Notes on Japanese Chrysomelidae (Coleoptera), III

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Abstract. Six new chrysomelid species are described from Japan: Cryptocephalus honshuensis, Goniociena (Brachyphytodecta) jamadai, Longitarsus osimaensis, Psylliodes sasakii, Sphaeroderma in-aizumii and Zipanginia bungoensis n. spp. Two cases of new combination are proposed: Lanka nagaii (Nakane) and Manobia aoshimensis (Nakane), n. comb. Further Cryptocephalus babai Chûjô, Longitarsus orientalis Jacoby, Lythraria komiyamai (Ohino) and Sphaeroderma atrum Jacoby are resurrected from synonymy as a good species.

In this paper six new species of leaf beetles from Japan are described and changes of taxonomic status are proposed for six other species.

The holotypes will be deposited in the collection of the Systematic Entomology of Hokkaido University, Sapporo (SEHU). Abbreviations used for institutions herein are as follows: MCZ: Museum of Comparative Zoology in Harvard University, USA; NHM: Natural History Museum, London, UK.; TPM: Tochigi Prefectural Museum, Utsunomiya, Japan.


Subfamily Cryptocephalinae

Cryptocephalus honshuensis n. sp.
(Figs. 1 & 18a)

Male. Body slender cylindrical, 2.5–2.8 mm in length; shining dark metallic blue; head, prothorax and all legs yellowish brown; head dark on vertex; pronotum largely dark brown on disk, narrowly margined with black at base; antennae dark brown except for four or five basal segments yellowish brown.

Head distinctly punctate, with a weak longitudinal depression on vertex medially; frons flat and sub-trapezoid, weakly margined on anterior margin; eyes large, with their longitudinal diameter distinctly longer than upper inter-ocular space; antennae filiform, 0.7 times as long as body, thickly pubescent beyond 3rd segment; 1st segment stout, twice as long as 2nd; 6th and 7th longest, 2.5 times as long as 2nd; relative length of antennal segments as: 6th = 7th > 5th = 8th = 10th = 11th > 1st > 4th > 3rd > 2nd. Pronotum rather oblong, 2/3 as long as wide, widest at base, gradually and archedly narrowed to apex, shortly straight near apex, almost straight at anterior margin, serrate and broadly produced medially on posterior margin, narrowly explanate along lateral margins; basal angles produced posteriorly; disc evenly convex, densely covered with slightly oblong punctures; the punctua-
tion sparse along both anterior and posterior margins. Scutellum tongue-shaped; disc weakly raised, smooth and impunctate. Elytra separately rounded at apex, each three times as long as wide, with 11 regular rows of large punctures; punctuation distinct to near apex; interstices shining and impunctate; humeri narrowly raised; epipleura smooth and impunctate, narrowed posteriorly and disappearing near middle. Prosternum transverse and trapezoid, narrowly margined on anterior and lateral margins, gently convex and densely punctate, without posterior tooth. Pygidium hemi-circular, densely punctate and pubescent. Last visible abdominal sternite simple, densely pubescent and punctate. Fore legs with 1st tarsal segment only slightly enlarged. Aedeagus with a pair of lateral projections and median process apically; the latter slender and not widened apically in both dorsal and lateral views (Fig. 18a).

**Female.** Body 2.8–3.2 mm in length; last visible abdominal sternite broadly depressed and impunctate medially; fore legs with 1st tarsal segment slender.


**Distribution.** Japan (Honshu).

**Host plant.** Unknown.

**Remarks.** This new species is well characterized by its slender body with dark metallic blue elytra and yellowish brown head and prothorax. *C. hakonensis* Takizawa from Japan may similar to this species, but is easily distinguished by non-metallic elytra and prosternum with a pair of posterior tooth. This species has its aedeagus also characteristic with the slender rod-like median process, and belongs to the subgenus *Burlinius* Lopatin, which is mainly characterized by the shape of aedeagus with three apical processes. Since there are some inconsistencies on the taxonomy of Japanese members of this subgenus, it is necessary to revise the subgenus in Japan.

Nothing is known on the biology of this new species. Its specific name was derived from its habitat, Honshu.

**Cryptocephalus babai** Chūjō, 1959

(Figs. 2 & 18b)


**Male.** Body small and subcylindrical, 1.7–2.0 mm in length; blackish blue with weak metallic luster; lower face, mouth-parts, antennae on basal five segments, and all legs yellowish brown; antennae on apical six segments dark brown; last visible abdominal sternite with brownish tinge.

Head finely granulate; vertex rather densely punctate, with median longitudinal impression anteriorly; frons with scattered punctures; antennae rather robust, with apical six segments each weakly dilated to apex; 10th segment twice as long as wide. Pronotum rather long, 1.5 times as wide as long, roundly and strongly narrowed from base to apex; disc strongly convex dorsally, weakly depressed before median lobe; surface densely covered with distinct punctures with interspaces finely reticulate, with a row of smaller punctures along base. Elytra each 2.5 times as long as wide, almost subparallel-sided on basal 3/5, thence roundly narrowed to apex; disc with ten regular rows of distinct punctures, with 7th and 8th anastomosing behind humerus; punctures not becoming weaker on posterior portion; interstices finely reticulate, more or less raised, 9th and 10th interstices weakly costate. Pros-
Figs. 1–9. Habitus. — 1, *Cryptocephalus honshuensis* n. sp. (holotype); 2, *C. babai* Chûô (Kuroiso, Tochigi Pref.); 3, *C. pumilo* SUFFRAN (Mt. Soranuma-dake, Hokkaido); 4, *Gonioctena jamadai* n. sp. (holotype); 5, *Longitarsus orientalis* JACOBY (Koremasa, Tokyo); 6, *L. osimaensis* n. sp. (holotype); 7, *L. tabidus* (FABRICIUS) (Radotin, Prague, Czech); 8, *Lythraria komiyamai* (OHNO) (Shôdo Is., Kagawa Pref.); 9, *L. salicariae* (PAYKULL) (Memanbetsu, Hokkaido).
ternum flat and rugose, sub-quadrate and longer than wide, ending in a pair of obtuse tooth. Last visible abdominal sternite broadly emarginated, with short and obscure median lobe. Pygidium evenly convex, densely covered with punctures. Fore legs with 1st tarsal segment not enlarged. Aedeagus short and broadly rounded at apex, thick in lateral view (Fig. 18b).

Female. Body 2.5–2.8 mm in length; last visible abdominal sternite broadly depressed medially.


Distribution. Japan (Honshu).

Host plant. Juglans mandshurica var. sachalinensis (KOMATSU) KITAM. (Juglandaceae).

Remarks. This species is similar to C. pumilo SUFFRIAN (Fig. 3), in the body shape, blackish blue coloration, pronotum densely punctate and elytra regularly punctate striate, but is easily distinguished from the latter by the elytra strongly punctate striate, with punctures in similar size through the whole length. In C. pumilo, elytra have punctures more or less weaker on posterior half, and interstices largely flat. Furthermore, this species has aedeagus similarly thickened in lateral view, but C. pumilo has the apex narrow and rather triangular (Fig. 18c). CHUJO (1959) described this species based on three specimens collected at Sugadaira, Nagano Pref. The type series are preserved in his private collection, of which location is unknown. Since the original description largely agrees with present specimens, I have no doubt on this identification.

These specimens were collected on a single stand of Juglans mandshurica near Nakagawa River in Tochigi Pref. Whereas C. pumilo is known to feeds on Betula spp. and Salix spp. in Hokkaido and is distributed in Japan [South Kuriles (Iturop Is.), Rishiri Is. and Hokkaido], Sakhalin, China and Siberia.

Subfamily Chrysomelinae

Gonioctena (Brachyphytodecta) jamadai n. sp.

(Figs. 4 & 18d)

Male. Body long oval, slightly widened posteriorly, moderately convex on dorsal side; 4.2–4.8 mm in length; shining black with antennae on basal five segments and claws brown.

Head small, deeply inserted in prothorax, rather densely covered with small punctures on fronto-clypeus; vertex sparsely punctate on lateral areas; eyes small with anterior margin almost straight; antennae short, not reaching the basal margin of pronotum, thickly pubescent beyond 4th segment, widened on apical five segments; 8th to 10th each slightly wider than long. Pronotum transverse, twice as wide as long, roundly narrowed from base to anterior angles, deeply excavated at anterior margin, archedly and strongly produced at posterior margin; disc evenly convex from side to side, rather densely covered with large punctures on lateral 1/4 excepting distinctly raised smooth area along lateral margins, sparsely covered with small punctures on median area; the punctuation sparser on posterior half. Scutellum shining, broader than long, roundly narrowed to apex. Elytra each 2.8 times as long as wide, weakly widened from base to basal 1/5th, almost parallel-sided on basal 1/5 to 3/5, thence broadly rounded to apex; disc with 11 regular rows of punctures, with sparse smaller punctures on flat interstices; epipleura rather wide on basal 1/3, thence gradually narrowed to apex; epipleural disc flat and smooth. Last visible abdominal sternite weakly truncate at apex. Fore legs
with 1st tarsal segment slightly and roundly widened to apex. Aedeagus strongly curved in lateral view, gently widened on basal 2/7, parallel-sided on 2/7th to 4/7th, thence narrowed and continued to a long slender apical process; the apical process strongly and evenly curved downwards (Fig. 18d).

**Female.** Body slightly larger, 4.5–5.0 mm in length; last visible abdominal sternite evenly produced posteriorly; fore legs with 1st tarsal segment narrow, and straightly widened to apex.

**Type series.** Holotype: ♂, “Sirokoutizawa, Itoigawa-si, Niigata, 6. VII. 2013, N. YAMADA” (SEHU). Paratypes: 6 ♂♂, 7 ♀ ♀, same data as the holotype.

**Distribution.** Japan (Honshu).

**Host plants.** *Caesalpinia decapetala* (Roth) ALSTON var. japonica (SIEBOLD et ZUCC.) H. OHASHI (Fabaceae).

**Remarks.** This new species is closely similar to *G. rubripennis* BALY, especially in its dark colored form. But the former is distinguished from the latter by the purely black coloration and the shape of aedeagus which has median process evenly curved. *G. rubripennis* has variable coloration of elytra from dark red to black with reddish tinge, but never to pure black. And its aedeagus is waved in lateral view (Fig. 18e).

This new species was collected feeding on leaves of *Caesalpinia decapetala* var. *japonica* growing along montane stream ca. 1,300 m altitude in middle Honshu. Whereas *G. rubripennis* is distributed widely on lowland of Hokkaido, Honshu, Shikoku and Kyushu, feeding on *Wisteria floribunda* and *Robinia pseudoacacia*.

GRUEV (1989) provided a key to nine species of the subgenus *Brachyphytodecta*. Since then four species of the subgenus were described (CHEN & WANG, 1984; TAKIZAWA & DACCORDI, 1998; WANG et al., 2001; GE et al., 2007). From all these species this new species is distinguished by its coloration and shape of aedeagus.

The specific name is derived from a nickname of my friend, Mr. N. YAMADA, who collected this species for the first time.

**Subfamily Alticinae**

*Lanka nagaii* (NAKANE, 1985), n. comb.

*Sphaeroderma nagaii* NAKANE, 1985: 2 (Japan: Aoshima in Miyazaki Pref.; SEHU).

This species is well characterized by color pattern of elytra composed of a black spot surrounded by yellow C-shaped band. Upon examining the type specimens, this is characterized by the head without frontal tubercles, the first visible abdominal sternite with a pair of short costae behind coxal cavities, and so forth. Based on these characters, this is transferred to the genus *Lanka MAULIK*.


**Distribution.** Japan (Kyushu: Miyazaki, Kagoshima).

**Host plant.** *Piper kadsura* (CHOISY) OHWI (Piperaceae).

*Longitarsus orientalis* JACOBY, 1885

(Figs. 5 & 18 f)


Warchalowski (1970) treated *L. orientalis* Jacoby from Japan as a subspecies of *L. tabidus* (Fabricius). Though Jacoby stated ‘the frontal tubercles indistinct’, the photo (http://www.mcz.harvard.edu/) of the head of a syntype in MCZ clearly shows that *L. orientalis* has narrow and oblique frontal tubercles which are rather well delimited behind. While frontal tubercles of *L. tabidus* are indistinct or lacking, at least without a furrow delimiting behind. Furthermore the shape of aedeagus (Figs. 18f & h) shows the obvious difference between these species. In this paper, I concluded that *L. orientalis* is an independent species, as Ohno (1968) clearly showed.


**Distribution.** Japan (Hokkaido?, Honshu, Awashima Is., Shikoku?).

**Host plant.** *Teucrium japonicum* Houtt. (Lamiaceae).

*Longitarsus osimaensis* n. sp.

(Figs. 6 & 18g)

*Longitarsus tabidus orientalis* ?: Warchalowski, 1970: 136. — Kimoto, 1994: 181, 253 (pl. 86, fig. 9 is not of this species, but of *L. nitidus* Jacoby).

Male. Body larger, 2.8–3.3 mm in length, pale yellowish brown; pronotum thinly trimmed with dark brown on basal margin; elytra thinly trimmed with dark brown on suture or narrowly striped on it; hind femora apically, antennae on 4–11th segments and hind tarsi infuscate; labrum blackish.

Head impunctate; vertex finely wrinkled, somewhat raised medially, with deep supra-orbital furrow, with a small fovea near the furrow; frontal tubercles obsolete, obliquely long oval, not delimited behind; frontal carina narrow and distinct; antennae filiform, 0.8 times as long as body, beyond 3rd segment thickly pubescent; 1st segment clavate and longest, 3.5 times as long as 2nd; 4th 1.5 times as long as 3rd; relative length of antennal segment as: 1st >> 11th > 6th = 7th = 8th = 9th > 5th > 4th > 3rd > 2nd. Pronotum transverse, 1.4 times as wide as long, widest at middle, thence slightly narrowed to both ends, almost straight at anterior margin, broadly produced at posterior margin; anterior angles thickened, obliquely truncate and produced, the posterior obtuse, weakly produced; the posterior margin somewhat straight and oblique behind posterior angles; disc evenly convex from side to side, densely covered with small obscure punctures. Scutellum wider than long; smooth, broadly rounded at apex. Elytra each three times as long as wide, gently widened on basal 1/3, subparallel-sided on middle 1/3, thence roundly narrowed to apex, which is separately rounded; hind wings reduced; humeri undeveloped; disc densely covered with small punctures, with a distinct punctate row above epipleuron, with interspaces aciculate; epipleura vertical, smooth and weakly raised and continued to before apex. Last visible abdominal sternite with a small median lobe, with a dark median line on posterior half. Fore legs with 1st tarsal segment scarcely enlarged. Aedeagus almost subparallel-sided on basal half, thence weakly narrowed and widened again to median orifice, roundly ended at apex, rather straight in lateral view with straight apex; ventral surface largely membranous except for the lateral-most (Fig. 18g).

Female. Body 3.2–3.5 mm in length; last visible abdominal sternite roundly produced at apical margin.

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Distribution. Japan (Hokkaido).

Host plant. Unknown.

Remarks. This new species is closely similar to *L. tabidus* (FABRICIUS) (Figs. 7 & 18h) from Europe in general coloration and structures. But the former is distinguished from the latter by following characters: vertex with median part raised, and with a distinct small fovea near eyes; frontal tubercles oblique and long oval; aedeagus weakly produced at apex, which is straight in lateral view. While *L. tabidus* has flat vertex without small fovea, frontal tubercles narrow and oblique, and aedeagus curved upward at apex (based on a male specimen: Radotin, Prague, Czech, Dr. MADAR leg.). I am not certain whether *L. tabidus orientalis* sense WARCHALOWSKI (1970) is same with this new species.

Specific name was derived from its type locality, Osima-Ôsima Is. near Hokkaido, Japan.

*Lythraria komiyamai* (OHNO, 1960)

(Figs. 8 & 19a)


*Paraphthonomorpha komiyamai* was described on a single female specimen from Hachijô Island and was later synonymized with *L. salicariae* by KIMOTO (1965). These two species are closely similar in their appearance. But the former is distinguished from the latter by the following characters: body smaller, 1.3–1.8 mm in length, pale yellowish brown, with pronotum and elytra concolor; pronotum rather sparsely covered with fine punctures; aedeagus acutely costate on lateral margins on ventral side, broadly depressed between these costae, with a pair of short and weak longitudinal costae subapically (Fig. 19a).

Though I could not examine the holotype, I examined a lot of specimens collected at the type locality, Hachijô Island. These specimens fairly agree with the original description. This species seems to be widely distributed on Honshu and Shikoku, and is collected at swamps, wet herbaceous fields, montane herbaceous fields and sea shores.


Distribution. Japan (Honshu, Hachijô Is., Shikoku, Shôdo Is.?, Tsushima Is.?).

**Lythraria salicariae** (Paykull, 1800)
(Figs. 9 & 19b)

*Galeruca salicariae* Paykull, 1800: 453 (Suecica).


This species is distinguished from the preceding species by the following characters: body larger, 2.0–2.5 mm in length; pronotum and head reddish brown in contrast to paler brown elytra; pronotum densely covered with distinct small punctures; aedeagus distinctly depressed and flat between narrowly raised lateral margins and lacking costae on the ventral side (Fig. 19b).


**Distribution.** Japan (Hokkaido); Europe, Siberia, Caucasus.

**Host plant.** Lysimachia fortunei Maxim.

**Manobia aoshimensis** (Nakane, 1985), n. comb.

*Sphaeroderma aoshimensis* Nakane, 1985: 3 (Japan: Aoshima in Miyazaki Pref.; SEHU).

So far, this species is known only by the type series. This species is characterized by the following characters: body oblong and apterous, without humeral callus; pronotum bounded laterally by short longitudinal furrow, with weak sub-basal transverse impression; elytra weakly punctate-striate; hind tarsi with longer 1st segment, etc.

Based on these characters, this species is transferred to the genus *Manobia* Jacoby.


**Distribution.** Japan (Kyushu: Miyazaki).

**Host plant.** Unknown.

**Psylliodes chujoe** Madar, 1960
(Figs. 10 & 19c)


**Diagnosis.** Body larger, 4–5 mm in length, metallic dark blue with slight greenish luster; antennae yellow on three basal segments; tarsi dark brown; pronotum slightly produced laterally at middle, densely covered with large punctures; elytra with 11 rows of regular punctate striae; interstices each with a distinct row of small punctures which are sometimes almost as large as those of punctate striae; male with last visible abdominal sternite weakly produced posteriorly; fore legs with 1st tarsal segment slender and weakly dilated; aedeagus robust, with distinct broad longitudinal furrow on both the dorsal and ventral sides (Fig. 19c).

**Specimens examined.** Ōita Pref. – 4 ♀♀, 3 ♂♂, Mt. Ono-dake, Hita, 8.X.2011, S. Sasaki leg.

**Distribution.** Japan (Honshu, Kyushu, Tsushima Is.).

**Host plant.** Tubocapsicum anomalum (Franch. et Sav.) Makino (Solanaceae; Sasaki, S. pers. comm.).

**Remarks.** Takizawa (2005) erroneously referred another undescribed species as *P. chujoe*. Mr. S. Sasaki in Hita City, Ōita Pref., kindly pointed out this error, and sent me specimens of true *P. chujoe*. This large species seems rather rare, but is found feeding on *Tubocapsicum anomalum* which is normally seen in woodland of Kyushu.
Figs. 10–17. Habitus. — 10, *Psylliodes chujoe* MADAR (Hita-shi, Oita Pref.); 11, *P. sasaki* n. sp. (holotype); 12, *Sphaeroderma atrum* JACOHY (Shiobara, Tochigi Pref.); 13, *S. placidum* HAROLD (Masutomi, Yamanashi Pref.); 14, *S. inaizumii* n. sp. (holotype); 15, *Trachyaphthona imasakai* (TAKIZAWA) (Senomoto-kogen, Kumamoto Pref.); 16, *Zipanginia bungoensis* n. sp. (holotype); 17, *Z. tosana* OHNO (Mt. Otaki-yama, Kagawa Pref.).
Psylliodes sasakii n. sp.

(Figs. 11 & 19d)


Male. Body oblong, convex dorsally and small, 2.2–2.8 mm in length; blackish blue with dull metallic luster; antennae and legs dark brown; tarsi contrastingly light brownish against dark tibiae.

Head with vertex convex and finely punctate; inter-ocular space wide, wider than twice the frontal width of eye; eyes small; frons in shape of inverted T, with broad longitudinal carina; antennae 0.7 times as long as body, thickly pubescent beyond 2nd segment; 11th longest, 1.3 times as long as 2nd; relative length of antennal segments as: 11th > 1st = 3rd = 5th = 6th = 7th = 8th = 9th > 4th = 10th > 2nd. Pronotum convex and transverse, 1.6 times as wide as long, widest at base, weakly and archedly narrowed to anterior angles; anterior angles strongly and obliquely thickened, weakly emarginated at anterior margin, gently and broadly produced at posterior margin; disc densely punctate with interspaces finely granulate. Scutellum broadly rounded. Elytra each almost three times as long as wide, gently widened from base to basal 1/3rd, thence gradually narrowed to apex, with 11 distinct regular rows of punctures; interstices granulate, wider than punctate rows. Last visible abdominal sternite trilobed, broadly depressed medially with median lobe rounded at apex. Fore and middle legs with 1st tarsal segments strongly expanded in shield shape, larger than the following two combined together. Aedeagus gently narrowed to pointed apex, sinuately curved in lateral view (Fig. 19d).

Female. Body 2.4–3.0 mm in length; head with inter-ocular space slightly narrower than twice the frontal width of eye; last visible abdominal sternite simply rounded at apex, with distinct longitudinal depression medially; fore and middle legs with 1st tarsal segments not enlarged.

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Distribution. Japan (South Kuriles: Kunasir Is., Hokkaido, Honshu, Kyushu).

Host plant. Cardamine anemonoides O. E. Schulz (Brassicaceae).

Remarks. Though this new species was erroneously treated as P. chujoe Madar (Takizawa, 2005), this is easily distinguished from the latter by its smaller body with the dorsum finely granulate. Further male has the first tarsal segment of fore and middle legs strongly expanded. Female has the last visible abdominal sternite with distinct longitudinal depression. This is also distinguished from P. subrugosa Jacoby by strongly convex pronotum and finely granulate dorsum.

This new species is found on the leaves of Cardamine anemonoides and Cardamine spp. at shady road-side and stream-side on hills to low mountains.

Its specific name is dedicated to Mr. S. Sasaki in Hita-shi, Ōita Pref., who kindly pointed out my wrong identification and sent me specimens of true P. chujoe.
**Sphaeroderma atrum** Jacoby, 1885

(Figs. 12 & 19e)

*Sphaeroderma atrum* Jacoby, 1885: 735 (Japan: Oyama, Kiga & Nikko; NHM & MCZ).


Kimoto (1961) actually examined the type series in NHM and MCZ. He synonymized *S. atrum* with *S. placidum* later without giving reasons (Kimoto, 1964). Ohno treated this as a good species in the same year. This contradiction may be partly due to pronounced color variations in *S. placidum* and to paucity of material of *S. atrum*. So far there are only five specimens known: NHM and MCZ have each two specimens of the syntypes from Oyama, Kiga and Nikko after original description. Ohno examined one female collected at Mt. Hikosan, Fukuoka Pref. Besides these, there are three specimens in my collection from Honshu. This species is characterized as below on available information:

- Body small, 2.1–2.8 mm in length; black with antennae, legs and 5th visible abdominal sternite yellowish brown; antennae on apical six or seven segments, and hind femora dark to blackish brown; pronotum with anterior angles yellowish brown; head with frontal tubercles narrow and transverse; inter-antennal area narrowly raised; pronotum almost straightly narrowed from the widest point to apex; anterior angles distinctly produced anteriad; elytra with punctuation arranged in close and rather irregular rows; aedeagus with a pair of lateral processes sub-apically, with apical portion rather shorter and duller, and with extreme apex curved upwards (Fig. 19f).

This species is closely related to *S. placidum* Harold (Fig. 13), of which aedeagus has similar lateral processes sub-apically. But the latter species is somewhat larger, 2.8–3.0 mm in length; frontal tubercles broader; inter-antennal area raised in broad oval shape, which is almost as wide as the diameter of antennal socket; aedeagus with apex longer and somewhat acute, with extreme apex flat (Fig. 19g).


**Distribution.** Japan (Honshu, Kyushu).

**Host plant.** Unknown.

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**Sphaeroderma inaizumii** n. sp.

(Figs. 14 & 19f)

Male. Body oblong and strongly convex, 2.5–3.2 mm in length; dark reddish brown, with elytra black except for apices and epipleura brown; head anteriorly, antennae on four basal segments and apex of 5th to 11th, pronotum laterally and anteriorly, legs except for hind tibiae basally, and last visible abdominal sternite light brown; pronotum with small obscure patches on disc.

Head with vertex smooth, shining and impunctate; frontal tubercles transverse and subquadrate with antero-inner angle slightly produced below, well delimited behind by a sharp furrow, contiguous to each other at postero-inner angles; area between antennal sockets raised and broad oval, the diameter of raised area wider than the diameter of antennal socket; eyes strongly convex, with its transverse diameter in frontal view 0.6 times as wide as inter-ocular distance; clypeus triangular and reticulate, with a narrow short median carina posteriorly; antennae stout, 2/3 as long as body, beyond 4th segment thickly pubescent; 1st segment twice as long as 2nd; 11th longest, 1.5 times as long as 10th; 10th twice as long as wide; relative length of antennal segments as: 11th > 1st > 7th = 8th = 9th = 10th
> 5th = 6th > 4th > 3rd > 2nd. Pronotum transverse, 1.6 times as wide as long, widest slightly before basal angles, thence rather straightly narrowed to anterior angles, sinuate and broadly produced medially at anterior margin, broadly arched at posterior margin, along lateral margin narrowly reflexed; anterior angles rounded produced, the posterior weakly angulate; disc evenly convex, densely covered with small punctures, with smooth and shining interspace; punctuation weaker on latero-anterior areas. Scutellum roundly triangular, as long as wide, flat and impunctate. Elytra oblong and strongly convex, each 2.3 times as long as wide, widest at basal 1/3rd, thence roundly narrowed to apex; disc weakly depressed along scutellum and interiorly to weakly raised humeri, densely covered with small semi-regularly arranged punctures on basal half; punctuation becoming weaker on apical half in semi-regular 13 to 15 striae; epipelaurea wide basally, gradually narrowed and disappeared before apex; epipleural disc impunctate and smooth, concave on apical 1/3. Prosternum narrow, as wide as length of 2nd antennal segment, with narrow longitudinal carina on basal 2/3; last visible abdominal sternite broadly tri-lobed. Legs stout, with all the first tarsal segments moderately enlarged, but distinctly narrower than 3rd one. Aedeagus stout, subparallel-sided, and produced apically in round triangle, with a pair of shallow oblong depressions ventrally near apex, gently curved in lateral view (Fig. 19f).

F e m a l e. Body slightly larger, 2.8–3.5 mm in length.

Distribution. Japan (Honshu).

Host plants. Probably Akebia spp. (Lardizabalaceae).

Remarks. This new species is well characterized by its coloration: dark reddish brown with black elytra, head anteriorly, pronotum anteriorly and laterally, elytra at apex, epipleura and appendages brown to light brown. This is somewhat similar to S. atrum JACOBY in coloration, but the latter has the following characters: body smaller (2.1–2.8 mm), head with frontal tubercles narrow and transverse, elytra much densely punctate on apical half, and so forth. Further the aedeagus of the latter has a pair of lateral processes sub-apically as in S. placidum HAROLD.

This species were found generally on Akebia spp. forming mat on floor surface in dark forest of Cryptomeria japonica or Chamaecyparis pisifera, and also on sunny mat of Akebia spp. along road-side. They occur in low mountains from June to November.

The specific name is dedicated to Dr. M. INAIZUMI of Utsunomiya, who first collected this species at Tochigi Pref.

Trachyaphthona imasakai (Takizawa, 1990), n. comb.

(Figs. 15 & 19h)


Imasaka and Miyake (2009) recorded this species from Handa-kōgen, Ōita Pref., as Zipangia sp. nr. imasakai. Populations from Kyushu mainland are somewhat different from those of the type locality, Shimokoshiki-shima Is., in the body slightly smaller, 1.8–2.1 mm in length; coloration generally pale yellowish brown; micropterous; head with frontal tubercles rather transversely triangular, with anterior angle weakly produced between antennal sockets. They also noted that the shape of aedeagus is triangularly produced at apex, and is different from rounded one in imasakai. Though the original description of imasakai stated “aedeagus rather stout and rounded at apex”, the apex is triangularly produced in dorso-posterior view (Fig. 19h), and is almost same in both the populations.

The genus Zipangia HEIKERTINGER was synonymized with Trachyaphthona BALY by OHNO (1961). This treatise was supported by Konstantinov and Prathapan (2008), and by Medvedev (2009).


Distribution. Japan (Kyushu, Amakusa Is., Shimokoshiki-shima Is.).

Host plant. Galium verum L. subsp. asiaticum (NAKAI) T. YAMAZ. (Rubiaceae) (IMASAKA: per. com.)
Zipanginia bungoensis n. sp.
(Figs. 16 & 19i)

Male. Body small and rather flat dorso-ventrally, 1.8–2.0 mm in length; dark metallic blue; antennae dark brown with 2nd to 4th segments yellowish brown; tibiae with dark brownish tinge.

Head shining; vertex densely covered with fine punctures; frontal tubercles obscure, long triangular with its anterior angle reaching between antennal sockets, weakly delimited behind, separated from each other on anterior portion by median longitudinal furrow; clypeus broadly triangle, flat and weakly raised, gently emarginated on anterior margin; labial palpi with last segment large and conical, longer than weakly enlarged penultimate segment; inter-ocular space 1.7 times as wide as longitudinal diameter of eyes; antennae rather robust, 0.7 times as long as body, beyond 2nd segment thickly pubescent; 1st segment stout and straight; 2nd shortest, 0.8 times as long as 3rd; 6th to 10th each weakly widened to apex; 11th longest, 1.7 times as long as 2nd, pointed at apex; relative length of antennal segments as: 11th > 7th > 4th = 8th = 9th = 10th = 3rd = 5th = 6th > 2nd. Pronotum transverse, 1.4 times as wide as long, widest behind middle, thence roundedly narrowed to both anterior and posterior angles, weakly concave at anterior margin, broadly and roundly produced at posterior margin; anterior angles slightly and obliquely produced, the posterior slightly angulate; disc narrowly explanate along lateral margins, densely covered with fine punctures, with sharp transverse furrow parallel to basal margin; punctures on latero-basal area larger; interspace smooth and shining. Scutellum short, roundly tongue-shaped and impunctate. Elytra rather wide, each almost 2.6 times as long as wide, widest and highest behind middle, thence roundly narrowed to both ends, and strongly lowered to apex, on lateral area perpendicular; disc densely covered with distinct punctures, on basal area somewhat rugose, interspaces with fine wrinkles; epipleura wide on basal 1/3, thence gradually narrowed and disappeared near apex; epipleural disc weakly concave, shagreened with fine punctures. Abdominal sternites broadly glabrous along sagittal line; last visible abdominal sternite tri-lobed at apex, medially flat and shining. Fore legs with 1st tarsal segment enlarged, as large as two followings combined together. Aedeagus rather stout, four times as long as wide, widest sub-basally, almost parallel-sided on apical half, roundly narrowed to apex, in ventral view broadly depressed longitudinally and weakly keeled along lateral margins, in lateral view almost straight but weakly inflated downward at middle (Fig. 19i).


Distribution. Japan (Kyushu).

Host plants. Elaeagnus umbellata Thunb. (Elaeagnaceae).

Remarks. This new species is closely similar to Z. tosana OHNO (Fig. 17) from Shikoku, Japan, but is distinguished from the latter by the following characters: elytra smooth and shining on interspace, aedeagus stout and short, and pronotum much rounded on the lateral margins. A key to Japanese species of the genus is provided below.

According to Mr. S. SASAKI in Hita-shi, Ôita Pref. (pers. comm.), this species was found feeding on Elaeagnus umbellata from the late April to early May at low mountain side. The specific name was derived from an old Japanese name of the type locality, Bungo. The holotype lost some appendages during photographing.
Key to Japanese Species of the Genus Zipanginia OHNO
(modified from KIMOTO, 1994)

1. Dorsal surfaces entirely greenish blue or dark metallic green, in some cases pronotum reddish brown. ........................................................................................................................................  2
   - Dorsal surfaces dark piceous to black. ...........................................................................................................................  6

2. Legs reddish brown, with femora generally dark brown; punctures of elytra generally weak. ........................................  3
   - Legs dark brown, with apical half of tibiae reddish brown; punctures of elytra generally strong. ..............................................  4

3. Pronotum nearly impunctate; body generally blackish blue; antennae generally reddish brown, with apical four or five segments dark brown; legs generally reddish brown with femora blackish brown; length 2.0 mm. .................................................. Z. sakishimana KIMOTO et GRESSITT
   - Pronotum impressed by distinct punctures; body entirely greenish blue on dorsum including antennae; legs generally reddish brown with posterior femora blackish blue; length 2.5 mm. .................................................................................................................................................... Z. loochooana OHNO

4. Pronotum densely punctate and minutely rugose behind sub-basal transverse impression. .......................................................... Z. tuberosa OHNO
   - Pronotum sparsely punctate and shining behind sub-basal transverse impression. ............................................................. Z. tosana OHNO

5. Aedeagus more slender, 5.3 times as long as wide, almost straight in lateral view; elytra densely punctate and weakly rugose, with interstices covered with minute punctures and wrinkles; pronotum rather straight on lateral margins. .............................................................................................................. Z. bungoensis n. sp.
   - Aedeagus rather stout, four times as long as wide, weakly but distinctly inflated downward at middle in lateral view; elytra densely punctate, with interstices shining and smooth; pronotum rounded on lateral margins. ........................................................................................................... Z. picipes n. sp.

6. Pronotum and elytra impressed by fine punctures. .................................................................................................................. Z. picipes katoi OHNO
   - Pronotum and elytra impressed by strong punctures; body generally dark reddish brown on the dorsum, with elytra and abdomen blackish brown; in some cases entirely blackish brown on the dorsum; antennae yellowish brown with apical segments darker; legs yellowish brown with posterior femora blackish brown; length 2.0 mm. .................................................. Z. miyatakei KIMOTO

7. Pronotum about 1.5 times as wide as long, sides gently rounded; occiput nearly smooth and impunctate; surface of elytral epipleura nearly flat in its whole length; mesosternal process not distinctly narrowed posteriorly; length 2.0–2.2 mm. .................................................. Z. picipes picipes (BALY)
   - Pronotum about 1.3 times as wide as long, sides straight and parallel; occiput and vertex (except for post-clypeus and frontal tubercles) rather distinctly shagreened; surface of elytral epipleura rather distinctly channeled in its basal half; mesosternal process rather distinctly narrowed posteriorly; length 2.5 mm. .................................................. Z. picipes katot OHNO (based on original description).

要　約
滝沢春雄：日本産ハムシ科覚書 (3) (鞘翅目) . ——— 日本からハムシ科の6新種を記載した：アカムネチ Cryptocephalus honshuensis n. sp., ヤマダクロフジハムシ Gonioctena (Brachyphytodecta) jamadai n. sp., マルアシナガトビハムシ Longitarsus osimaensis n. sp., ヒロアシナガスネトビハムシ Psylliodes sasakii n. sp., イナイズミタマノミハムシ Sphaeroderma inaizumii n. sp., キュウシュウグミトビハムシ Zipanginia bungoensis n. sp. また、従来 Sphaeroderma 属とされていたフタツメタマノミハムシ Lanka nagaii (NAKANE) およびケシタマノミハムシ Manobia aoshimensis (NAKANE) の所属を変更し、これまでシノニムとされていたババチビ
ツツハムシ Cryptocephalus babai CHūJō, トウヨウアシナガトビハムシ Longitarsus orientalis JACOBY, コナスビトビハムシ Lythrraria komiyamai OHNO およびクロタマノミハムシ Sphaeroderma atrum JACOBY を独立種とした。

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