

A Taxonomic Revision of the Menemachine Weevils of the Genus *Podeschrus* ROELOFS (Coleoptera, Curculionidae, Conoderinae)

Yūsuke FUJISAWA and Hiroaki KOJIMA*

Laboratory of Entomology, Tokyo University of Agriculture,
1737 Funako, Atsugi, Kanagawa, 243–0034 Japan

*corresponding author; E-mail: h3kojima@nodai.ac.jp

Abstract Menemachine weevils of the genus *Podeschrus* ROELOFS are revised taxonomically. *Podeschrus* is redefined based mainly on structures of the prosternal canal and fore legs. A total of four species are recognized in the genus. The type species, *P. signatus* ROELOFS, is redescribed in detail including the male and female terminalia. Two new species and a new subspecies are described from the Ryukyu Islands, southwestern Japan: *P. ryukyuensis* sp. nov., *P. morimotoi* sp. nov., and *P. morimotoi satsunanensis* subsp. nov. An Indian species, *Podeschrus chatterjeei* (MARSHALL), comb. rev., is restored to the genus *Podeschrus* from the genus *Kumozo* MORIMOTO in the light of the new definition of the genus. A key to all the known species of *Podeschrus* is provided.

The tribe Menemachini, subfamily Conoderinae comprises 31 genera of small ovate to oblong-ovate species from the Ethiopian, Oriental, eastern Palaearctic, and Australasian regions (ALONSO-ZARAZAGA & LYAL, 1999; KUMAR, 2014). A little is known about biology of this tribe, however, as with other members of the Conoderinae, menemachine weevils are generally considered to be wood-feeders (GARDNER, 1938; KOJIMA *et al.*, 2004) and the adults move rather actively and quickly as far as we have ever observed in the field.

The genus *Podeschrus* was established by ROELOFS (1875) based on a single Japanese species, *P. signatus* ROELOFS. Later, MARSHALL (1938) described the second species, *P. fuscoturalis* from India, and also transferred another Indian species, *Meneudetes chatterjeei* MARSHALL, 1936, to *Podeschrus*. Recently, KUMAR (2014) established a new genus *Hemisulcus* for *P. fuscoturalis* and transferred *P. chatterjeei* to *Kumozo* MORIMOTO, 1960, based on structure on the prosternal canal. Thus, *Podeschrus* is a monotypic genus for *P. signatus* at the moment. However, *Podeschrus* is apparently in need of revision, since the definition is still unclear and our preliminary study suggests that two more species of this genus occur in Japan.

In this paper, the genus *Podeschrus* is redefined. In addition, we describe two new species and a new subspecies of this genus from the Ryukyu Islands, southwestern Japan, with redescription of the type species, *P. signatus*. The taxonomic position of an Indian species, *Kumozo chatterjeei*, is discussed with proposal of a revised combination restoring it to the genus *Podeschrus*. A key to all the known species of *Podeschrus* is also provided.

Depositories of specimens used in this study are abbreviated as follows. KUM: Kyushu University Museum, Fukuoka; NIAES: Institute for Agro-Environmental Sciences, NARO, Tsukuba; and TUA: Laboratory of Entomology, Tokyo University of Agriculture, Atsugi.

Genus *Podeschrus* ROELOFS, 1875

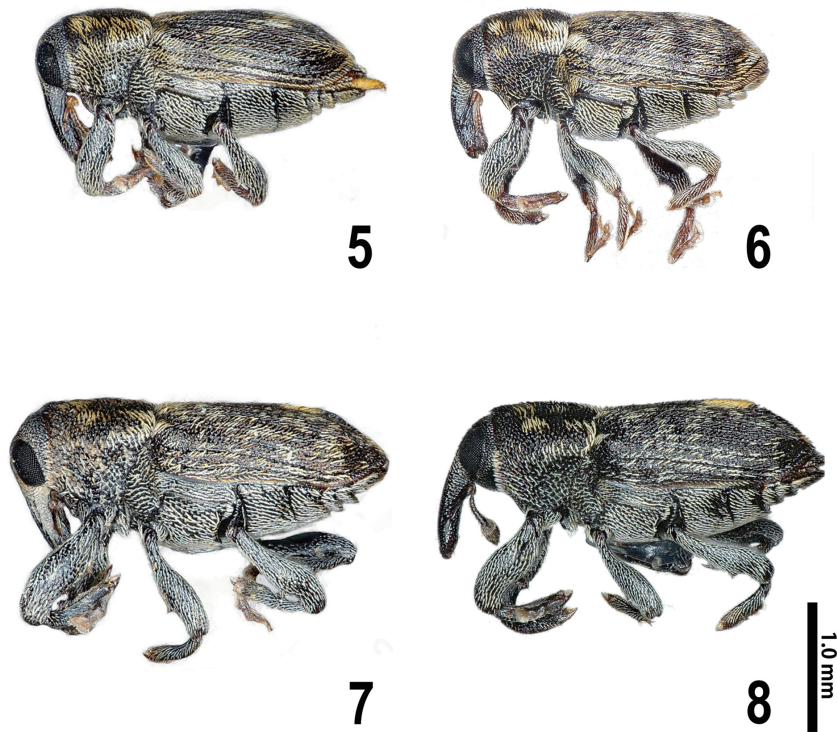
Podeschrus ROELOFS, 1875: 175 (type species: *P. signatus* ROELOFS, 1875; Zygopides); HELLER, 1894: 4 (in key; Zypopiden); HUSTACHE, 1934: 79 (catalogued; Isorhynchini incertae sedis); MARSHALL, 1938: 174 (Indian spp.; Menemachinae);



Figs. 1–4. Habitus photographs of *Podeschrus* spp., dorsal view. — 1, *Podeschrus signatus* ROELOFS; 2, *P. ryukyuensis* sp. nov.; 3, *P. morimotoi* sp. nov.; 4, *P. morimotoi satsunanensis* subsp. nov.

MORIMOTO, 1960: 110 (in key; Isorhynchini), 112 (diagnosis); MORIMOTO, 1962: 48 (in key; Isorrhynchini); MORIMOTO, 1984: 515 (in checklist; Menemacini); ALONSO-ZARAZAGA & LYAL, 1999: 113 (catalogued; Menemachini); KOJIMA & MORIMOTO, 2004: 107 (in checklist; Menemachini); LYAL, 2013: 217 (catalogued; Menemachini).

Redescription. Head globular, with close setiferous punctures; eyes suboval; forehead between eyes narrow, 1/5 or less as wide as base of rostrum. Rostrum shorter than pronotum, slightly longer in females than in males, weakly curved in lateral view; dorsum on basal half with fine median carina, which is flanked by two punctuate striae; antennal scrobes running directly from middle of lateral side to base of lower margin on each side. Antennae inserted at or beyond middle of rostrum; scape shorter than funicle, not reaching anterior margin of eye; funicle with 1st segment robust, 2nd slightly shorter than 1st, 3rd to 7th subequal in length, shorter than 2nd; club ovate, more or less compressed dorso-ventrally. Prothorax broader than long, curved and narrowed to weak subapical constriction on sides; anterior margin slightly arched anteriorly; posterior margin bisinuate; dorsum densely punctured, without lateral tubercles. Scutellum circular, convex, inclined posteriorly. Elytra much longer than pronotum, with sides narrowed posteriorly in weak curve to subtruncate apices; striae deep, 1st stria more or less sinuate by scutellum and reaching elytral base, 10th stria complete; intervals much



Figs. 5–8. Habitus photographs of *Podeschrus* spp., lateral view. — 5, *Podeschrus signatus* ROELOFS; 6, *P. ryukyuensis* sp. nov.; 7, *P. morimotoui* sp. nov.; 8, *P. morimotoui satsunanensis* subsp. nov.

broadier than striae, 1st interval weakly depressed behind scutellum. Pygidium almost entirely concealed except caudal margins narrowly visible from above. Legs with fore femora slightly to moderately thicker and each provided with more or less larger tooth than mid and hind pairs; tibiae carinate along inner and outer margins, fore tibiae slightly to hardly sinuate internally, arcuate externally on basal half; claws simple, free. Prosternum with canal bordered with sharp keels reaching or extending beyond middle of fore coxae, scattered with hairy scales inside of canal; sternellum more or less raised ventrally on sides, but not canaliculate. Mesosternal process as wide as or wider than mid coxa. Mesepimera strongly ascended upwards between bases of pronotum and each elytron, and reaching 9th striae of elytra. Venter with 1st ventrite longer than 2nd, which is longer than 3rd and 4th taken together, 1st ventrite weakly depressed in middle in males or weakly inflated in females.

Male terminalia with 8th sternite unpaired, but deeply emarginate in middle of anterior and posterior margins; spiculum gastrale nearly as long as aedeagus, asymmetrical and curved; tegmen ringed, without parameres; aedeagal body shorter than apodemes, ventral plate with protrusion to base of aedeagal apodemes; internal sac relatively short, flagellum absent.

Female terminalia with 8th tergite subtriangular, truncate at apex; 8th sternite with apodemes longer than apical plate.

Distribution. Japan (Kyushu, Ryukyus), India.

Bionomics. At least Japanese species might have a strong association with *Ficus* spp. (Moraceae).

Remarks. Recently, KUMAR (2014) transferred *P. chatterjeei* (MARSHALL, 1936) to *Kumozo* MORIMOTO, 1960 based on a difference in structures of the prosternal canal, which reaches (in *Kumozo*) or apparently extends beyond (in *Podeschrus*) the middle of fore coxae. However, an intermediate state was observed in the two Japanese species described below that the prosternal canal extends slightly beyond the middle of the fore coxae. *Kumozo* also possesses the fore femora as thick as the mid and hind ones and armed with a small and obtuse tooth on each fore femur. However, the fore femora are thicker and each of which is provided with a larger tooth than posterior pairs in *K. chatterjeei*, and the features are well concordant with those of *Podeschrus*. Therefore, we propose to restore the species to *Podeschrus* and redefined the genus *Podeschrus* based on prosternal canal and fore legs.

Podeschrus is easily separable from other Asian genera of the Menemachini by the redefinition based on a combination of the following features: pronotum neither with lateral tubercles nor special scales; scutellum visible, inclined posteriorly; fore femora slightly to moderately thicker and each provided with more or less larger tooth than mid and hind ones; prosternal canal bordered with sharp keels, which are reaching or extending beyond middle of fore coxae; venter with 1st ventrite longer than 2nd, which is longer than 3rd and 4th taken together.

Key to the Species of *Podeschrus*

- 1(2): Prosternum with keels limiting canal well extending beyond middle of fore coxae. Elytra 2.2–2.3 times as long as pronotum. Yellowish to whitish gray scales forming lateral and median stripes on pronotum and basal and submedian bands on elytra, respectively. Length: 2.2–2.8 mm. Japan (Kyushu, Ryukyus: Yaku-shima, Kuchinoshima and Nakanoshima Isls.). *signatus* ROELOFS
- 2(1): Prosternum with keels limiting canal reaching or slightly extending beyond middle of fore coxae. Elytra usually twice or less as long as pronotum.
- 3(4): Pronotum with abbreviated smooth median line on disc. Elytra with basal quadrate patch and submedian band of yellowish scales. Length: 2.2–2.5 mm. India (West Bengal). *chatterjeei* (MARSHALL)
- 4(3): Pronotum without smooth median line on disc. Elytra mottled with scattered yellowish scales, which form no remarkable markings.
- 5(6): Elytra with submedian and apical spots of whitish scales on suture. Fore femora slightly thicker and each with slightly larger triangular tooth than mid and hind pairs, with no ridge on ventral surface. Sternellum weakly raised ventrally on each side, but not forming edge. Length: 2.2–3.0 mm. Japan (Ryukyus: Okinawa-jima, Kume-jima, Ishigaki-jima, Iriomote-jima and Yonaguni-jima Isls.). *ryukyuensis* sp. nov.
- 6(5): Elytra with submedian and apical spots of yellowish scales on suture. Fore femora thicker and each with larger triangular tooth than mid and hind pairs, with faint ridge on ventral surface near base. Sternellum raised ventrally on each side, forming edges. *morimotoi* sp. nov.
- 7(8): Elytra with postscutellar spot of yellowish scales on suture. Length: 2.5–3.5 mm. Japan (Ryukyus: Okinawa-jima Is.). *morimotoi morimotoi* nominate subsp. nov.
- 8(7): Elytra without postscutellar spot of yellowish scales on suture. Length: 2.6–3.3 mm. Japan (Ryukyus: Kuchinoshima, Nakanoshima, Amami-Ôshima and Tokunoshima Isls.). *morimotoi satsunanensis* subsp. nov.

***Podeschrus signatus* ROELOFS, 1875**

(Figs. 1, 5, 9, 10, 15, 18–25)

Podeschrus signatus ROELOFS, 1875: 176, pl. 3, fig. 11 (Japan); HUSTACHE, 1934: 79 (catalogued); MORIMOTO, 1960: 112 (diagnosis); MORIMOTO, 1962: 197 (in checklist); NAKANE, 1963: 372, pl. 186, fig. 15 (Kyushu); SHIMIZU, 1969: 278 (Miyazaki); MORIMOTO, 1984: 318, pl. 62, fig. 25 (Kyushu, Tokara Isls.: Nakanoshima I.); MORIMOTO, 1989: 514 (in checklist); SASAKI *et al.*, 2002: 281 (in checklist); KOJIMA & MORIMOTO, 2004: 107 (in checklist); LYAL, 2013: 217; KOJIMA & FUJISAWA, 2015: 519 (biological note).

Redescription. Male. Length: 2.3–2.8 mm; width: 1.2–1.4 mm.

Derm black; antennae, posterior margins of elytra, tarsi, and often bases and apices of tibiae reddish brown. Body clothed with yellowish to whitish gray and blackish narrow scales; pronotum with median and lateral stripes of yellowish to whitish gray scales; elytra with the following markings of yellowish to whitish gray scales: basal and submedian bands, subapical patch on declivity, and post-scutellar, submedian and apical spots on suture; underside and legs thinly and almost evenly clothed with grayish to yellowish gray narrow scales.

Head closely punctured, bearing short fuscous setae in each puncture; forehead between eyes 1/6 as wide as base of rostrum, covered with fuscous setae. Rostrum 0.8 times as long as pronotum, covered with yellowish gray narrow scales on each side near base. Antennae inserted slightly beyond middle of rostrum; funicle with 1st segment about 1.5 times as long as broad, 2nd slightly shorter than 1st, 3rd to 7th each about 3/5 as long as 2nd; club 1.7 times as long as broad, nearly as long as basal three funicular segments taken together.

Prothorax 1.4 times as wide as long, widest at basal fourth; dorsum reticulately punctured, punctures slightly larger than those on head, becoming smaller near anterior margin, simple medially, without any remarkable structures. Scutellum densely covered with short yellowish gray scales. Elytra 2.2–2.3 times as long as pronotum, 1.3 times as long as wide, subparallel-sided in basal half, and then gradually narrowing posteriorly; intervals each with three to four rows of narrow scales. Legs with fore femora slightly thicker than mid and hind pairs, usually furnished with short suberect seta at subapical part of anterior margin, and simple near base, not constricted, each femur armed with small triangular tooth, which is slightly larger than those on posterior pairs and about 1/5 as wide as femur at widest point; fore tibiae slightly sinuate internally and barely widened apicad from basal 1/3 to 2/3, each with minute premucro almost as large as those on mid and hind pairs (Figs. 9, 10).

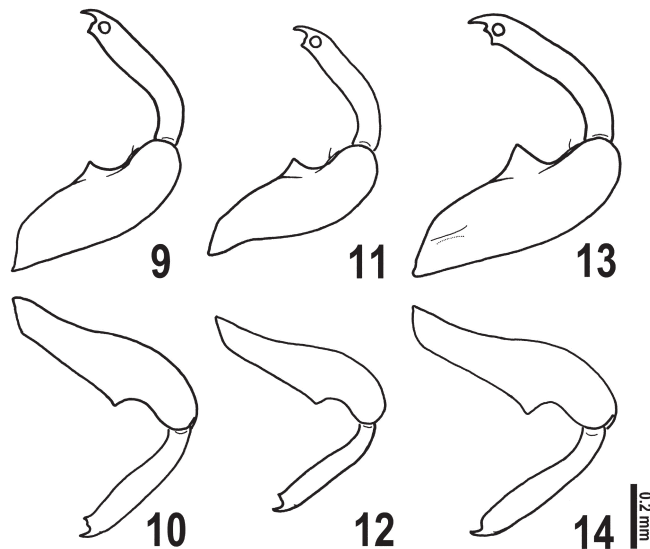
Prosternum with canal long, extending near posterior margins of fore coxa; sternellum weakly raised ventrally on each side, not edged, with caudal margins weakly produced posteriorly. Mesosternal process wider than mid coxa (Fig. 15).

Terminalia as illustrated (Figs. 18–21); tegmen with apodeme about 1/3 of its entire length; aedeagus with body short, nearly as long as broad, shorter than apodemes, truncate at tip, orificial sclerites nearly 1/3 of body, apodemes half as long as entire length of aedeagus, internal sac nearly as long as body, with nine sclerites.

Female. Length: 2.2–2.6 mm; width: 1.1–1.3 mm. Similar to the male except rostrum slightly longer, 9/10 as long as pronotum, antennae inserted just slightly beyond middle of rostrum.

Terminalia as illustrated (Figs. 22–25); spermatheca comma-shaped, ramus simple, spermathecal gland robust at base.

Specimens examined. [Kyushu]: 1 ♂, Ushiroda, Kimotsuki Town, Kimotsuki-gun, Kagoshima Pref., Japan, 14.V.2014, H. SAWADA. [Ryukyus] Yaku-shima Is.: 1 ♀, Hanyama, 28.IV.–1.V.2007, T. YAMAUCHI *et al.* (Collision trap); 1 ♂, 2 ♀♀, Hanyama, 1.V.–5.VI.2007, T. YAMAUCHI *et al.* (Malaise trap); 1 ♀, Kankake, 28.VI.–30.VII.2007, T. YAMAUCHI *et al.* (Malaise trap); 1 ♂, 1 ♀, 17.V.2015, Y.



Figs. 9–14. Legs of *Podeschrus* spp. (9, 11, 13, fore leg; 10, 12, 14, hind leg). — 9, 10, *Podeschrus signatus* ROELOFS; 11, 12, *P. ryukyuensis* sp. nov. 13, 14, *P. morimotoi* sp. nov.

FUJISAWA; 3 ♂♂, Yudomari, 18.V.2015, Y. FUJISAWA. Kuchinoshima Is.: 1 ♀, Seranma, 5.V.2013, H. KOJIMA. Nakanoshima Is.: 1 ♂, 2 ♀♀, Funakura–Oike, 19.IV.1997, N. TAKAHASHI; 1 ♂, 1 ♀, Mt. Otake, 20.IV.1997, N. TAKAHASHI; 1 ♂, 1 ♀, Ôkizaki, 30.IX.2015, H. KOJIMA; 1 ♀, Oike, 30.IX.2015, H. KOJIMA; 1 ♂, 1 ♀, Nishi–Kusuki, 1.X.2015, H. KOJIMA; 2 ♂♂, 2 ♀♀, Entrance of Mt. Otake-tozandôro, 2.X.2015, H. KOJIMA.

Distribution. Japan (Kyushu, Ryukyus: Yaku-shima, Kuchinoshima and Nakanoshima Isls.).

Bionomics. The adults were captured on *Ficus* spp. such as *F. microcarpa*, *F. superba* var. *japonica*, and *F. erecta* (Gajumaru, Akô and Inubiwa in Japanese, respectively). On Yaku-shima Is., some adults were captured on branches of a more or less stressed tree of *F. microcarpa*, which was damaged by a leaf beetle, *Morphosphaera coerulea* (Chrysomelidae).

Remarks. With regard to *P. signatus*, MORIMOTO (1960) described the structure of prosternal canal that reaches the level between the posterior margins of the fore coxae. In fact, however, it just well extends beyond the middle of the fore coxae, but does not reach the posterior margins. This species is characterized by a combination of the following features: yellowish to whitish gray scales forming lateral and median stripes on pronotum and basal and submedian bands on elytra, which are more than twice (2.2–2.3 times) as long as pronotum; fore femora each with a small triangular tooth, which is slightly larger than those on posterior pairs; prosternum with canal well extending beyond middle of fore coxae.

Podeschrus chatterjeei (MARSHALL, 1936), comb. rev.

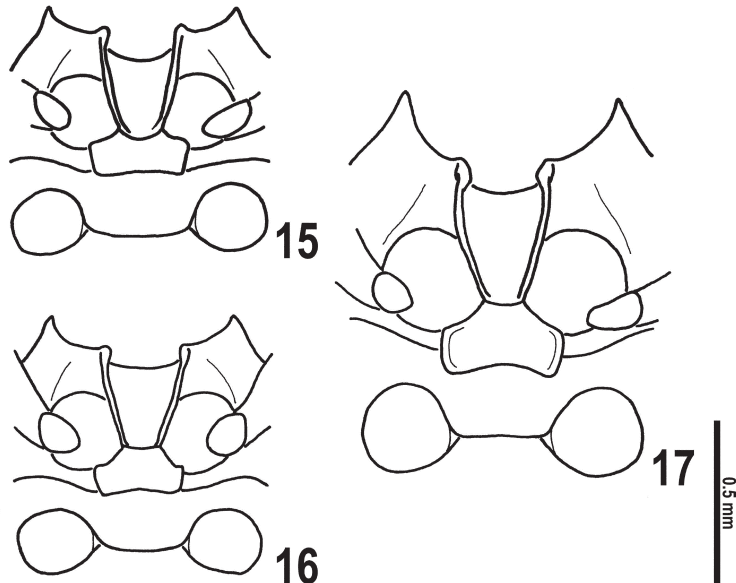
Meneudetus chatterjeei MARSHALL, 1936: 223, pl. 1, fig. 6 (Kalimpong, Bengal).

Meneudetus chatterjeei (sic): KUMAR, 2014: 189.

Podeschrus chatterjeei: MARSHALL, 1938: 175.

Podeschrus chatterjeei (sic): KUMAR, 2014: 188.

Kumozio chatterjeei (sic): KUMAR, 2014: 188 (redescription with habitus photograph & figures of male and female terminalia).



Figs. 15–17. Prosternum and mesosternal process of *Podeschrus* spp. — 15, *Podeschrus signatus* ROELOFS; 16, *P. ryukyuensis* sp. nov.; 17, *P. morimotoi* sp. nov.

See MARSHALL (1936) and KUMAR (2014) for description.

Distribution. India (West Bengal: Kalimpong).

Remarks. This species is characterized by a combination of the following features: pronotum with an abbreviated median smooth line on disc; elytra about 1.6 times as long as pronotum, with a basal quadrate patch and submedian band of yellowish scales; fore femora each with a larger triangular tooth than posterior pairs; prosternal canal reaching the middle of fore coxae.

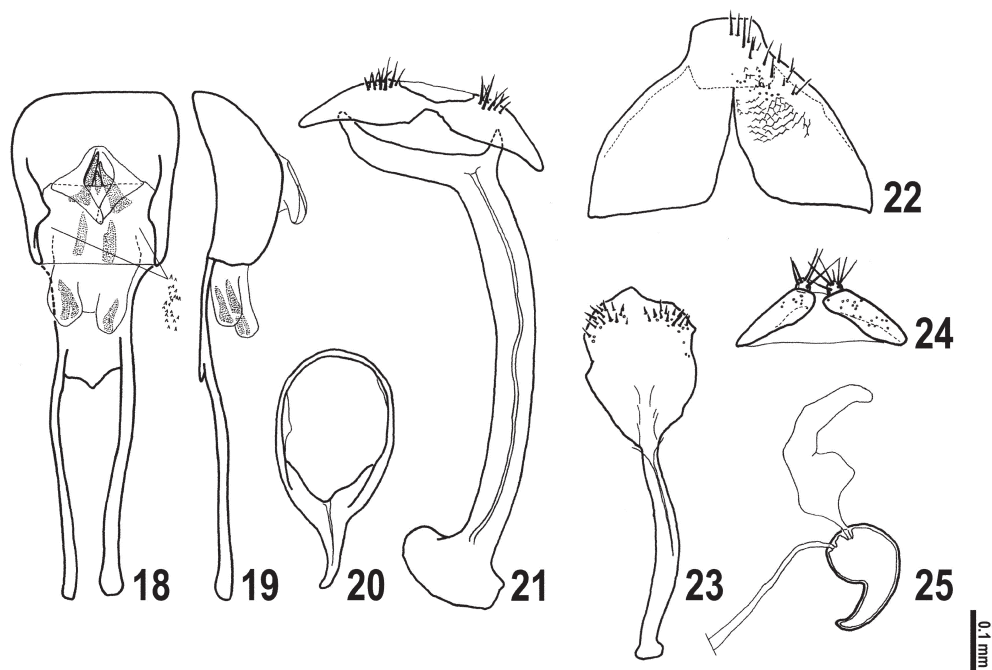
As this species possesses the diagnostic features of *Podeschrus*, it is hereby restored to the genus. See the aforementioned remarks of the genus for the taxonomic position of this species in detail.

***Podeschrus ryukyuensis* sp. nov.**

(Figs. 2, 6, 11, 12, 16, 26–33)

M a l e. Length: 2.3–3.0 mm; width: 1.2–1.5 mm.

Derm black; antennae, posterior margins of elytra, femoral apices, tibiae and tarsi reddish brown. Body clothed with fuscous, yellowish gray, and whitish narrow scales; pronotum with median and lateral stripes of yellowish gray scales, mingled with whitish ones, each of which is usually connected by transverse median band; median stripe often interrupted greatly by fuscous scales on disc and divided into subtriangular antescutellar patch and apical small one; lateral stripes each divided by fuscous scales into three patches on basal, submedian, and apical parts; patches on basal angles of pronotum quadrate, distinct, mainly composed of whitish scales; submedian and apical patches smaller than basal one; elytra covered with yellowish gray to whitish scales and sparsely irregularly mottled with small spots of fuscous scales, with dark transverse scaly patch on subapical part across suture, rarely



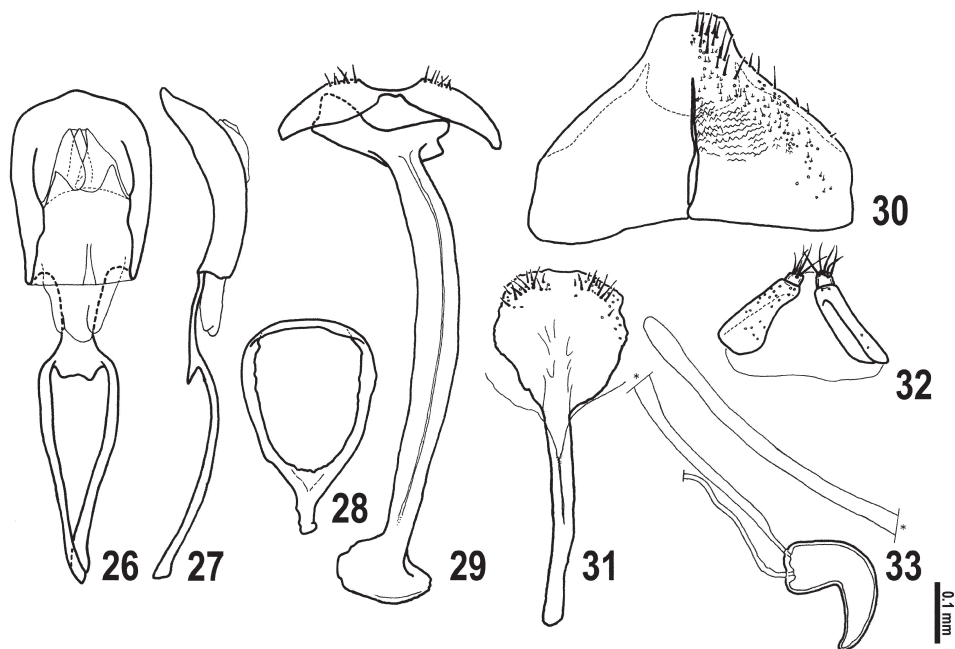
Figs. 18–25. Male and female terminalia of *Podeschrus signatus* ROELOFS (18–21, male; 22–25, female). — 18, Aedeagus, dorsal; 19, ditto, lateral; 20, tegmen; 21, sternite 8 and spiculum gastrale; 22, tergite 8; 23, sternite 8; 24, hemisternites; 25, spermatheca.

largely clothed with fuscous scales except basal and apical parts with yellowish gray to whitish scales; elytral suture with postmedian and subapical spots of whitish scales; underside and legs thinly and evenly clothed with yellowish gray narrow scales.

Head closely punctured, bearing short fuscous setae in each puncture, except middle of vertex usually bearing yellowish gray narrow scales in each puncture and forming median patch; forehead between eyes $1/6$ as wide as base of rostrum, covered with yellowish gray narrow scales. Rostrum $4/5$ as long as pronotum, covered with yellowish gray narrow scales on each side of basal half. Antennae inserted slightly beyond middle of rostrum; funicle with 1st segment about 1.5 times as long as broad, 2nd slightly shorter than 1st, 3rd to 7th each about $3/5$ as long as 2nd; club 1.3 times as long as broad, nearly as long as basal three funicular segments taken together.

Prothorax 1.3 times as wide as long, widest at or just behind basal fourth; dorsum reticulately punctured, punctures slightly larger than those on head, becoming smaller near anterior margin, simple medially, without any remarkable structures. Scutellum densely covered with short yellowish gray scales. Elytra 1.9–2.1 times as long as pronotum, 1.2 times as long as wide, subparallel-sided in basal half, and then gradually narrowing posteriorly; intervals each with three to four rows of narrow scales. Legs with fore femora slightly thicker than mid and hind pairs, usually furnished with short suberect seta at subapical part of anterior margin, constricted near base, each femur armed with small triangular tooth, which is slightly larger than those on posterior pairs and about $1/3$ – $1/4$ as wide as femur at widest point; fore tibiae slightly sinuate internally and barely widened apicad from basal $1/3$ to $2/3$, each with minute premucro almost as large as those on mid and hind pairs (Figs. 11, 12).

Prosternum with canal slightly extending beyond middle of fore coxae; sternellum weakly raised



Figs. 26–33. Male and female terminalia of *Podeschrus ryukyuensis* sp. nov. (26–29, male; 30–33, female). — 26, Aedeagus, dorsal; 27, ditto, lateral; 28, tegmen; 29, sternite 8 and spiculum gastrale; 30, tergite 8; 31, sternite 8; 32, hemisternites; 33, spermatheca.

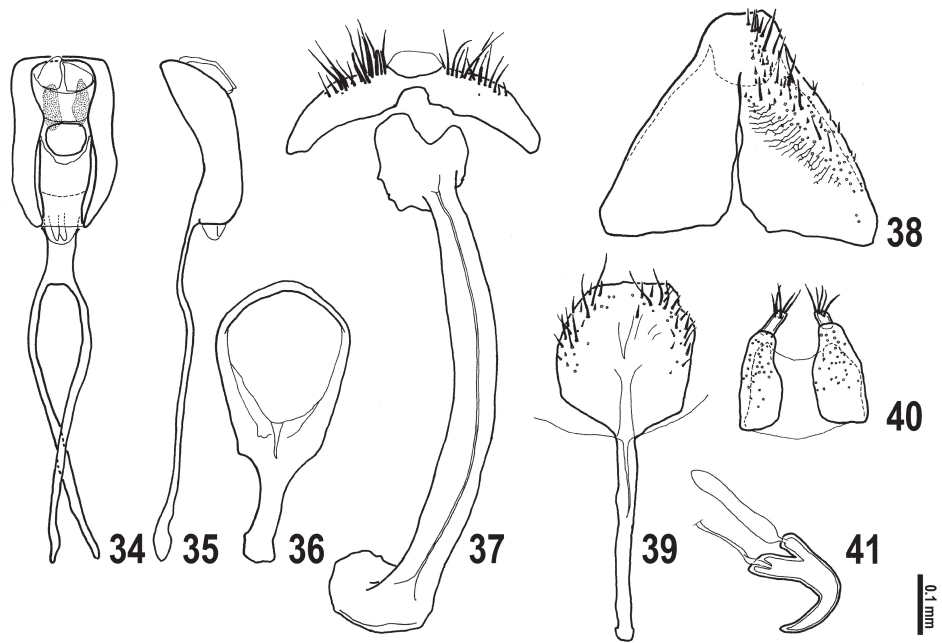
ventrally on each side, not edged, with caudal margins weakly produced posteriorly. Mesosternal process nearly as wide as mid coxa (Fig. 16).

Terminalia as illustrated (Figs. 26–29); tegmen with apodeme short, about 1/4 of its entire length; aedeagus with body 1.5 times as long as broad, slightly roundly produced at tip, slightly shorter than its apodemes, orificial sclerites about 1/3 as long as aedeagal body, apodemes about half as long as entire length of aedeagus, internal sac nearly as long as aedeagal body, without sclerites.

F e m a l e. Length: 2.2–2.9 mm; width: 1.1–1.5 mm. Similar to the male except rostrum slightly longer, 9/10 as long as pronotum, antennae inserted barely beyond middle of rostrum.

Terminalia as illustrated (Figs. 30–33); spermatheca comma-shaped, ramus simple, not differentiated; spermathecal gland very long, nearly 4.0 times as long as its body.

Type series. Holotype: ♂, Āra-rindō, Kume-jima Is., Ryukyus, Japan, 29.IV.2011, H. KOJIMA (TUA). Paratypes: [Ryukyus] Okinawa-jima Is.: 1 ♂, 1 ♀, Yona, 28.IV.1989, Y. OKUSHIMA (TUA); 2 ♂♂, 1 ♀, Mt. Ōnishi-dake (alt. 176 m), Kunigami Vill., 26.IV.2010, H. YOSHITAKE (NIAES); 1 ♀, Mt. Nishime-dake, Ōgimi Vill., 6.V.2015, H. SAWADA (TUA). Kume-jima Is.: 10 ♂♂, 4 ♀♀, same data as the holotype (TUA); 3 ♂♂, 3 ♀♀, M. KUME (TUA). Ishigaki-jima Is.: 1 ♂, Hirano, 18.IV.1992, H. KOJIMA (TUA); 1 ♂, 1 ♀, Takeda-rindō–Mt. Omoto-dake, 18.III.1998, N. TAKAHASHI (TUA); 1 ♂, Mt. Yarabu-dake, 23–25.III.2007, H. KAWAI (NIAES); 1 ♀, Mt. Omoto-dake, 17.III.2012, Y. FUJISAWA (TUA); 2 ♂♂, 5 ♀♀, Mt. Nosoko-dake, 16.III.2013, H. YOSHITAKE (NIAES); 1 ♂, Ōura Dam, 16.III.2013, H. YOSHITAKE (NIAES). Iriomote-jima Is.: 1 ♀, Haemi-naka, Ōtomi-rindō, 15.III.2013, Y. NAKATANI (NIAES); 1 ♂, Haemi, 16.III.2015, K. WATANABE (TUA); 1 ♂, Ōtomi, 7.V.1989, Y. OKUSHIMA (TUA); 1 ♂, 29.VII.2014, H. KOJIMA (TUA); 1 ♂, Ōtomi-rindō, 27.IV.2012, Y. FUJISAWA



Figs. 34–41. Male and female terminalia of *Podeschrus morimotoi* sp. nov. (34–37, male; 38–41, female). — 34, Aedeagus, dorsal; 35, ditto, lateral; 36, tegmen; 37, sternite 8 and spiculum gastrale; 38, tergite 8; 39, sternite 8; 40, hemisternites; 41, spermatheca.

(TUA); 1 ♂, 30.IV.2012, Y. FUJISAWA (TUA); 1 ♂, Ôhara–Mihara, 19.IV.1993, H. KOJIMA (TUA); 2 ♂♂, Nakamagawa-rindô, 27.III.1990, H. KOJIMA (TUA); 1 ♂, 27.V.1990, H. KOJIMA (TUA); 5 ♂♂, 2 ♀♀, Airagawa, 13.III.1998, N. TAKAHASHI (TUA); 1 ♂, 2 ♀♀, 15.III.1998, N. TAKAHASHI (TUA); 2 ♂♂, 2 ♀♀, 15.III.2013, H. YOSHITAKE (NIAES); 1 ♂, 12.III.2013, H. YOSHITAKE & Y. NAKATANI (NIAES); 1 ♂, Komi, 8–11.IV.1997, H. YOSHITAKE (NIAES); 1 ♀, 14.III.2013, Y. NAKATANI (NIAES); 1 ♀, 15.III.2013, Y. NAKATANI (NIAES); 1 ♂, 17.III.2015, K. WATANABE (TUA); 1 ♂, 19.III.2015, K. WATANABE (TUA); 1 ♂, 1 ♀, Funaura–Mihara, 19.IV.1993, H. KOJIMA (TUA); 4 ♂♂, 1 ♀, Shirahama-rindô, 8–11.IV.1997, H. YOSHITAKE (NIAES); 1 ♀, Shirahama, 12.III.2013, Y. NAKATANI (NIAES); 3 ♂♂, Iriomote, 20.III.2015, K. WATANABE (TUA); 1 ♀, Gunkan-iwa–Kanpira, 14.III.1998, N. TAKAHASHI (TUA). Yonaguni-jima Is.: 2 ♂♂, Kubura–Hikawa, 21–22.IV.1993, H. KOJIMA (TUA); 1 ♂, Mt. Kubura-dake, 26–31.III.1997, T. ISHIKAWA (NIAES); 14 ♂♂, 4 ♀♀, 23.III.1999, T. KURIHARA (NIAES); 6 ♂♂, 29.V.2013, Y. FUJISAWA (TUA); 2 ♂♂, 30.V.2013, Y. FUJISAWA (TUA); 1 ♂, Mt. Donan-dake, 4.VI.2013, Y. FUJISAWA (TUA).

Distribution. Japan (Ryukyus: Okinawa-jima, Kume-jima, Ishigaki-jima, Iriomote-jima and Yonaguni-jima Isls.).

Etymology. The specific name is given after the known range of the species.

Bionomics. Some specimens were captured on *Ficus microcarpa* and *F. superba* var. *japonica* (Gajyumaru and Akô in Japanese, respectively).

Remarks. This species is easily separable from other congeners by the following features: head with a median patch of yellowish gray scales on vertex; elytra about twice as long as pronotum, mottled with fuscous scales, lacking a distinct submedian band; fore femora slightly thicker and each with

a slightly larger triangular tooth than posterior pairs; prosternal canal slightly extending beyond middle of fore coxae.

Podeschrus ryukyuensis shows a remarkable variation in the elytral vestiture, differing from other congeners. In *P. ryukyuensis*, the elytra are mainly covered with yellowish gray to whitish scales, but in some individuals the elytra are mostly covered with fuscous scales. Additionally, the elytra of this species are mottled with dark scaly spots and patches in varying size and shape.

***Podeschrus morimotoi* sp. nov.**

(Figs. 3, 4, 7, 8, 13, 14, 17, 34–49)

M a l e. Length: 2.5–3.3 mm; width: 1.2–1.7 mm.

Derm black; antennae, posterior margins of elytra, apices of tibia and tarsi dark reddish brown. Body clothed with fuscous to blackish narrow scales and with markings of yellowish to yellowish gray narrow scales; pronotum with two patches on basal angles and four subapical spots, which are arranged in transverse row and sometimes confluent with each other, in addition to antescutellar spot and pair of faint median spots; basal patches and subapical spots sometimes connected with each other on sides of pronotum; elytra with two or three spots on suture, basal spots on 3rd intervals, and small basal spots on 8th intervals, in addition to yellowish to yellowish gray scales scattered on remaining area; legs and underside thinly and almost evenly clothed with grayish to yellowish gray narrow scales, except 5th ventrite with pair of dark scaly spots.

Head closely punctured, bearing short fuscous setae in each puncture; forehead between eyes $1/5$ as wide as base of rostrum, covered with fuscous setae. Rostrum $7/10$ as long as pronotum, covered with yellowish white narrow scales on each side of basal half; basal half of dorsum with a median carina, which is flanked by four carinae. Antennae inserted just behind apical $1/3$; funicle with 1st segment about 1.4 times as long as broad, 2nd as long as 1st, 3rd to 7th each about $3/5$ times as long as 2nd; club 1.6–1.7 times as long as broad, nearly as long as basal four funicular segments taken together.

Prothorax 1.3 times as wide as long, widest at basal $1/3$; dorsum reticulately punctured, punctures slightly larger than those on head, becoming smaller near anterior margin, simple medially, without any remarkable structures. Scutellum thinly covered with short yellowish gray or fuscous scales. Elytra 1.8–2.0 times as long as pronotum, 1.2 times as long as wide, subparallel-sided in basal $1/3$ and then gradually narrowing posteriorly; intervals each with three to four rows of narrow scales. Legs with fore femora thicker than mid and hind pairs, usually furnished with short suberect seta at subapical part of anterior margin, with faint ridge on ventral surface near base, and simple near base, not constricted, each femur armed with large triangular tooth, which is larger than those on posterior pairs and about $1/3$ as wide as femur at widest point; fore tibiae slightly sinuate internally and barely widened in apical half of internal margins, each with minute premucro, which is indistinct on mid and hind pairs (Figs. 13, 14).

Prosternum with canal slightly extending beyond middle of fore coxae; sternellum raised ventrally on sides, forming edges, with caudal margins produced posteriorly. Mesosternal process nearly as wide as mid coxa (Fig. 17).

Terminalia as illustrated (Figs. 34–37, 42–45); tegmen with apodeme about $1/3$ of its entire length; aedeagus with body about 1.7 times as long as broad, truncate at tip, $2/3$ as long as its apodemes, orificial sclerites nearly $1/3$ of aedeagal body, apodemes slightly longer than $1/2$ of entire length of aedeagus, internal sac as long as aedeagal body, with pair of sclerites.

F e m a l e. Length: 2.9–3.5 mm; width: 1.3–1.7 mm. Similar to the male except rostrum slightly longer, 4/5 as long as pronotum, antennae inserted slightly beyond middle of rostrum.

Terminalia as illustrated (Figs. 38–41, 46–49); spermatheca with ramus differentiated; spermathecal gland moderate in length, nearly as long as its body.

Etymology. The specific name is dedicated to the eminent Japanese curculionologist, Dr. K. MORIMOTO.

Remarks. This species is characterized by having the following features: fore femora thicker than posterior pairs, each with a large triangular tooth and a faint ridge on ventral surface near base; prosternum with sternellum raised and edged ventrally on each side; 5th ventrite with a pair of dark spots of fuscous scales.

This species can be divided in two subspecies as follows:

***Podeschrus morimotoi morimotoi* nominate subsp.**

(Figs. 3, 7, 13, 14, 17, 34–41)

M a l e and f e m a l e. Length: 2.5–3.5 mm; width: 1.2–1.7 mm.

Scutellum thinly covered with short yellowish gray scales. Elytra with three (postscutellar, submedian and apical) spots of yellowish scales on suture.

Type series. Holotype: ♂, Mt. Yonaha-dake, Okinawa-jima Is., Ryukyus, Japan, 20–22.III.1998, N. TAKAHASHI (TUA). Paratypes: [Ryukyus] Okinawa-jima Is.: 2 ♀♀, Yona, 24.III.1964, T. SHIRÔZU (KUM); 2 ♂♂, 25–28.IV.1965, S. HIRASHIMA (KUM); 1 ♂, 14.III.1988, T. UENO (KUM); 2 ♂♂, 1 ♀, 28.IV.1989, H. KOJIMA; 1 ♀, 28.IV.1989, Y. OKUSHIMA (TUA); 1 ♀, Yona-field (alt. 25 m), Univ. Ryukyus, 20.IV.2016, S. SHIMAMOTO (TUA); 1 ♂, 2 ♀♀, Ôkuni-rindô, Kunigami-gun, 15.IX.1986, K. KUME (KUM); 2 ♀♀, 14.XI.1987, K. KUME (KUM); 1 ♂, 19.VII.1987, K. KUME (KUM); 7 ♂♂, 3 ♀♀, 18.IV.1988, K. KUME (KUM); 1 ♀, Fukubaru, Ôkuni-rindô, Kunigami-gun, 18.IV.1988, K. KUME (KUM); 1 ♂, Usa-hama (alt. 0–10 m), Kunigami Vill., Kunigami-gun, 22.IV.2016, S. SHIMAMOTO (TUA); 2 ♂♂, Yona-rindô, Kunigami Vill., Kunigami-gun, 21.IV.2016, Y. TAMADERA (TUA); 4 ♂♂, Mt. Yonaha-dake, 16–21.IV.1997, H. YOSHITAKE (NIAES); 1 ♂, Mt. Nekumachiji-dake, 4.V.2015, T. HASEGAWA (TUA).

Distribution. Japan (Ryukyus: Okinawa-jima Is.).

Bionomics. Some specimens were captured on *Ficus virgata* (Hamainubiwa in Japanese).

***Podeschrus morimotoi satsunanensis* subsp. nov.**

(Figs. 4, 8, 42–49)

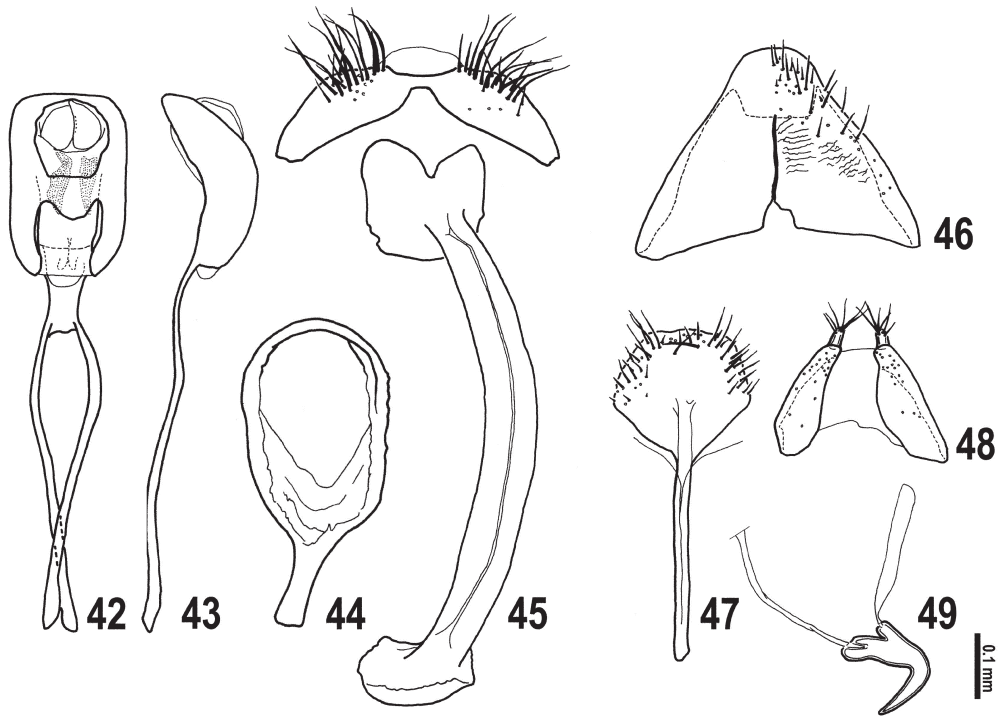
M a l e and f e m a l e. Length: 2.5–3.3 mm; width: 1.3–1.7 mm.

Differing from the nominate subspecies in the following points.

Scutellum thinly covered with short fuscous scales. Elytra with two (submedian and apical) spots of yellowish scales on suture.

Type series. Holotype: 1 ♀, Seranma, Kuchinoshima Is., Tokara Isls., Ryukyus, Japan, 5.V.2013, H. KOJIMA (TUA). Paratypes: [Ryukyus] Kuchinoshima Is.: 2 ♀♀, Shûraku, 2–4.V.2013, H. KOJIMA (TUA); Nakanoshima Is.: 2 ♀♀, 21.V.1962, M. SATÔ (KUM). Amami-Ôshima Is.: 1 ♀, Mt. Yui-dake, Setouchi Town, 23–26.IV.1997, H. YOSHITAKE (NIAES). Tokunoshima Is.: 1 ♂, Isen Town, Tokunoshima Is., 27.V.2007, K. WATANABE (TUA).

Distribution. Japan (Ryukyus: Kuchinoshima, Nakanoshima, Amami-Ôshima and Tokunoshima



Figs. 42–49. Male and female terminalia of *Podeschrus morimotoi satsunanensis* subsp. nov. (42–45, male; 46–49, female). — 42, Aedeagus, dorsal; 43, ditto, lateral; 44, tegmen; 45, sternite 8 and spiculum gastrale; 46, tergite 8; 47, sternite 8; 48, hemisternites; 49, spermatheca.

Isls.).

Etymology. The subspecific name is given after the known range of this subspecies.

Bionomics. Adult weevils were captured on *Ficus microcarpa* (Gajyumaru in Japanese) on Kuchinoshima Is.

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要 約

藤澤侑典・小島弘昭：ヒメクモゾウムシ族 *Podeschrus* 属(鞘翅目ゾウムシ科)の分類学的再検討。——
Podeschrus 属について分類学的再検討を行い、属の模式種であるキュウシュウヒメクモゾウムシ *P. signatus* ROELOFS, 1875 について再記載を行なうとともに、琉球列島から2新種1新亜種(*P. ryukyuensis* sp. nov.,

P. morimotoi sp. nov. および *P. morimotoi satsunanensis* subsp. nov.) を記載した。また、近年、*Podeschrus* 属から *Kumozo* 属に移されたインド産の *K. chatterjeei* (MARSHALL, 1936) の所属をもとの *Podeschrus* 属に戻した。その結果、日本およびインドから計 4 種を確認し、属の再定義を行なった。日本産の本属の種はいずれもクワ科イチジク属 (*Ficus* spp.) から成虫が得られており、クワ科植物を寄主としている可能性が高いと考えられる。

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