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**Research Article**

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**Descriptions of Four New Species of the *Hoplosaenidea takizawai* Group from the Greater Sunda Islands Area (Coleoptera: Chrysomelidae: Galerucinae)**

Haruo Takizawa<sup>1,2\*</sup>, Mohamed S. Mohamedsaid<sup>3</sup>

1 *Nodai Research Institute, Tokyo University of Agriculture, Japan*

2 *Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah, Jalan UMS, 88400, Kota Kinabalu, Sabah, Malaysia*

3 *48 Jalan SS 15/3A, 47500 Subang Jaya, Selangor, Malaysia*

\*Corresponding author: cpirka12@gmail.com

**Abstract**

Four new species of the *Hoplosaenidea takizawai*-group are described from the Greater Sunda Islands area: *Hoplosaenidea javanica* n. sp. from E. Java, *H. jalur*, *H. duawarna*, and *H. sabahensis* n. spp. from Sabah, Borneo. This group is characterized by male secondary sexual characters: fronto-clypeus widely excavated and furnished with small projections, and first antennal segment large, strongly expanded with a large triangular tooth. A key is provided to the seven known species from the group.

**Keywords:** *Hoplosaenidea takizawai*-group, Galerucinae, Chrysomelidae, New species, Java, Borneo, Malaysia

**Introduction**

The second author (Mohamedsaid, 2001, 2002, 2009) recently described three species of the genus *Hoplosaenidea* Laboissiere, which are characterized by having similar secondary sexual characters in males. Males have the fronto-clypeus excavated and furnished with small projections, and have the first antennal segment large, strongly expanded with a large triangular tooth near the apex. This group is seemingly distributed widely in the Greater Sunda Islands area, viz. *H. takizawai* Mohamedsaid from Bali Is., *H. singaporensis* Mohamedsaid from Singapore, and *H. sarah* Mohamedsaid from Peninsular Malaysia.

In this paper four new species from this group are described, one from Java and three from Sabah, Borneo. Previously, the second author revised the genus and recorded 17 species from Malaysia. However, unpublished results by the first author show that about 30 species of the genus exist in Sabah, Borneo, including

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three new species described in the present paper. The revision of the entire genus in Sabah and/or Malaysia will be subject of another paper.

## Materials and Methods

Specimens were collected from various locations in Sabah and in Java. The holotypes will be deposited in the BORNEENSIS collection at the Institute for Tropical Biology and Conservation (ITBC), Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia or in the Laboratory for Systematic Entomology (SEHU), Hokkaido University, Sapporo, Japan.

## Result and Discussion

### Key to known species of *Hoplosaenidea takizawai*-group

1. Dorsum yellowish brown, with/without black stripes on elytra, which, if present, are composed of a broad common one along the suture and another covering lateral-most area and epipleuron; aedeagus subparallel-sided, narrowed gently to apex on apical one quarter; apex acutely triangular (Figure 3b) ----- *H. jalur* n. sp.
- Dorsum more or less with metallic tinge ----- 2
2. Dorsum bicoloured: head and pronotum largely yellowish brown, or pronotum margined with yellowish brown; elytra metallic green ----- 3
- Dorsum largely unicolour ----- 5
3. Legs largely blackish brown; elytra dark metallic green; pronotum wholly yellowish brown; aedeagus slender, subparallel-sided, narrowed to apex; apex narrowly triangular, and straight in lateral view (Figure 3a) ----- *H. duawarna* n. sp.
- Femora pale yellowish brown; tibiae and tarsi more or less infusate; pronotum with metallic greenish patch medially ----- 4
4. Aedeagus slender gradually narrowed to apex; apex acute, weakly curved down in lateral view (Figure 3g) ----- *H. takizawai* Mohamedsaid

- Aedeagus slender, suddenly narrowed near apex; apex broad, rectangularly curved down in lateral view (Figure 3c) ----- *H. javanica* n. sp.

5. Dorsum green; legs black; venter black; aedeagus triangularly narrowed at apex (Figure 3f)----- *H. singaporensis* Mohamedsaid

- Dorsum bluish ----- 6

6. Dorsum dark blue, with slight greenish tinge; head except for vertex yellowish brown; fronto-clypeus flat and wide, with a single median process in males; aedeagus subparallel-sided, narrower on apical one quarter, acutely narrowed to apex (Figure 3d) ----- *H. sabahensis* n. sp.

-Dorsum purplish blue; fronto-clypeus brownish, with a pair of median process in males; legs brownish with tibiae and tarsi black; aedeagus subparallel-sided on basal three fifth, thence narrowed, and subparallel-sided on apical second fifth, roundly narrowed to apex (Figure 3e) ----- *H. sarah* Mohamedsaid

### Taxonomy

***Hoplosaenidea duawarna* n. sp.** (Figure 1a)

**Holotype.** Male, Kg. Kiapad, Inanam, Kota Kinabalu, Sabah, Malaysia, 16.V.2008. H. Takizawa leg. (ITBC, Kota Kinabalu)

**Paratypes.** 1♀, Poring Park, Ranau, Sabah, 4-5.IV.2008, H. Takizawa leg.; 1♀, Kg. Kiapad, Inanam, Kota Kinabalu, Sabah, 13.I.2010, H. Takizawa leg.; 1♀, ditto, 17.IV.2010, H. Takizawa leg.; 1♂, ditto, 16.IV.2014, H. Takizawa leg.; 1♂, ditto, 18.IV.2010, H. Takizawa leg.; 2♀, ditto, 18.V.2008, H. Takizawa leg.; 1♀, ditto, 5.VII.2008, H. Takizawa leg.; 1♀, ditto, 12.VII.2009, H. Takizawa leg.; 1♂, ditto, 17.VIII.2008, H. Takizawa leg.; 3♀, ditto, 21.VIII.2013, H. Takizawa leg.; 1♀, ditto, 7.IX.2008, H. Takizawa leg.; 1♂, 1♀, ditto, 4.X.2008, H. Takizawa leg.; 1♀, ditto, 7.XI.2009, H. Takizawa leg.; 1♀, ditto, 9.XI.2008, H. Takizawa leg.; 1♀, ditto, 6.XII.2008, H. Takizawa leg.; 1♀, Kg. Kionsum Kecil, Inanam, Kota Kinabalu, Sabah, 1.I.2008, H. Takizawa leg.; 1♀, Kg. Kipao, Kionsum, Inanam, Kota Kinabalu, Sabah, 7.VII.2007, H. Takizawa leg.; 1♀, ditto, 19.VIII.2007, H. Takizawa leg.; 1♀, Kg. Kipouvo, Jln. Tambunan, Penampang, Sabah, 20.V.2007, H. Takizawa leg.

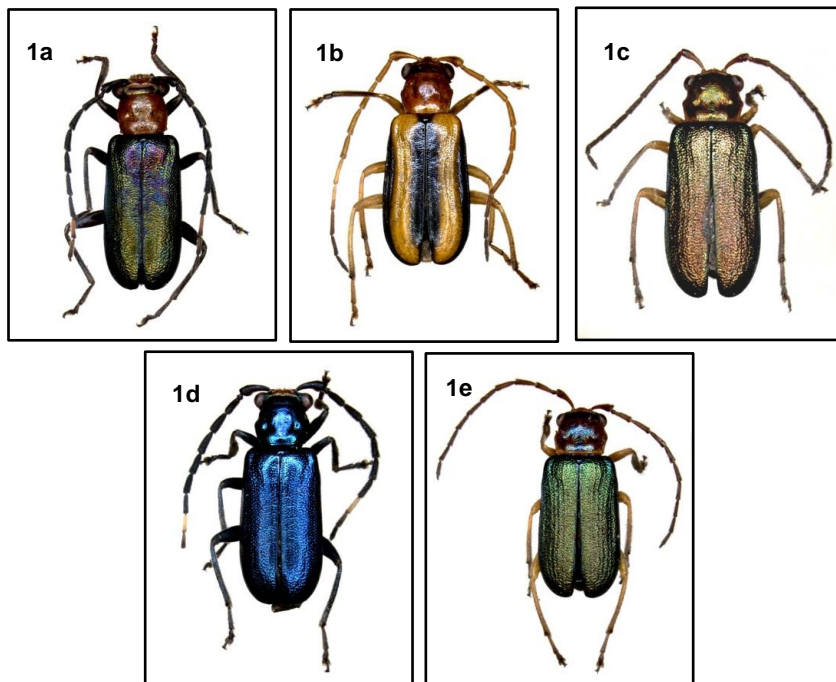


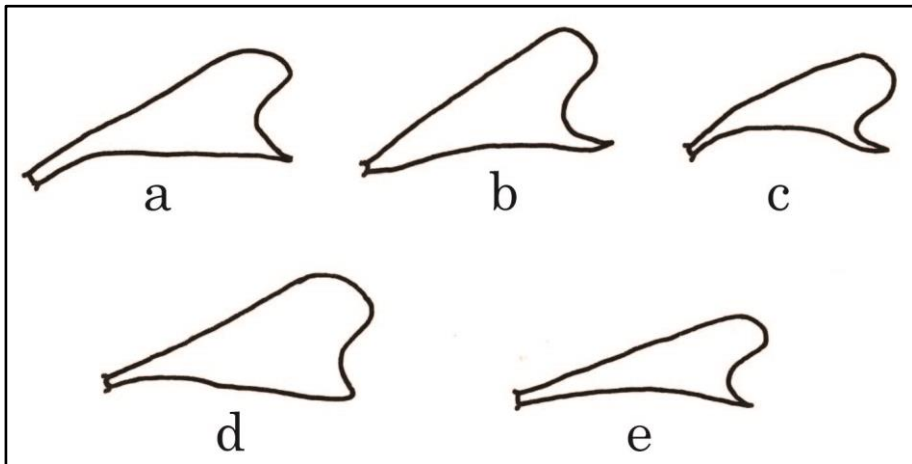
Figure 1. Habitus of: a, *Hoplosaenidea duawarna* n. sp. (Holotype); b, *H. jalur* n. sp. (Holotype); c, *H. javanica* n. sp. (Holotype); d, *H. sabahensis* n. sp. (Holotype); e, *H. takizawai* Mohamedsaid (Wanasari, Is. Bali).

### Description.

**Male.** Body subparallel-sided, 6.0–6.5 mm in length; head and prothorax yellowish orange with weak greenish luster, except for vertex metallic green and frons with small blackish patch; antennae blackish brown, with 9th segment yellowish brown, last 2 segments dark brown; elytra and venter dark green with metallic luster, except for prothorax; legs blackish brown, with coxae and trochanters paler; dorsum more or less densely shagreened.

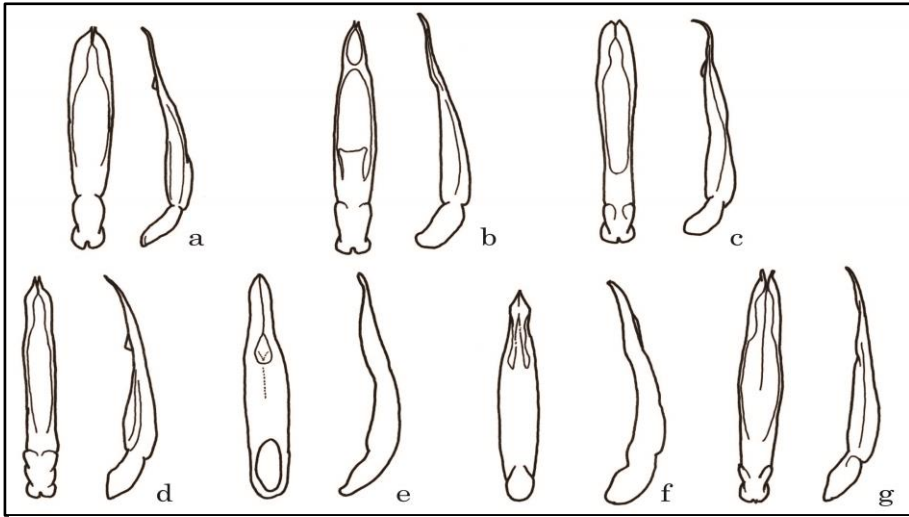
Head distinctly wider than pronotum; vertex sparsely punctate and finely reticulate; eyes large, with longitudinal diameter 0.6 times as wide as inter-ocular space; frontal tubercles sub-pentagonal, sinuately delimited behind, narrowly elongate toward eyes; both tubercles contiguous to each other at inner angles, transversely raised between antennal sockets; fronto-clypeus flat and depressed, irregularly wrinkled on the surface, pubescent at sides and with stiff hairs near anterior margins, transversely oval, narrowly rimmed along inner margin of eyes to genae, deeply concave at anterior margin, with a large fovea

anteriorly; a small conical process situated in the fovea; genae as deep as transverse diameter of eye in frontal view; labrum almost straight at anterior margin; antennae almost as long as body, beyond second segment densely pubescent, with first 8 segments stouter than last 3 segments; first robust, strongly widened to apex, half as wide as long, longer than second and third combined together, with a large triangular process subapically (Figure 2b); second small and rounded, 0.2 times as long as fourth; labial palpi with penultimate segment strongly swollen. Pronotum subquadrate, 1.2 times as wide as long, widest near apical one third, thence roundly narrowed to anterior angles, rather straightly so to posterior angles, weakly emarginated at anterior margin, archedly produced at posterior margin, with sparse setae on lateral margins; disc convex, densely covered with shallow punctures, with a pair of deep oblique impressions behind middle; interspaces finely reticulate; anterior angles weakly triangular, invisible from above; posterior angles rectangularly produced; anterior coxal cavities closed behind. Scutellum subtriangular, weakly convex and smooth.



**Figure 2.** Male first antennal segment of: a, *Hoplosaenidea duawarna* n. sp. (Holotype); b, *H. jalur* n. sp. (Holotype); c, *H. javanica* n. sp. (Holotype); d, *H. sabahensis* n. sp. (Holotype); e, *H. takizawai* Mohamedsaid (Wanasari, Is. Bali).

Elytra each almost 4 times as long as wide, subparallel-sided on basal third quarter, thence roundly narrowed to apex, where they are separately rounded, with subbasal area gently raised; disc densely and confusedly punctate, with interspaces strongly reticulate, with sparse erect hairs on apical one third; punctures with tendency to arrange themselves in rows more or less on lateral



**Figure 3.** Aedeagus (left: dorsal view; right: lateral view) of: a, *Hoplosaenidea duawarna* n. sp. (Holotype); b, *H. jalur* n. sp. (Holotype); b, c, *H. javanica* n. sp. (Holotype); d, *H. sabahensis* n. sp. (Holotype); e, *H. sarah* Mohamedsaid (after Mohamedsaid, 2009: left: ventral view); f, *H. singaporensis* Mohamedsaid (after Mohamedsaid, 2002; left: ventral view); g, *H. takizawai* Mohamedsaid (Wanasari, Is. Bali).

half; epipleura oblique, rather wide on basal half, thence gently narrowed posteriorly, and disappearing near latero-posterior angles; epipleural surface finely reticulate, sparsely punctate, and with transverse wrinkles. Second abdominal sternite triangularly depressed, third and fourth each with weak depression at middle of posterior margin; last visible abdominal sternite deeply tri-lobed at posterior margin; the median lobe depressed and slightly narrowed anteriorly. Aedeagus subparallel-sided and flat, gently narrowed on apical one third, with long median orifice occupying apical two thirds, apically triangular and weakly curved down, weakly curved in lateral view (Figure 3a). Legs slender; fore legs with first tarsal segment subparallel-sided, as long as following 2 segments combined together; hind legs with first tarsal segment distinctly longer than the followings combined together.

**Female.** Body 6.0–6.5 mm in length; first antennal segment clavate, almost 6 times as long as second; head with frons triangularly and evenly raised; eyes rather small with its transverse diameter in frontal view 0.3 times as wide as inter-ocular space; last visible abdominal sternite roundly produced posteriorly; fore legs with first tarsal segment weakly widened to apex.

**Distribution.** Borneo (Sabah).

**Host plants.** Unknown.

**Remarks.** *Hoplosaenidea duawarna*, n. sp. is characterized by contrastingly bicolorous dorsum among known species of *takizawai* group, viz. yellowish orange head and pronotum against dark green elytra. From similarly coloured species of the genus, it is distinguished by the first antennal segment strongly enlarged in males, robust and strongly clavate one in females. This species was collected by sweeping along secondary forests at a 150 - 800 m altitude. Its specific name was derived from two Malay words, 'dua' and 'warna' meaning 'two' and 'colour,' respectively.

***Hoplosaenidea jalur* n. sp.** (Figure 1b)

**Holotype.** Male, Kg. Tambatuon, Kota Belud, Sabah, Malaysia, 17.IV.2014, H. Takizawa leg. (ITBC, Kota Kinabalu)

**Paratypes.** 1♂, 1♀, data same as the holotype; 1♂, Crocker Range Park, HQ, Keningau, 5.XII.2014, H. Takizawa leg.; 1♀, Ulu Senagang substation, Crocker Range Park, Tenom, 10-12.III.2012, H. Takizawa leg.

**Description.**

**Male.** Body subparallel-sided, 5.5–6.5 mm in length; brown with yellowish brown appendages; fore legs with tibia and tarsus infuscate; elytra yellow with a broad common black stripe along suture, which is narrowed near scutellum and apex, and with another black stripe covering lateral side and epipleuron extending from humerus to apex; metathorax and abdomen black except for 5th visible abdominal sternite largely yellowish brown; sometimes elytra wholly yellowish brown.

Head with wide inter-ocular space, 1.7 times as wide as the longitudinal diameter of the eye; vertex finely shagreened and impunctate; frontal tubercles delimited behind by almost straight line, longitudinally triangular, acutely and weakly curved at lower portion, narrowly elongate laterad, contiguous to each other; fronto-clypeus medially depressed with broad oblique furrow, below which a tuft of hairs present on latero-anterior areas of central fovea; surface not excavate, but weakly convex with large central fovea which is delimited laterally by narrow and roundly raised ridges; a small but high process situated on the fovea; genae roundly narrowed anteriorly, half as deep as longitudinal diameter of eye; antennae slender and long, 1.2 times as long as body, with third to seventh segments each stouter than the eighth; first segment

triangularly expanded from base to apex, with robust and acute lobe below (Figure 2a), 7 times as long as second; second and third combined together distinctly shorter than the fourth; tenth 1.7 times as long as second. Pronotum slightly transverse, 1.1 times as wide as long, widest before apical one third, thence weakly narrowed to anterior angles, much strongly so to the posterior, gently emarginated at anterior margin, broadly arched on posterior margin; anterior angles oblique, the posterior slightly tuberculate; disc finely shagreened and covered with sparse punctures, convex with a broad and shallow transverse impression before middle, which is shallower on the median portion. Scutellum roundly triangular, as long as wide, slightly raised and shagreened. Elytra subparallel-sided, weakly widened to behind the middle, thence roundly narrowed to separately rounded apex; disc uneven with weakly raised sub-basal area, 2 obscure and broad longitudinal depressions, the outer one behind humerus, and another inner one parallel to the outer one continued to intra-humeral impression; exterior to the outer depression with a weak costa, below which elytron is perpendicular; surface wholly shagreened, densely covered with distinct punctures, weakly rugose in part, with sparse dark hairs; epipleura parallel-sided on basal half, thence gradually narrowed and disappeared before apex; epipleural disc flat, weakly shagreened and sparsely punctate; fifth visible abdominal sternite tri-lobed; median lobe obliquely narrowed on lateral margins, rounded at apex with a small median notch. Aedeagus subparallel-sided, gently narrowed to acute apex on apical one quarter (Figure 3b). Legs slender; fore tibiae slightly curved outward on apical half; fore tarsi with first segment subparallel-sided; hind tarsi with first segment longer than second and third combined together.

**Female.** Body 7 mm in length; antennae infusate on apical 2 segments; head below antennal sockets gently raised; inter-ocular space 1.6 times as wide as longitudinal diameter of eye; fronto-clypeus broadly triangular and median carena reaching between frontal tubercles, archedly emarginated at anterior margin; antennae normal, as long as body length; first segment clavate, 6 times as long as second; third 4 times as long as second; second and third combined together slightly shorter than fourth ; fifth visible abdominal sternite roundly produced at apex; fore legs with first tarsal segment slender, weakly widened to apex.

**Distribution.** Borneo (Sabah).

**Host plants.** Unknown.



**Remarks.** Because of expanded first antennal segment in males, *H. jalur* n. sp. undoubtedly belongs to the *takizawai*-group. The body coloration and front-clypeus which is not largely excavated, however, are completely different from other species of the group. The striped elytra look like those of *H. fuscolineata* (Jacoby) or its allies, but the presence of expanded first antennal segment in males clearly distinguishes this from *fuscolineata*. Further long antennae in both sexes also help to distinguish it. Since females lack modified fronto-clypeus and antennae, their identification may be more difficult. One female specimen collected at Kg. Tambatuon has elytra that is wholly yellowish brown. This species was collected by sweeping in secondary forests at ca. 400-500 m altitude. Its specific name is derived from a Malay adverb 'jalur' meaning 'stripe'.

*Hoplosaenidea javanica* n. sp. (Figure 1c)

**Holotype.** Male, Pantai Wato Ulo, nr. Jember, E. Java, 30.V.2005, H. Takizawa leg. (SEHU, Sapporo)

**Paratypes.** 12♂, 14♀, data same as the holotype.

#### **Description.**

**Male.** Pale metallic green; pronotum widely brownish on all margins; head brownish except for metallic green vertex; venter yellowish brown except for metathorax and abdomen dark brown with slight greenish tinge; legs yellowish brown with tibiae and tarsi infuscate; antennae brown; labial palpi and mandibles apically dark brown; colour somewhat variable: pronotum sometimes largely brown, elytra sometimes with red cupreous tinge.

Body subparallel-sided, 4.5 - 6.0 mm in length, with erect dark hairs sparsely on elytra. Head with vertex distinctly and sparsely covered with weak punctures, with row of hairs along anterior margin; interstices finely reticulate; frontal tubercles transverse and triangular, narrowly elongated laterad, contiguous to each other at upper inner angles; inter-antennal area broadly raised; inter-ocular space wide, nearly twice as wide as longitudinal diameter of eye; fronto-clypeus deeply and transversely excavate; the excavation rather rectangular, with lateral sides almost parallel to sides of elongate genae, with several long whitish hairs near upper lateral angles; the anterior margin with similar hairs near lateral angles; long stout process situated at the centre of excavation, which is ended in two acute separate tips; these tips curved upwards in lateral view; a pair of narrow curved ridges present below the central process, which form an X-shape; labrum transverse with 6 hairs medially; genae long, 0.4 times as long as longitudinal diameter of the eye;

antennae slightly shorter than body length, thickly covered with sub-erect dark hairs; first segment longest, 5 times as long as the second, strongly clavate, subapically with large and acute triangular teeth which has broader base starting at basal 1/3rd (Figure 2c); 3rd to 7th robust, each weakly widened to apex; eighth to tenth rod-like; second and third combined together as long as fourth. Pronotum weakly transverse, 1.3 times as wide as long, widest at basal one third, thence weakly narrowed to anterior angles, rather strongly narrowed to basal angles, weakly emarginate at anterior margin, broadly arched at posterior margin, with a few dark hairs on lateral margin; both angles slightly tuberculate; disc convex, but uneven with a broad oblique impression before middle, with another shallower oblique one antero-laterally, with obscure longitudinal costa at middle on basal one third; disc granulate, densely covered with shallow punctures. Scutellum broadly triangular, 1.3 times as wide as long, finely granulate. Elytra each almost 4 times as long as wide, subparallel-sided, roundly narrowed to apex on apical one third and separately rounded at apex, weakly elevated at sub-basal area, which is delimited by obscure wide impression on latero-posterior area, with a short longitudinal impression behind middle at lateral area; disc sparsely covered with sub-erect dark brown hairs, densely covered with large and deep punctures which are arranged more or less longitudinally along obscure 7 or 8 costae and are partially contiguous to each other, with interstices distinctly granulate; epipleura rather vertical, subparallel-sided on basal half, thence gradually narrowed and disappeared before apex. Metathorax and abdomen finely granulate and covered with obscure punctures and long hairs; second abdominal sternite shallowly depressed at median portion; last visible abdominal sternite deeply tri-lobed with median lobe 1.5 times as wide as long. Aedeagus slender, subparallel-sided, acutely and strongly curved down at apex, which is ending in 2 acute triangular teeth (Figure 3c). Legs slender; fore tibiae slightly curved and widened on apical half, with first tarsal segment subparallel-sided, as long as 2 followings combined together.

**Female.** Body slightly larger, 5.0 - 6.5 mm in length; head with inter-ocular space 1.5 times as wide as longitudinal diameter of eye; genae 0.4 times as deep as longitudinal diameter of eye; fronto-clypeus broadly triangular, rather deeply impressed below eyes, with broad median carena; antennae shorter, 0.8 times as long as body; first segment longest, 6 times as long as second, simply clavate; second and third combined together distinctly shorter than fourth; elytra without short longitudinal impression behind middle on lateral area; last abdominal sternite simple at apex; fore tarsi with first segment gradually and weakly widened from base to apex.

**Distribution.** Java.

**Host plants.** Broadleaf tree, not further identified.

**Remarks.** The new species is very close to *H. takizawai* Mohamedsaid from Is. Bali. This has the male aedeagus strongly curved down at apex and ended in 2 sharp triangular teeth, whereas *H. takizawai* has the aedeagus gently curved down at apex and gently narrowed to apex. Further, the former has the frontal excavation on the head rectangular. The latter has an oblong excavation, with lateral margin rounded. In females these two species are indistinguishable. This species was collected in sparse dry forest at the sea beach at Pantai Wato Ulo, feeding on an undetermined broadleaf tree. The specific name refers to its type locality, Is. Java in Indonesia.

*Hoplosaenidea sabahensis* n. sp. (Figure 1d)

**Holotype.** Male, Kg. Sinarut Baru, Ranau, Sabah, Malaysia, 27.IV.2014, H. Takizawa leg. (ITBC, Kota Kinabalu)

**Paratypes.** 4♀, data same as the holotype; 2♀, Kg. Sinarut Baru, Ranau, Sabah, 27. IV.2014, H. Takizawa leg.; 1♀, ditto, 7.IX.2013, H. Takizawa leg.; 1♂, 3♀, Kg. Sirau, Ranau, Sabah, 19.IV.2013, H. Takizawa leg.; 1♂, Kg. Singgahmata, Telupid, Sandakan, Sabah, 27.VIII.2013, H. Takizawa leg.

**Description.**

**Male.** Body subparallel-sided, 5.8—6.5 mm in length; dark metallic blue; head yellowish brown except for vertex, sometimes upper area of frons darkened; antennae blackish with ninth and tenth yellowish white, sometimes the latter infuscate; labial palpi on penultimate segment and mandibles blackish.

Head wider than pronotum; vertex finely shagreened, sparsely covered with obscure punctures; frontal tubercles well demarcated and raised, transversely triangular, narrowly elongate to laterad, contiguous to each other at upper inner angle; inter-antennal space 1.7 times as wide as longitudinal diameter of eye, transversely keeled between antennal sockets below frontal tubercles; fronto-clypeus shallowly and widely depressed, with a slender short and acute process in the fovea at the centre of the depression, broadly incised triangularly at anterior margin; a tuft of long white hairs present on both side of the process; dense white hairs present below antennal sockets near the anterior border of depression; surface of depressed area irregular and not smooth; antennae stout, densely pubescent, almost as long as body length; first segment

stout, half as wide as long, triangularly expanded from base to near apex, thence acutely narrowed to apex (Figure 2c); second conical, 0.2 times as long as first; second and third combined together longer than fourth; third to seventh each wide and depressed; ninth to tenth rod-like; tenth 4 times as long as second. Pronotum weakly transverse, 1.3 times as wide as long, widest at apical one third, thence narrowed to anterior angles, much strongly so to posterior angles, slightly emarginate at anterior margin, gently and distinctly arched at posterior margin, with sparse erect hairs on lateral margins; both angles weakly tuberculate; disc convex with a broad and distinct arched impression before middle, which ends laterally in deeper triangular impressions; surface wholly shagreened and densely covered with shallow punctures. Scutellum rounded triangular, almost as long as wide; surface finely shagreened. Elytra subparallel-sided, each 3.6 times as long as wide, only slightly widened posteriorly, on apical one third gently and roundly narrowed to apex; apex separately rounded; sub-basal area weakly raised, delimited by shallow intra-humeral impression; disc convex without obscure costa, densely covered with large punctures, along suture more or less transversely rugose; punctuation having tendencies to arrange in longitudinal rows; interstices wholly shagreened, with sparse erect hairs; epipleura rather horizontal, subparallel-sided on basal one third, thence gently narrowed and disappeared near apex; surface finely shagreened and with coarse transverse wrinkles. Metathorax and abdomen covered with long whitish hairs; first and second visible abdominal sternites triangularly depressed along median line; the second with a tuft of hairs on the depression; fifth distinctly tri-lobed with median lobe broadly depressed, almost twice as long as wide. Aedeagus subparallel-sided, narrowed on apical one quarter, ending in acute triangular process at apex, where it is gently curved down (Figure 3d). Fore leg with tibiae weakly curved and widened on apical half on inner side; first tarsal segment subparallel-sided; hind tarsi with first segment distinctly longer than the second and third combined together.

**Female.** Body slightly larger, 5.5–7.0 mm in length; head almost as wide as pronotum, wholly shagreened; frontal tubercles flat, not raised between antennal sockets; inter-ocular space 1.5 times as wide as longitudinal diameter of eye; frons triangularly raised; antennae 0.9 times as long as body length; first segment strongly curved; third to seventh each weakly widened to apex; first segment 5 times as long as the second; second and third combined together as long as the fourth; abdominal sternites normal, with the fifth archedly produced at posterior margin; fore leg with first tarsal segment gradually widened to apex.

**Distribution.** Borneo (Sabah).

**Host plants.** unknown.

**Remarks.** The new species is similar to *H. sarah* Mohamedsaid described from Peninsular Malaysia, but is easily distinguished from the latter by the head with frontal area only weakly depressed with a single projection, almost wholly dark bluish coloration with metallic tinge including venter and by antennae shorter than body length etc. This species was collected by sweeping secondary forests at 200 to 500 m altitude. Its specific name refers to its type locality, state of Sabah in Malaysia.

### **Acknowledgement**

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