : 25 : 24 : 36. Under side of head scattered with fine punctures and with a lineolate microsculpture throughout. Gular plate widened apicad, straightly tapering basad, then becoming narrow in basal fourth.

Pronotum oblong, longer than wide (1 : 0.88), slightly narrower than (0.87 : 1) and longer (1.21 : 1) than head; widest at about apical third, lateral margins hardly visible only near base



Fig. 4. *Hesperosoma yasuhikoi* T. ITO, sp. nov. — Habitus.

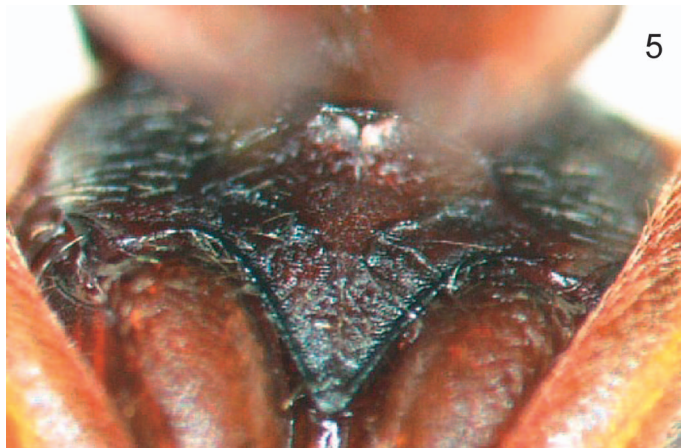


Fig. 5. *Hesperosoma yasuhikoi* T. ITO, sp. nov. — Mesosternum.

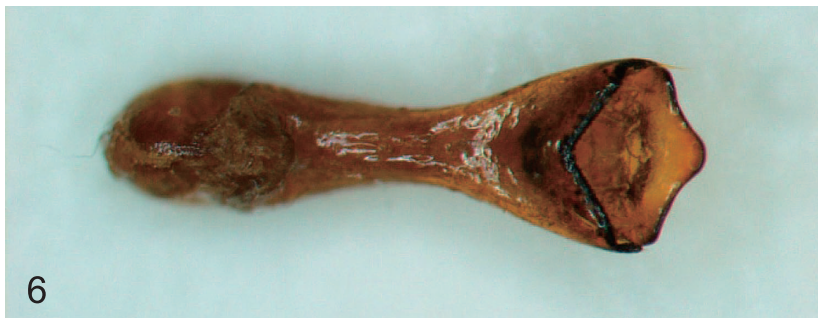


Fig. 6. *Hesperosoma yasuhikoi* T. ITO, sp. nov. — Aedeagus in ventral view.

when viewed from above; disc well convex, closely punctate and with a median line which is hardly discernible but rather clear at base; the punctures more or less longitudinally elongate-umbilicate, interstices of them without any microsculpture. Mesosternum with a weak and short median carina at base and distinctly with a Y-shaped carina in middle (Fig. 5). Scutellum subdepressed, distinctly punctate as on head.

Elytra quadrate, as long as wide, slightly dilated apicad, widest at about apical fifth, wider (1.35 : 1) and longer (1.21 : 1) than pronotum; surface rather flattened and asperate-punctate, the punctures not umbilicate and shallower and finer than on head except near scutellum.

Abdomen widest at 6th segment, thence gradually narrowed basad and apicad, with punctures rather fine and sparse and with a scratch-like microsculpture throughout; basal three tergites strongly depressed at each base, the depression bearing medially a transverse and well defined fossa; 7th tergite clearly with a very thin and white seam at apical margin. In male 7th sternite furnished with a transversely suboval and large fovea behind the middle, the fovea well defined basally with a tuft of long erect hairs at base, and with apical margin widely, shallowly emarginate; 8th sternite shallowly emarginate at apical margin; 10th tergite subtruncate at apical margin. Legs long and slender, protarsi dilated in male.

Aedeagus (Fig. 6) symmetrical, relatively narrow; median lobe webfoot-like, when viewed from ventral side, flattened and widened apically; lateral lobe forked, the prongs a little dorsally rolling and not extending beyond the median lobe, the inner sides of the fork with a number of pegsetae on submarginal area and scattered with an additional number of them on the back side.

F e m a l e. Unknown.

Holotype: ♂, Tram Ton, alt. 1,900 m, Sapa District, Vietnam, 4-V-2009, Tateo ITO leg. (coll. to be eventually deposited in the Osaka Natural History Museum).

Comments. Although the present species is keyed out to the subgenus *Euhesperosoma* in the mesosternum with a short median carina at base, according to the key given by HAYASHI (2002), but I regard it to belong to the subgenus *Paramichrotus* in other characteristics, especially in the outline of aedeagus. Moreover, the present new species is analogous to *Hesperosoma sakoi* HAYASHI from Taiwan particularly in the structure of gular plate, but it can be differentiated by the elytra with different pattern of maculation and with a bluish tinge, the aedeagus differently shaped, especially the root of forked lateral lobe sharply incised in middle, etc.

I considered that the relation between *Hesperosoma vietnamense* and *H. yasuhikoi* closely resembles the relation between *Hesperosoma miwai* and *H. sakoi* in the following respects, the structure of body, above all, of head, the structure of gular plate and the structure of aedeagus, etc.

Etymology. The specific name is dedicated to Mr. Yasuhiko HAYASHI who is an old member of the Osaka Coleopterological Society and a coworker of studies on the Staphylinidae.

Hesperosoma (Paramichrotus) hasuoi T. ITO, sp. nov.

(Figs. 7–8)

Body moderate-sized and rather robust, dull except for mouth parts and basal three segments of abdomen in middle somewhat shiny, and black; mouth parts, legs and 2nd segment of antennae yellowish to reddish brown, each apicalmost segment of labial and maxillary palpi paler, femora a little darkened; basal three segments of abdomen, metasternum and its episterna and elytra except macula sordid red; apical four segments of antennae, apex of 7th abdominal segment



Fig. 7. *Hesperosoma hasuoi* T. ITO, sp. nov. — Habitus.

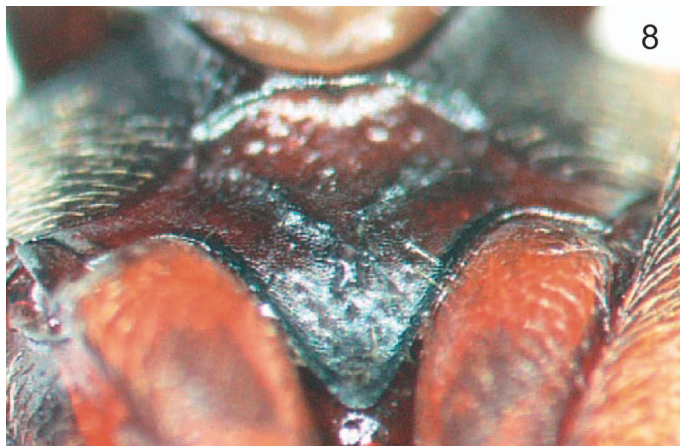


Fig. 8. *Hesperosoma hasuoi* T. ITO, sp. nov. — Mesosternum.

narrowly and base of 8th widely whitish yellow; elytra each with a macula approximately circular in shape, situated nearly at apical half, not extending at suture as well as lateral and apical margins and bearing bluish tinge; pubescence on body yellowish to blackish brown. Length: 11.7 mm (except for mouth parts and 9th abdominal segment).

Head suborbicular, wider than long (1.29 : 1), slightly convex above but deplanate on frons, very closely and more or less umbilicately and reticulately punctate; the reticulation isodiametric; median line indistinct, hardly discernible; mandibles long and subequal to head in length; eyes prominent laterad, longitudinal diameters clearly shorter than postgenae which are arcuately narrowed toward neck; antennae slender, incrassate distally and almost reaching the base of

pronotum, 1st to 8th and 11th segments each longer than wide, 9th nearly as long as wide, 10th slightly wider than long; segments from base to apex with the following relative lengths:— 62 : 30 : 41 : 25 : 24 : 24 : 24 : 23 : 22 : 20 : 28. Under side of head much sparsely with fine punctures on basal half and wholly with microsculpture. Gular plate widened at apex and rapidly narrowed basad, very narrow in basal half.

Pronotum oblong, longer than wide (1 : 0.87), clearly narrower than (0.85 : 1) and longer (1 : 0.78) than head; widest at about apical third, thence lateral margins almost invisible to base when viewed from above; disc well convex, closely punctate and with a median line which is hardly discernible except at base; the punctures more or less longitudinally elongate-umbilicate. Mesosternum without any median carinae at base and apex, and with a V-shaped carina in middle (Fig. 8). Scutellum subdepressed, distinctly but somewhat irregularly punctate.

Elytra quadrate, a little wider than long (1.08 : 1), slightly dilated apicad, widest at about apical fifth, distinctly wider (1.51 : 1) and longer (1.22 : 1) than pronotum; surface asperate-punctate, the punctures not umbilicate and weaker and finer than on head.

Abdomen subparallel-sided in three basal segments, then gradually narrowed apicad, with punctures rather fine and sparse and with a scratch-like microsculpture throughout; basal three tergites strongly depressed at each base, the depression bearing medially a transverse and well defined fossa; seventh tergite clearly with a very thin and white seam at apical margin. In female 10th tergite protuberant at apical margin, legs long and slender, protarsi slightly dilated.

Male. Unknown.

Holotype: ♀, Tram Ton, alt. 1,900 m, Sapa District, Vietnam, 5-V-2009, Atsushi HASUO leg. (coll. to be eventually deposited in the Osaka Natural History Museum).

Comments. According to the key given by HAYASHI (2002), the present species belongs to the subgenus *Paramichrotus* (= *Hemihesperosoma*) in the mesosternum without median basal carina and the shape of 10th tergite in female. However, the present new species is similar to *Hesperosoma excellens* (BERNHAEUER) of the subgenus *Euhesperosoma* from China and Vietnam (and Japan?) in general appearance. The new species can be easily distinguishable from *H. excellens* by the different subgeneric characteristics, the different coloration of body and different pattern of elytral macula, etc.

Etymology. The present specific name is dedicated to the collector of the holotype, Mr. Atsushi HASUO who was a member of the collecting trip to Sapa District, Vietnam in 2009.

要 約

伊藤建夫: ベトナム産 *Hesperosoma* 属 (コウチュウ目ハネカクシ科) の 3 新種の記載。—— 北部サパ州の山地から, *Hesperosoma vietnamense* T. ITO, *H. yasuhikoi* T. ITO, *H. hasuoi* T. ITO の 3 新種を命名記載した。

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