

**A new genus of Mordellidae from East Asia
with description of a new species
(Insecta: Coleoptera)**

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東アジアからのハナノミ科の新属と一新種について
(昆虫綱：鞘翅目)

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抄録：Ermischが1941年に記載した*Mordellistenoda*属は、雄が口器に特徴的な小顎髯(maxillary palpus)を持つ東アジア産の一群で、おもにこの形質によって属が定義されていた。本稿ではこの形質だけではこの*Mordellistenoda*属の特徴を持つものの、後脚脛節端棘や交尾器側片の形状からは本属には含まれないと考えられる2種に基づき、新属*Asiatolida*を創設し記載した。南西諸島産の一新種を*A. miyatakei*として記載して模式種とし、近縁な中国浙江省産の一既知種*Mordellistenoda melana* Fan et Yang, 1995を本属に含めた。

Abstract: *Asiatolida miyatakei* gen. et sp. nov. is described from the Nansei Islands, Japan. The new genus is characteristic in having the peculiar maxillary palpi in male alike those of *Mordellistenoda*, but tibial spurs of hind legs are different in length, and both parameres of male genitalia are rather symmetrical and provided each with a ventral branch. *Mordellistenoda melana* Fan et Yang, 1995 from China (Zhejiang Prov.) is newly transferred to this genus judging from the description and figures.

Key words: Coleoptera; Mordellidae; *Asiatolida* new genus; *miyatakei* new species; East Asia; Japan; Nansei Iss.; China; Zhejiang

The feature of maxillary palpi has been recognized as one of the most important structures for the taxonomy of Mordellidae. Franciscolo (1957) recognized such 5 types in those features as the *Mordella*-, *Glipa*-, *Mordellochroa*-, *Mordellistenula*- and *Glipodes*-types, and subdivided each into 2 to 4 subtypes. His type C-4 in *Mordellochroa*-type is characteristic in having the terminal segment of the maxillary palpi ovate and articulated with the penultimate segment at the middle of basal margin. The palpi of this type have been regarded as the key feature for the genus *Mordellistenoda*, and thus it is newly termed here the *Mordellistenoda*-type.

Since the revision of *Mordellistenoda* in East Asia (Shiyake, 1997), a series of specimens from the Nansei Islands, Japan in the collections of the institutions noted below have been

examined including an apparent new species, which possesses the following distinctive characteristics: (1) maxillary palpi are categorized in the *Mordellistenoda*-type, (2) two spurs on the tip of hind tibia are not equal in length, (3) both parameres of male genitalia are rather symmetrical and are provided with ventral branches in both ones, whereas in *Mordellistenoda* the tibial spurs are equal in length and both parameres are asymmetrical and ventral branch is wanting on the left one. These two characteristics are commonly found in the tribe Mordellistenini, but are different from *Mordellistenoda* in spite of the same type of the maxillary palpi.

In this paper, a new genus is proposed upon the mentioned new species, and a species in the genus *Mordellistenoda* from China is newly transferred to the genus.

Abbreviation of the depositories

NIAES: Laboratory of Insect Systematics, National Institute of Agro-Environmental Science, Tsukuba, Ibaraki Pref., Japan

OMNH: Osaka Museum of Natural History, Osaka, Japan

URN: Faculty of Agriculture, University of the Ryukyus, Nishihara, Okinawa, Japan

Asiatolida gen. nov.

Description. Eyes oval to circular and coarsely faceted. Antennae moderately long and slightly serrate in both sexes, each segment almost equally long and 1.7 to 2.0 times as long as wide. Maxillary palpi sexually dimorphic, terminal segment in male widely ovate, articulated to penultimate segment at middle of hind margin, terminal segment in male of *Mordellistenoda*-type, widely ovate, articulated with penultimate segment at middle of hind margin, evenly arcuate at distal margin, depressed at granulate distal area, fringed with hairs along lateral and distal margins, terminal segment in female of *Mordellistena*-type, securiform, penultimate segment not dilated in both sexes. Penultimate segments of fore and middle tarsi dilated, almost as long as wide, depressed for receiving ultimate segment and jointed with terminal segment at center of dorsal surface. Pronotum with lateral margins nearly straight in profile, anterior angle broadly rounded at tip, posterior angles rectangular and narrowly rounded at tip. Hind tibial spurs not equal length. Ridges on hind legs long and oblique, 3rd tarsal segment with 0 to 2 ridges. Parameres of male genitalia in general shape of the tribe Mordellistenini, provided with a ventral branch on each one.

Body somewhat small, 2.2–3.5 mm and dark brown to black in the known species.

Affinities. This new genus is common with some species of *Mordellistenoda* in having the reniform terminal segment in male maxillary palpi, but the tibial spurs of hind legs are unequal in length in both sexes, and the parameres of male genitalia are almost symmetrical, whereas in *Mordellistenoda* the tibial spurs are equal in length and both parameres are asymmetrical and ventral branch are wanting on the left one. The females which do not have the peculiar maxillary palpi is difficult to distinguish from those of *Glipostenoda*, but the posterior angles of pronotum are not obtusely and widely rounded but nearly rectangular, and that

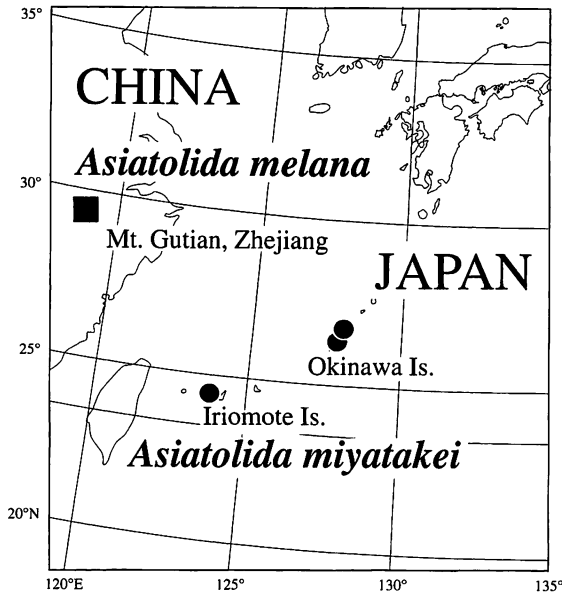


Fig. 1. The locality map of the two *Asiatolida* species.

Distribution. Japan (Nansei Iss.) and eastern China (Fig. 1).

Etymology. Asia+Tolida, of which the latter is a generic name of Mordellidae and has been adopted for the formation of some genera such as *Tolidopalpus*, *Pseudotolida* or *Tolidostena*. Though the genera are common in having enlarged terminal segment in the male of maxillary palpi, the true *Tolida* in the modern definition does not have such palpi because of the confusion of *Tolida* and relatives at the early part of the 20th century.

Remarks. It seems to be likely that the range of the generic distribution covers Taiwan.

Asiatolida miyatakei sp. nov.

(Figs. 2 and 3)

Japanese name: Miyatake-hime-hananomi.

Description. Coloration (Fig. 2 and 3-A) dark brown in general, basal half of elytra a little paler, head rather blackish, mouth parts, antennae and four anterior legs reddish brown. Hairs on almost whole body yellowish with luster.

Eyes circular, somewhat large and pubescent without emargination, with rather coarse facets. Tempora present but very narrow. Antennae (Fig. 3-E) moderately long and slightly serrate in both sexes, each segment almost equally long, each of 3rd and 4th somewhat thin and 2 times as long as wide, each of 5th to 10th about 1.7 times as long as wide. Maxillary palpi sexually dimorphic, terminal segment in male widely ovate, articulated with penultimate segment at middle of hind margin, terminal segment in male of *Mordellistenoda*-type, widely ovate, articulated to penultimate segment at middle of hind margin, evenly arcuate at distal

the combined length of 3rd and 4th segments of antennae is clearly longer than that of the 5th segment. *Tolidopalpus* Ermisch, 1952 after the redefinition of Shiyake, 1995 may be similar to this new genus, but the eyes are finely faceted, the antennae are remarkably short and serrate, the pygidium are short and stout, and the terminal segment of maxillary palpi is articulated at the end of base.

Type species. *Asiatolida miyatakei* sp. nov., which will be described below.

Another species included. *Asiatolida melana* (Fan et Yang, 1995) comb. nov. from China (*Mordellistenoda*).



Fig. 2. Habitus of *Asiatolida miyatakei* sp. nov.

margin, depressed at granulate distal area, fringed with hairs along lateral and distal margins, terminal segment in female of *Mordellistena*-type, securiform, penultimate segment not dilated in both sexes. Pronotum a little wider than long, lateral margins nearly straight in profile and converging anteriorly when seen above, anterior angle broadly rounded at tip, posterior angles rectangular and narrowly rounded at tip, apical and basal margins protrudent in usual way. Elytra 2.0 times as long as their humeral breadth, about 2.5 times as long as pronotum, tapered posteriorly. Apical margin of anal sternite not emarginate but straight in both sexes. Pygidium moderately long and formed as in usual species of Mordellistenini, about 1/3 as long as elytron.

Penultimate segments of fore tarsi (Fig. 3-G) dilated, almost as long as wide, depressed for receiving ultimate segment and jointed with terminal segment at center of dorsal surface. Penultimate segment of middle tarsi almost the same as that of fore tarsi. Hind legs (Fig. 3-F) with long and oblique ridges, formulated as 3, 3, 2, 0; tibiae provided with 3 long and oblique ridges, apical ridge the shortest and angled to tibial edge, one more rudimental ridge often present basally; 1st segment of tarsi usually with 3 oblique ridges, the basal ridge sometimes absent; 2nd segment with 2 ridges; 3rd segment without ridge. Outer spur on hind tibia about 3 times as long as inner one.

Eighth abdominal urosternum in male nearly quadrate, median lobe slightly protrudent with sparse hairs, lateral wings slightly protrudent and broadly rounded at apices.

Parameres of male genitalia (Fig. 3-C) of usual shape of the tribe Mordellistenini, provided with a ventral branch on each one, left paramere with moderately long main lobe, basal process recognizable at apical 1/4, ventral branch longer than the main lobe; right paramere

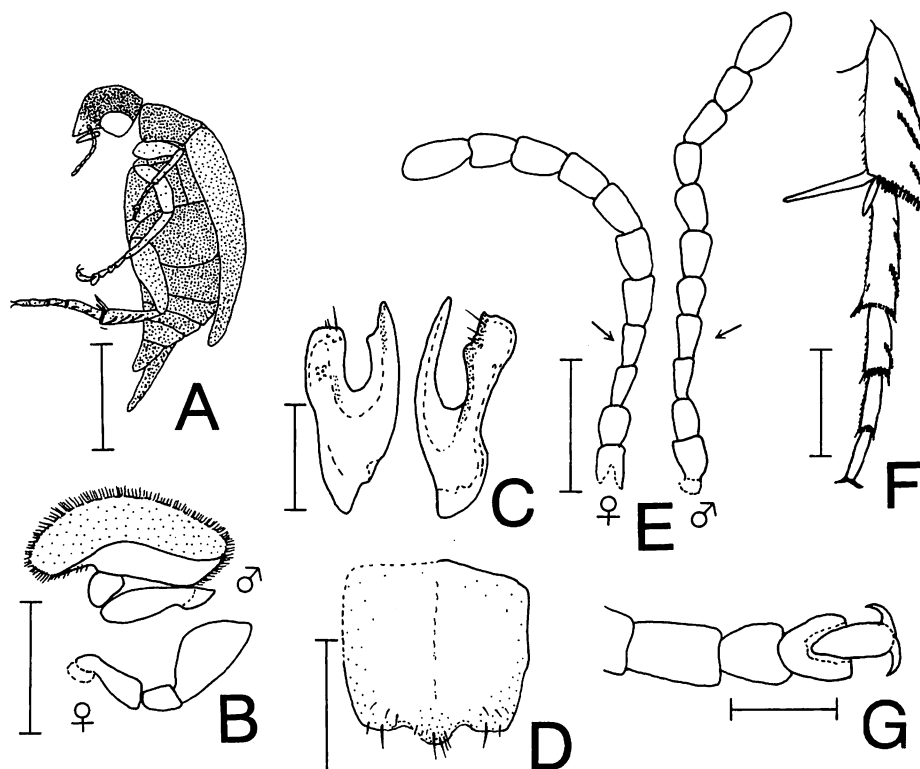


Fig. 3. *Asiatolida miyatakei* sp. nov. — A, lateral view; B, maxillary palpus, C, parameres of genitalia; D, 8th abdominal urosternum in male, E, antennae (4th segment arrowed); F, hind leg, G, distal segments of fore tarsus. Scales: A 1.0mm, C and G 0.1mm, the rest 0.25mm.

with thick main lobe, ventral branch longer than the main lobe and provided with a process.

Body length: 2.2–2.5mm. (excl. pygidium)

Holotype. ♂, Mt. Nishime (alt. 360m), Kunigami-son, Okinawa Is., Nansei Iss., Japan, 19.x.1987, M. Sakai leg. [OMNH TI-125].

Paratypes. [Okinawa Is.] 1♂, Nago City, 12.x.1988, K. Konishi leg. (NIAES); 1♂, Kunigami-son, 10-11.x.1988, K. Konishi leg. (NIAES); 2♀♀, Oura, 19.x.1990, M. Hayashi leg. (OMNH). [Iriomote Is.] 1♂, Inaba, 20.viii.1971, S. Azuma leg. (URN); 1♂, Shirahama, 18.viii.1971, S. Azuma leg. (URN).

Distribution. Nansei Iss. (Okinawa Is. and Iriomote Is.), Japan.

Affinities. The diagnoses to distinguish from a Chinese congener are noted below.

Etymology. The specific name is dedicated to Mr. Yorio Miyatake, a hemipterologist and the former director of the Osaka Museum of Natural History, in commemoration of his retirement on March, 1998.

***Asiatolida melana* (Fan et Yang, 1995) comb. nov.**

Mordellistenoda melana Fan et Yang, 1995: 95. [Type locality. Mt. Gutian (29.3N, 118.2E), Kaihua Co., Zhejiang Prov., China]

According to the description and figures of parameres, maxillary palpus in male, hind leg and antenna in the original description, this species must be a member of the new genus, and is different from *A. miyatakei* in the following points after the original description: Body black and a little longer, 3 to 3.5 mm; the ridges on hind legs formulated as 4; 3, 2, 2; the ventral branch on the left paramere shorter.

No specimen was available to the present study.

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