

Descriptions of Two New Species of the Clavigerine Genus
Articerodes (Coleoptera, Staphylinidae, Pselaphinae)
from the Ogasawara Islands, Japan

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Abstract The clavigerine genus *Articerodes* is discovered for the first time from Japan. Two new species, *A. kurosawai* and *A. kishimotoi* are described from the Ogasawara Islands far south of Tokyo, Japan.

Key words: Staphylinidae, Pselaphinae, Clavigerini, *Articerodes*, new species, Ogasawara.

Introduction

Two new species of the clavigerine genus *Articerodes* RAFFRAY, 1890 was discovered from the Ogasawara Islands. This is the first record of this genus from Japan. In the present study, pselaphine species are recorded for the first time from the Ogasawara Islands.

Genus *Articerodes* RAFFRAY

[Japanese name: Shima-higebuto-arizukamushi Zoku]

Articerodes RAFFRAY, 1890 a, Revue Ent., Caen, 9: 167. Type species: *Articerus syriacus* SAULCY, by monotypy.

Pararticerus JEANNEL, 1955, Mém. Mus. Hist. nat., Paris, (A), 9: 179. Type species: *Articerodes latus* RAFFRAY, by original designation.

Remarks. The genus *Articerodes* including four species has been known from the Ethiopian and Oriental Regions. It is similar to the genus *Diartiger* widely distributed in East Asia in having the four-segmented antennae and the elytral fringes. However, it differs by very short third antennal segments.

Key to Clavigerine Genera Known from Japan

- 1. Antennae 3-segmented *Triartiger* KUBOTA.
- Antennae 4-segmented 2.
- 2. Third antennal segment long and elongate *Diartiger* SHARP.
- Third antennal segment very short 3.

3. Head ovoid; abdomen predominantly large and elytra strongly shortened
 *Micrelytriger* NOMURA.
 — Head subcylindrical; abdomen about as large as elytra *Articerodes* RAFFRAY.

Articerodes kurosawai sp. nov.

[Japanese name: Kurosawa-higebuto-arizukamushi]

(Figs. 1, 2 A, C, 3 A, C, 4 A, 5)

Male. Length 1.58–1.60 mm. Width 0.69 mm. Body reddish brown, broadened posteriorly, widest at basal part of abdomen.

Head about 1.3 times as long as wide, subcylindrical, subparallel-sided, irregularly punctate on dorsal surface, sparsely covered with normal hairs intermingled with spatulate and bifurcate ones on dorsal side; clypeus short, arcuate at anterior margin, frons roundly convex on dorsal side, strongly narrowed and carinate anteriorly, vertex slightly convex, with a pair of distinct dorsal tentorial pits each between eye and hind margin of vertex, genae expanded and angulate antero-laterally before eyes, postgenae broad and nearly flat. Eyes convex and ovoid, each composed of about 20 facets. Antennae short and thick, about 1.3 times as long as head, 1st segment very short, invisible in dorsal view, 2nd short and thick, subcylindrical, 3rd smaller than 2nd, slightly wider than long, narrowed basally, 4th the largest, slightly longer than head, 3.8 times as long as wide, elongate and weakly thickened distad, truncate and excavated at apex, densely with foliate setae on apical excavation.

Pronotum slightly shorter than head, as long as wide, subglobose, irregularly punctate on dorsal and lateral sides, with a pair of lateral foveae at basal 1/3 and a large shallow concavity at postero-median part, sparsely covered with normal hairs and a few bifurcate setae on dorsal surface. Metasternum very broad, conically projected at the middle, with dense hairs just behind the median projection, densely covered with linear microsculpture at lateral sides. Elytra wider than long, nearly trapezoidal, arcuately emarginate at anterior and posterior margins, weakly convex on dorsal side, shallowly concave at postero-median part, covered with linear microsculpture and sparse normal hairs, each elytron with a large conical fringe at postero-lateral part. Legs short and thick, mid femora stout, each with a large denticle on posterior side near the middle, mid tibiae elongate, each with a small denticle at apical 1/8.

Abdomen slightly larger than elytra, wider than long, rounded at lateral and posterior margins, composite tergum (4th to 6th tergites) very broad, strongly concave in basal part, roundly convex in posterior part, with a pair of short basilateral fringes each just behind elytral fringe and with a pair of very deep basilateral foveae just outside the basilateral fringe, 7th tergite very short and transverse, nearly trapezoidal in posterior view, 8th small, semicircular, paratergites narrow, each with a narrow paratergal fringe on basal part, 4th sternite the largest, transverse, 5th to 7th each short, successively shortened posteriorly in median part, 8th semicircular, almost flat at median part.

Male genitalia strongly sclerotized; median lobe reniform in lateral view, basal

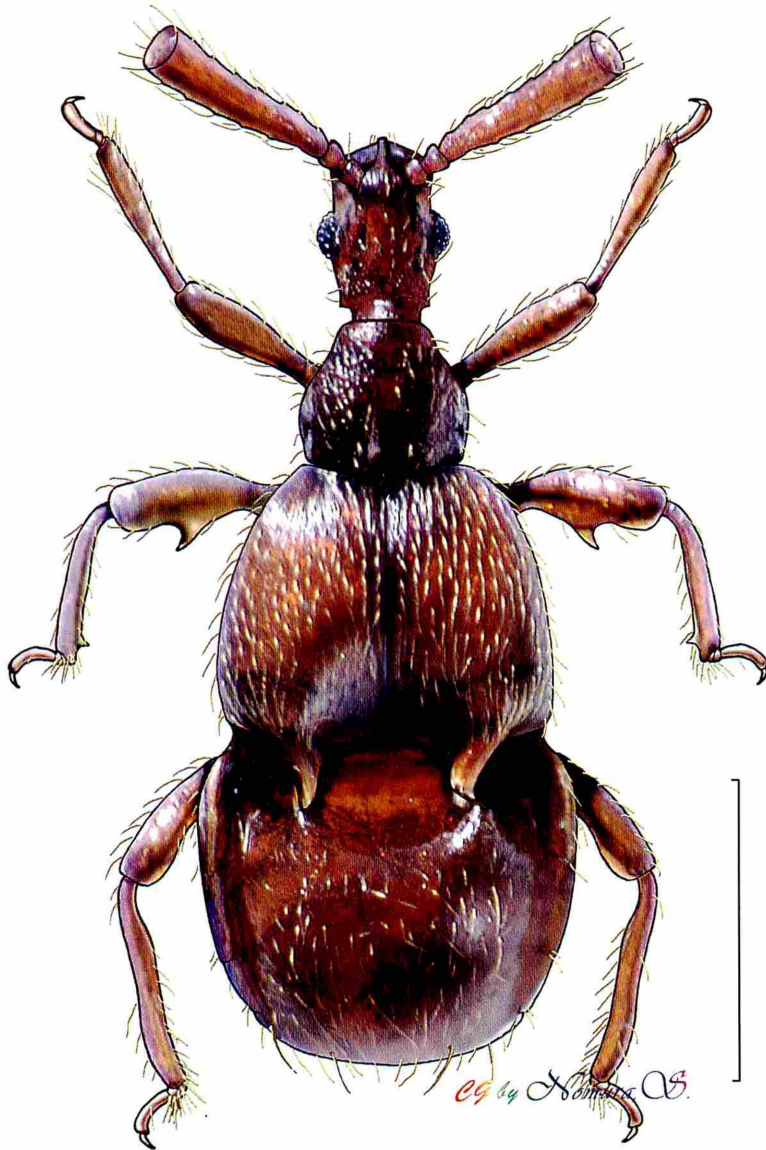


Fig. 1. *Articerodes kurosawai* sp. nov., male, habitus. Scale: 0.5 mm.

capsule large and bulbous in basal part, weakly narrowed apicad, weakly constricted at apical 1/4, then gently broadened distad, with a small and ovate membranous part on dorsal side, apical lobe very small, subcylindrical, projected ventrally on internal side at apex; endophallus weakly sclerotized, composed of a weakly curved median spine and a pair of strongly curved lateral spines.

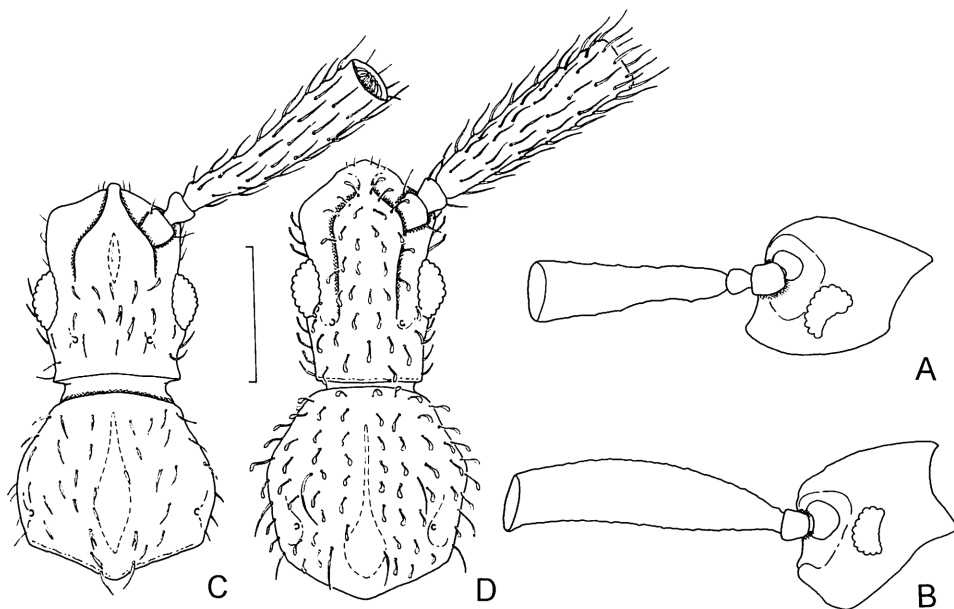


Fig. 2. Cephalic and pronotal structures of *Articerodes* and *Triartiger*; A–B, head in lateral view; C–D, head and pronotum in dorsal view; A, C, *Articerodes kurosawai* sp. nov.; B, *Triartiger urceus* KUBOTA; D, *Articerodes kishimotoi* sp. nov. Scale: 0.2 mm.

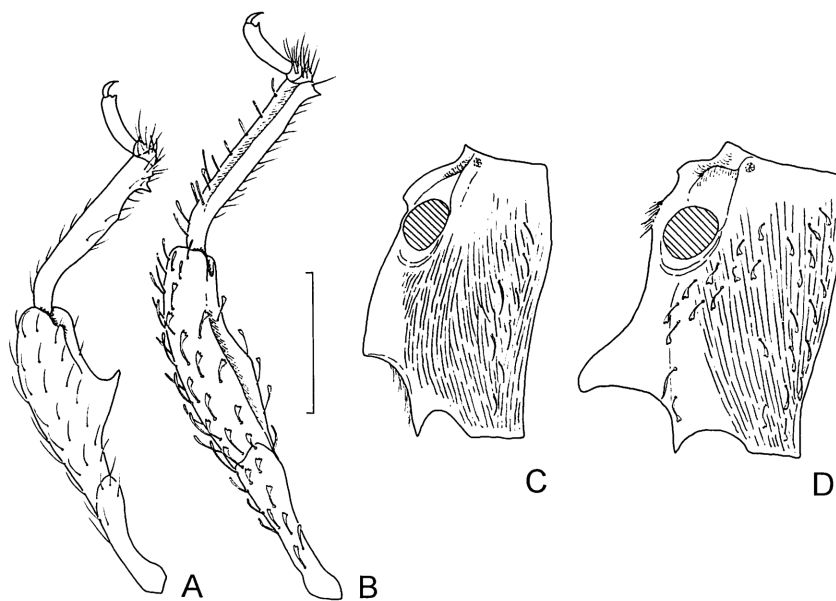


Fig. 3. Mid legs (A–B) and meso- and metanota (C–D) of *Articerodes* spp.; A, C, *A. kurosawai* sp. nov.; B, D, *A. kishimotoi* sp. nov. Scale: 0.2 mm.

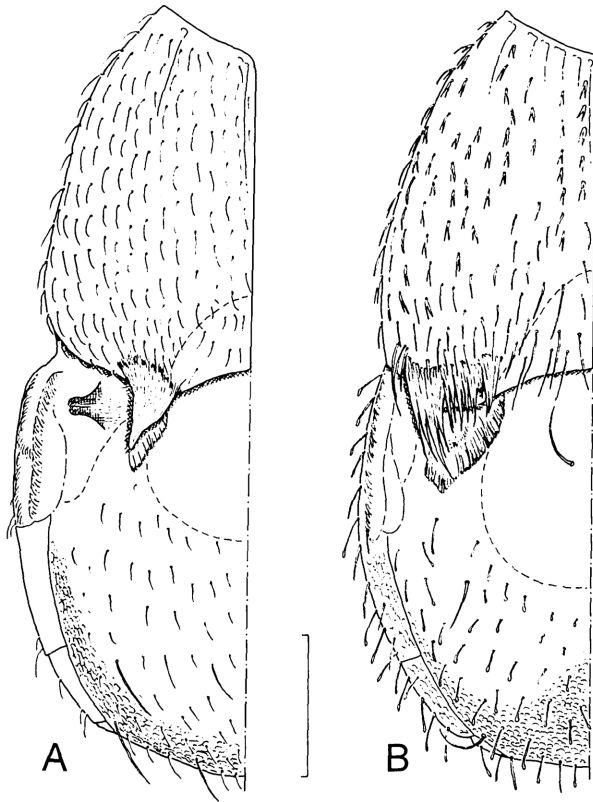


Fig. 4. Elytral and abdominal structures of *Articerodes* spp.; A, *A. kurosawai* sp. nov.; B, *A. kishimotoi* sp. nov. Scale: 0.2 mm.

Female. Length 1.50–1.73 mm. Width 0.64–0.74 mm. Very similar to male except for the following characters: antennae slightly shorter than in male, 4th segment 3.6 times as long as wide; metasternum gently convex in median part, densely covered with hairs along median line from mesocoxae to just before metacoxae; mid femora each flat on posterior side, mid tibiae without denticle; 8th abdominal sternite shorter than in male, transverse and U-shaped.

Holotype male (preserved in National Science Museum, Tokyo), Mt. Chibusa-yama, Haha-jima Is., Ogasawara Isls., 17–VI–1999, H. INOUE leg. Paratypes: 1 female, same locality as holotype, by Tullgren funnel, 6–VII–1997, T. KISHIMOTO leg.; 1 male, 1 female, Mt. Sakaigatake, by Tullgren funnel, Haha-jima Is., 5–VII–1997, T. KISHIMOTO leg.; 1 female, Sekimon, by Tullgren funnel, Haha-jima Is., 9–III–1999, T. KISHIMOTO leg.; 1 female, nr. Mt. Tenkaizan, by Tullgren funnel, Otouto-jima Is., 9–VII–1997, T. KISHIMOTO leg.; 1 female, Ainosawa, by Tullgren funnel, Otouto-jima Is., 28–IV–1997, T. KISHIMOTO leg.

Distribution. Ogasawara Islands (Haha-jima Is. and Otouto-jima Is.).

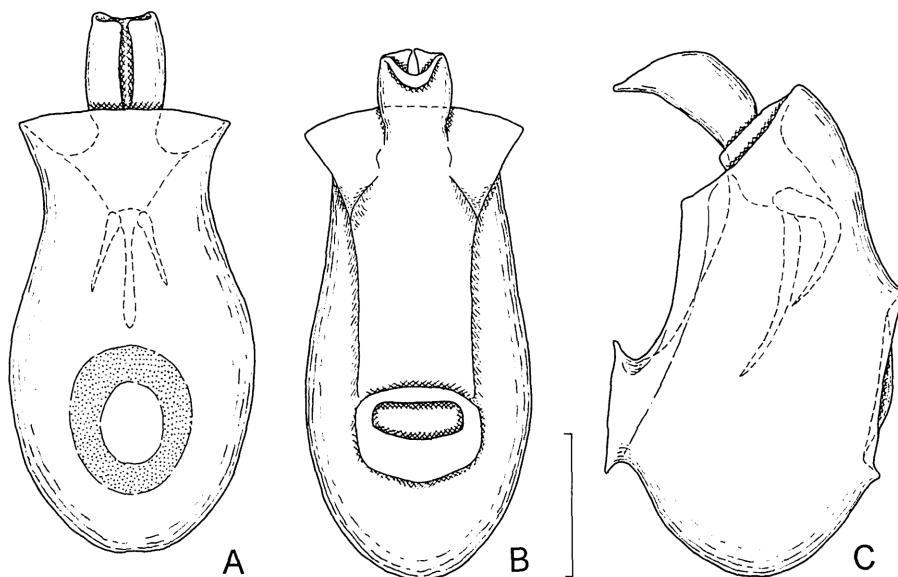


Fig. 5. Male genitalia of *Articerodes kurosawai* sp. nov.; A, dorsal view; B, ventral view; C, lateral view. Scale: 0.1 mm.

Remarks. This new species is closely allied to the type species of the genus, *A. syriacus* (SAULCY) in the antennal structure illustrated by RAFFRAY (1890 b), but it is distinctive within the genus in having conically projected metasternum, the mid femur with a large denticle and the mid tibia with a small denticle at the apical 1/8 in the male. It is quite different from *A. latus* (JEANNEL) in external characters, though their male genitalic characters are almost coincident according to JEANNEL (1955).

Etymology. This species is dedicated to the late Dr. Yoshihiko KUROSAWA who was a great coleopterologist and remarkably contributed to the study of the coleopteran fauna of the Ogasawara Islands.

Articerodes kishimotoi sp. nov.

[Japanese name: Ogasawara-higebuto-arizukamushi]

(Figs. 2 D, 3 B, D, 4 B, 6)

Male. Length 1.74 mm. Width 0.71 mm. Body slightly larger than in *A. kurosawai*, reddish brown to dark brown, similar to *kurosawai* in general structure, but the head, pronotum, legs and the peripheral parts of the elytra and abdomen are sparsely covered with spoon-like hairs.

Head about 1.5 times as long as wide, rugosely sculptured on dorsal surface, clypeus angulate at anterior margin, frons narrower than in *kurosawai*, with a pair of deep and broad longitudinal grooves each running from frontal gena to dorsal tentorial

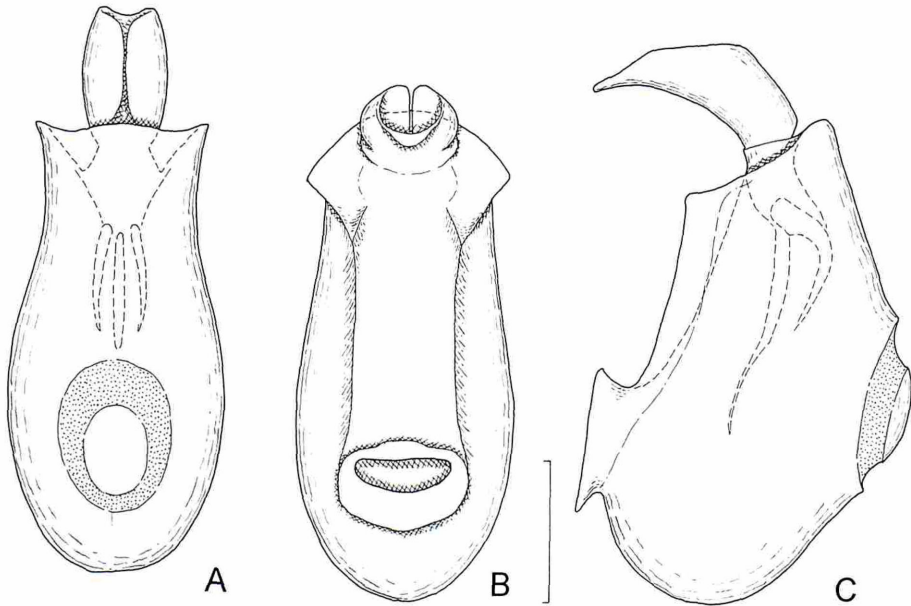


Fig. 6. Male genitalia of *Articerodes kishimotoi* sp. nov.; A, dorsal view; B, ventral view; C, lateral view. Scale: 0.1 mm.

pit. Eyes ovoid and convex, each consisting of about 20 facets. Antennae similar to those of *kurosawai*, 4th segment elongate, 3.7 times as long as wide. Pronotum as long as wide, subglobose, rugosely sculptured on dorsal surface, lateral foveae and postero-median concavity deeper and more distinct than in *kurosawai*. Metasternum less convex than in *kurosawai*, with a well projected large and triangular median keel. Elytra wider than long, nearly trapezoidal, sparsely covered with spoon-like hairs on peripheral part, with bifurcate hairs on discal part, each elytron with indistinct four basal foveae and a large fringe in postero-lateral part. Legs short and stout, mid femora thick, with weak projection on posterior side at the middle, mid tibiae each elongate, with a short mucro near apex. Abdomen similar to that of *kurosawai*, but basilateral fringe larger than in *kurosawai*, basilateral foveae hidden by the basilateral fringes in dorsal view. Male genitalia very similar to those of *kurosawai*, but the apical lobe of the median lobe is slightly larger and the lateral spine of the endophallus is less curved than in *kurosawai*.

Female. Length 1.78 mm. Width 0.73 mm. Similar to male, but antennae shorter than in male, with the 4th segment thick, 2.9 times as long as wide; metasternum gently convex, less densely covered with hairs along median line than in female of *kurosawai*; mid femora straight on posterior margin, mid tibiae without mucro.

Holotype male (preserved in National Science Museum, Tokyo), Mt. Sakaigatake, 400 m alt., Haha-jima Is., 1-IX-1997, S. NOMURA leg. Paratype: 1 female, Sekimon, by Tullgren funnel, Haha-jima Is., 9-VIII-1999, T. KISHIMOTO leg.

Distribution. Ogasawara Islands (Haha-jima Is.).

Remarks. This species is similar to *A. kurosawai* sp. nov. in general characters, but it is easily separated by the spoon-like hairs located on the head, pronotum, legs and the peripheral parts of the elytra and abdomen, the deep and broad frontal grooves, and the basilateral foveae of the abdomen hidden by the large basilateral fringes.

Etymology. The name of this species is given after the collector of the paratype, Dr. Toshio KISHIMOTO.

Key to the Species of the Genus *Articerodes* from Japan

1. Head, pronotum, legs, peripheral parts of elytra and abdomen sparsely covered with spoon-like hairs, head and pronotum rugosely sculptured on dorsal surface; frons with a pair of deep and broad longitudinal grooves at lateral sides; metasternum with a well-projected triangular median keel in male; mid femora each with a small projection on posterior side at the middle, mid tibiae each with a short mucro near apex in male; abdomen with basilateral foveae hidden by basilateral fringes *A. kishimotoi* sp. nov.
- Body sparsely covered with many normal hairs and a few spatulate and bifurcate hairs, head and pronotum irregularly punctate on dorsal surface; frons with a pair of shallow concavities at lateral sides; metasternum conically projected at the middle in male; mid femora each with a large denticle on posterior side near the middle, mid tibiae each with a small denticle at apical 1/8 in male; abdomen with deep and exposed basilateral foveae *A. kurosawai* sp. nov.

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要 約

野村周平：小笠原産ヒゲブトアリヅカムシ *Articerodes* 属（ハネカクシ科アリヅカムシ亜科）2新種の記載。—— 日本から未記録であったヒゲブトアリヅカムシ族の1属，*Articerodes* RAF-FRAY シマヒゲブトアリヅカムシ属（和名新称）の2新種を小笠原から記載した。本属は *Diar-tiger* ヤマトヒゲブトアリヅカムシ属に似ており，同様に4節からなる触角をもち，上翅末端に毛茸をそなえるが，触角第3節が短いことで容易に区別できる。新種 *A. kurosawai* クロサワヒゲブトアリヅカムシは母島の山地森林と弟島から発見された。もう一方の新種 *A. kishimotoi* オガサワラヒゲブトアリヅカムシは，母島石門付近の森林落葉土中から採集されている。両種はたがいがいによく似ているが，*kishimotoi* は，頭部，前胸，脚および上翅と腹部の周縁部がスプーン形

の刺毛でまばらに覆われ、前頭部側方に1対の深く幅広い縦溝を備えることで *kurosawai* から区別できる。本種の雄は中脚腿節後方に歯状突起がなく、後胸腹板中央に三角形の大きい竜骨突起をもつ点で *kurosawai* と異なっている。これらは小笠原諸島におけるアリヅカムシの初めての確実な記録である。

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