

**New Cerambycid Beetles of the Genus *Demonax*
THOMSON from Taiwan
(Coleoptera, Cerambycidae)**

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Abstract Four new cerambycid beetles of the genus *Demonax* THOMSON are described from Taiwan: *Demonax formosomontanus*, *D. nishiyamai*, *D. sulinensis* and *D. masaoi*.

Throughout the survey made in recent years by our friends and us, a large number of specimens belonging to the tribe Clytini were collected in the various parts of Taiwan. These collections includes many undescribed or unrecorded species on the fauna of Taiwan. Although most of them are still under investigation, we are going to describe four new species of the genus *Demonax* THOMSON as a part of our study.

The following abbreviations are used in this paper: HW-maximum width of head, PW-maximum width of pronotum, PL-length of pronotum, PA-apical width of pronotum, PB-basal width of pronotum, EW-maximum width of elytra, EL-length of elytra.

Before going further, we express our hearty thanks to Dr. Yoshihiko KUROSAWA of National Science Museum (Nat. Hist.), Tokyo, for allowing us to study the museum collection, to Messers Masao ITO, Shusei SAITO and Akira NISHIYAMA for their kind offers of materials, and to Mr. Sumao KASAHARA for his preparing of the illustrations used herein.

***Demonax formosomontanus* IKEDA et NIISATO, sp. nov.**

Male. Body rather elongate and cylindrical, with legs very long. Colour black, slightly brownish on antennae and tarsi, and dark reddish brown to yellowish brown on mouthparts except for black mandibular tips, tibial spurs and claws.

Head in large part densely clothed with pale yellow pubescence, with gula sparsely with yellowish white pubescence and semilong hairs. Antennae densely clothed with pale

yellowish gray pubescence, though the pubescence become more yellowish on the distal segments; underside of 2 to 4 with semilong pale yellow hairs. Pronotum densely clothed with yellowish gray pubescence, which are arranged as shown in fig. 1. Prosternum densely clothed with dull gray pubescence. Elytra densely clothed with olive gray pubescence, each with the following darkish areas: a squarish black spot on epipleuon behind humerous; a V-shaped black band, starting just behind scutellum, curving obliquely backward to middle of disc, then curving and narrowing forward to external margin, where it is joined to the preceding spot; a broad black band on basal third, zigzag anteriorly and oblique (almost transverse in the allotype) posteriorly; a somewhat vague dark yellowish brown band on apical sixth. Ventral sides of mid and hind thoraces densely clothed with dull gray to yellowish gray pubescence, except for mesosternal process, mesepimeron, metasternum and middle part of metapisternum dense white pubescent. Abdomen clothed with dense dull gray pubescence and sparse semilong erect goldenish yellow hairs intermixed except for posterior half of 1st sternite and most of 2nd sternite white pubescent. Legs clothed with gray pubescence, and goldenish yellow hairs sparsely intermixed on femora and tibiae.

Head distinctly narrower than pronotum (HW/PW 0.73), densely and rather coarsely punctured, the punctures being coarser on occiput and sparser on gula; frons almost squarish, a little wider than long, wider at apex than at base (1: 0.86), gently convex, with anterior part rather strongly depressed, sinuately bordered along lateral margins; clypeus trapezium, about 3 times as long as wide, narrower at apex than at base (1:1.2); genae as deep as lower eyelobes. Antennae slender and long, reaching elytral apices; scape slightly arched, shorter than 2; 4 as long as scape; 5 a little longer than 3; 5 to 10 slightly decreasing in length; 11 as long as 9; 3 and 4 briefly toothed apically, though the tooth is obsolete in 3; relative lengths of segments — 1.7:0.5:2.0:1.7:2.1:2.0:1.7:1.6:1.5:1.4:1.5. Pronotum spherical, widest at middle; PW/HW 1.36, PW/PL 0.94, PW/PB 1.48, PW/PA 1.43; disc rather strongly convex, fairly even, in large part rather finely reticulate. Scutellum triangular. Elytra 2.7 times as long as the humeral width, almost parallelsided; humeri strongly expanded; each apex almost transversely truncate, with a minute projection at external angle; disc slightly raised near suture behind scutellum, densely and finely granulose. Ventral surface finely and very sparsely punctured. Legs elongate, with hind legs 2.3 times as long as elytra; 1st hind tarsal segments 2.8 times as long as the following two segments combined.

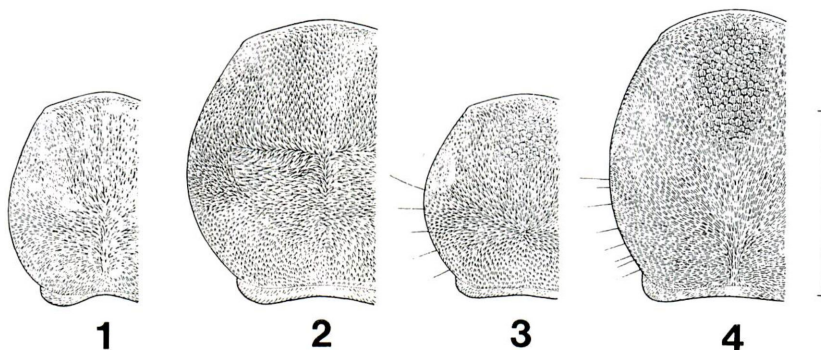
Length: 9.5 mm; width: 2.1 mm.

Female. Antennae fairly short, barely reaching about apical third of elytra, relative lengths of segments — 1.5:0.5:1.6:1.5:1.7:1.5:1.3:1.1:1.05:1.0:1.05; legs a little shorter. (the specimen examined has more brownish body than the holotype).

Length: 8.8 mm; width: 2.1 mm.

Type series. Holotype: ♂, Tohasu, at the northern side of the Jiuyuehtan lake, Yuchih, Nantou Hsien, C. Taiwan, 23. III. 1981, K. IKEDA leg. Allotype: ♀, C. Taiwan, 1967, ex. coll. Y. KUROSAWA (no further data).

Notes. This species very closely resembles to *D. simillimus* GRESSITT distributed in E. China such as Chekiang, Kiangsu and Fukien. From the information of the original description of *D. simillimus* by GRESSITT (1939), it is clear that this species is distinct



Figs. 1–4. Pronotum of *Demonax* spp. — 1, *D. formosomontanus* IKEDA et NIISATO; 2, *D. nishiyamai* NIISATO; 3, *D. sulinensis* NIISATO; 4, *D. masaoi* NIISATO. Scale: 2 mm.

from *D. simillimus*, in being the smaller body (12.5 mm in *D. simillimus*) and having the reticulate pronotal disc (granulose in *D. simillimus*).

***Demonax nishiyamai* NIISATO, sp. nov.**

Female. Closely stands by preceding species, *D. formosomontanus*, from which it is difficult to distinguished by the elytral maculation alone. Different from *D. formosomontanus* in some external characters, especially by the stout and shorter antennae, by the larger and transverse pronotum and by the posteriorly attenuate elytra.

Colour black, slightly brownish on tarsi, and dark reddish brown on mouthparts except for black mandibles, tibial spurs and claws.

Head densely clothed with yellowish gray pubescence, except for gula which is thinly with pale gray hairs; antennae densely clothed with pale yellowish gray pubescence, the pubescence become yellowish on distal segments; pronotum densely clothed with yellowish gray pubescence, which are arranged as shown in fig. 2; prosternum in large part densely clothed with pale yellowish gray pubescence; scutellum rather thinly clothed with olive gray pubescence; elytral maculation as in *D. formosomontanus*, though the colour of pubescence are more yellowish, and the 2nd black band is sinuate posteriorly; ventral surface densely clothed with pale yellowish gray pubescence, except for basal two and last abdominal sternites which are clothed with pale gray pubescence, and intermixed with goldenish yellow short hairs on femora and tibiae.

Head as in *D. formosomontanus*, though the frons is almost flattened except for the anterior depression. Antennae stout and rather short, reaching apical third of elytra; 3 and 4 briefly toothed apically; relative lengths of segments — 2.2:0.7:2.3:2.0:2.3:2.1:1.8:1.5:1.4:1.1:1.4. Pronotum almost globose, larger and more transverse than in *D. formosomontanus*, evidently wider than head and nearly as wide as the humeral width of elytra, widest at two-sevenths from apex; PW/HW 1.3, PW/PL 1.07, PW/PB 1.3, PW/PA 1.3; disc strongly convex, and moderately reticulate. Scutellum triangular. Elytra 2.6

times as long as the humeral width, a little wider than pronotum; sides gradually attenuate from base to apex; humeri distinctly expanded; each apex sinuately truncate, with external angles briefly toothed; disc slightly raised near suture behind scutellum, finely granulose. Ventral surface finely and closely punctured. Legs very long, though fairly stout than in *D. formosomontanus*, with hind legs a little less than twice as long as elytra; first hind tarsal segment 2.5 times as long as the following two segments combined.

Length: 12.5 mm; width: 3.0 mm.

Holotype, ♀, Lienhwachih (about 800 m alt.), Yuchih, Nantou Hsien, central Taiwan, 14. V. 1980, A. NISHIYAMA leg.

Demonax sulinensis NISHIYAMA, sp. nov.

Female. Body moderately robust and elongate. Colour black, partially blackish brown; tibial spurs and claws dark reddish brown.

Head densely clothed with dullish yellow pubescence, the pubescence become sparser on gula; genae densely with pale yellowish gray pubescence. Antennae densely clothed with silvery gray pubescence. Pronotum densely clothed with dullish yellow pubescence, with a few long pale hairs on basal half on each side; pronotal pubescence arranged as shown in fig. 3. Scutellum densely clothed with olive gray pubescence. Elytra densely clothed with olive gray pubescence, each with the following two black and one olive green pubescent bands: a rather narrow V-shaped black band, starting just behind scutellum, curving obliquely, and slightly broadening then narrowing to middle of disc, where it is angulate behind, and then curving and narrowing forward to external margin; a broad black band just before middle, zigzag anteriorly and oblique posteriorly; a vague defined olive green band in apical fourth. Ventral sides of mid and hind thoraces densely clothed with yellowish gray pubescence; mesosternal process, external margin of mesepisternum, most of metasternum and metaposternum except for the apical part with dense whitish pubescence. Abdomen densely clothed with pale yellowish gray pubescence and with a few erect goldenish yellow hairs intermixed, the former of which are slightly more yellowish on 3 and 4 sternites. Legs rather densely clothed with pale gray pubescence and sparsely with short goldenish yellow hairs.

Head distinctly narrower than pronotum (HW/PW 0.74), densely and rather coarsely punctured, except for gula which is more coarsely and sparsely punctured, frons squarish, longer than wide (1: 0.86), apex as wide as base, almost flattened though moderately depressed near the anterior part, with a indistinct median furrow and also with lateral borders almost straight; clypeus transverse, a little less than 5 times as long as wide, distinctly narrower at apex than at base (1:1.35), with anterior margin weakly emarginate; genae 0.88 times as deep as lower eyelobes. Antennae fairly stout, reaching apical third of elytra; scape slightly arched, a little shorter than 3; 4 shorter than scape and as long as 6; 5 as long as scape; 6 to 8 decreasing in length; 9 to 11 equal in length and each segment 0.8 times as long as 8; 3 and 4 distinctly toothed apically, though the tooth in 4 is about twice as long as in 3; relative lengths of segments — 1.6:0.6:1.7:1.4:1.6:1.4:1.3:1.0:0.8:0.8:0.8. Pronotum globose, widest at middle; PW/HW 1.35, PW/PL 1.0, PW/PB 1.43, PW/PA 1.51; disc moderately convex, somewhat impressed near middle part,

with reticulation large and distinct. Scutellum subtriangular, rounded at apex. Elytra 2.6 times as long as the humeral width; sides moderately expanded at humeri, slightly narrowed behind humeri then parallel to middle, weakly rounded and gradually attenuate to apices, which are sinuately truncate and briefly toothed at external angles; disc longitudinally raised near suture behind scutellum, densely and finely granulose. Ventral surface in large part sparsely and indistinctly punctured, though the mesothorax and the anterior part of metapisternum are scarabrously punctured. Legs moderate in length; hind legs 1.8 times as long as elytra, strongly bended at base of femora, with 1st tarsal segment a little more than twice as long as the following two segments combined.

Length: 9.2 mm; width: 2.3 mm.

Holotype, ♀, Sulín, Fushín, Taoyuan Hsien, northern Taiwan, 27. IV. 1978, S. SAITO leg.

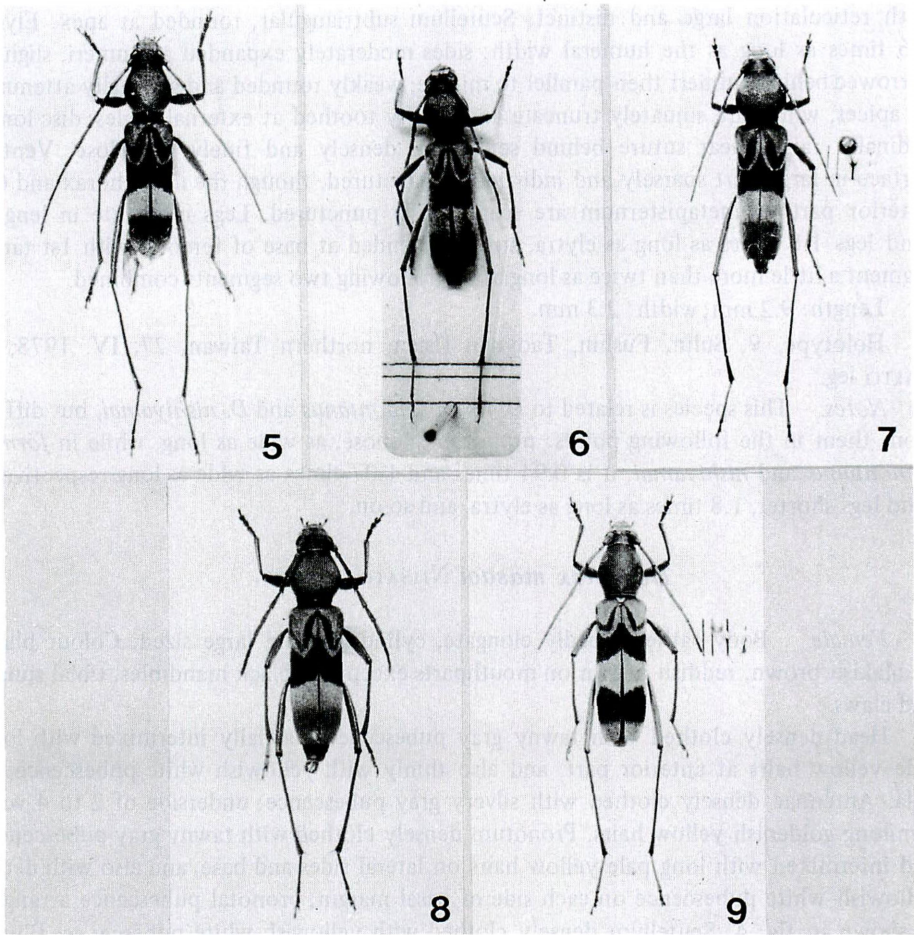
Notes. This species is related to *D. formosomontanus* and *D. nishiyamai*, but differs from them in the following points: pronotum globose, as wide as long, while in *formosomontanus* and *nishiyamai*, it is 0.94 times and 1.07 times as wide as long respectively; hind legs shorter, 1.8 times as long as elytra, and so on.

Demonax masaoi NIISSATO, sp. nov.

Female. Body rather broadly elongate, cylindrical and large sized. Colour black to blakish brown, reddish brown on mouthparts except for black mandibles, tibial spurs and claws.

Head densely clothed with tawny gray pubescence, partially intermixed with long pale yellow hairs at anterior part, and also thinly with yellowish white pubescence on gula. Antennae densely clothed with silvery gray pubescence; underside of 2 to 4 with semilong goldenish yellow hairs. Pronotum densely clothed with tawny gray pubescence, and intermixed with long pale yellow hairs on lateral sides and base, and also with dense yellowish white pubescence on each side of basal margin; pronotal pubescence arranged as shown in fig. 4. Scutellum densely clothed with yellowish white pubescence. Elytra densely clothed with dull gray pubescence, each with the following maculation of black pubescence: a triangular spot on epipleuron behind humerous; a narrow V-shaped band, commencing just behind scutellum, slightly broadening and bending away from suture to middle of disc, then curving and narrowing forward to the preceding spot; a broad oblique band in basal third, zigzag anteriorly and oblique posteriorly; a somewhat vague broad band in apical fourth, strongly projected anteriorly and almost transverse posteriorly. Ventral surface densely clothed with yellowish white pubescence and sparsely with long pale yellow hairs intermixed; posterior margin of mesopimeron, metapimeron and basal margin of metasternum densely with white pubescence. Legs densely clothed with dull gray pubescence, with mid and hind femora and tibiae sparsely with short goldenish yellow hairs intermixed.

Head distinctly narrower than pronotum (HW/PW 0.74), rather densely and finely punctured, except for gula which is sparsely and coarsely punctured; frons almost squarish, as wide as long, a little wider at apex than at base (1: 0.92), almost flattened except for the anterior depression, with median furrow extending to vertex, and also



Figs. 5–9. *Demonax* spp. — 5, *D. formosomontanus* IKEDA et NIISATO, male (holotype); 6, ditto, female (allotype); 7, *D. nishiyamai* NIISATO, female (holotype); 8, *D. sulinensis* NIISATO, female (holotype); 9, *D. masaoi* NIISATO, female (holotype).

with lateral borders rather strongly sinuate; clypeus transverse, about 3 times as long as wide, narrower at apex than at base (1 : 1.18); genae as deep as lower eye-lobes. Antennae stout and moderate in length, reaching about middle of elytra; scape slightly arched and shorter than 3; 4 a little shorter than scape and 0.76 times as long as 3; 5 as long as scape; 6 to 11 decreasing in length; 3 and 4 with distinct tooth at each apex, though the tooth in 4 is a little longer than in 3; relative lengths of segments — 2.2:0.7:2.5:1.8:2.1:1.8:1.6:1.2:1.1:1.0:0.9. Pronotum longer than wide, widest at middle; PW/HW 1.34, PW/PL 0.79, PW/PB 1.29, PW/PA 1.48; disc moderately convex, with reticulation large and distinct. Scutellum rather large, rounded at apex. Elytra 2.7 times as long as the humeral width; sides almost parallel in basal four-fifths, and then gradually attenuate toward

apices; humeri moderately expanded; each apex transversely truncate, with a brief projection at external angle; disc slightly raised near suture behind scutellum, and very finely granulose. Ventral surface minutely and obsoletely punctured, with a few visible punctures on base of prosternum and mesepisternum. Legs stout and moderate in length, with hind legs about twice as long as elytra; 1st hind tarsal segment about 3 times as long as the following two segments combined.

Length: 13 mm; width: 3 mm.

Holotype, ♀, Mt. Nanfengshan (about 1000 m alt.), near Liukuei, Kaohsiung Hsien, southern Taiwan, 26. V. 1981, M. ITO leg.

Notes. This species is easily separable from the preceding three species by the robust and broad body.

All the type specimens treated in this study are preserved in the National Science Museum (Nat. Hist.), Tokyo.

摘 要

台湾より次のトゲヒゲトラカミキリ属 *Demonax* の4新種を記載した。

1) *Demonax formosomontanus* IKEDA et NHSATO, sp. nov. 中国東部に分布する *D. similimus* GRESSITT に近縁な種と思われるが、体長は小さく、前胸背の表面が網目状になる点などから区別できる。台湾中部南投縣及び中部産の詳細不明のそれぞれ1個体ずつの標本を検した。

2) *Demonax nishiyamai* NHSATO, sp. nov. 前種及び *D. similimus* に非常に近縁な種と思われる、とくに翅鞘の斑紋は極めて良く似ているが、前胸はより幅広く、翅鞘両側は先端に向けて強く細まる特徴から識別は可能である。台湾中部南投縣産の1♀を検した。

3) *Demonax sulinensis* NHSATO, sp. nov. 翅鞘の斑紋は前2種に良く似ているが、より丸味のある前胸、短い跂などから一見して区別できる。台湾北部桃園縣産の1♀を検した。

4) *Demonax masaoi* NHSATO, sp. nov. 翅鞘の斑紋は前3種にやや似るが、頑強で幅広い体から容易に識別できる。台湾南部高雄縣産の1♀を検した。

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