

A Taxonomic Revision of Tyrini of the Oriental Region

I. *Paralasinus* (Coleoptera, Staphylinidae, Pselaphinae), a New Genus of Tyrina from Indochina

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Abstract A new pselaphine genus, *Paralasinus* gen. nov. is defined with descriptions of five new species: *P. antennatus*, *P. gigas*, *P. humilis*, *P. namcatienicus* and *P. thayerae* from Indochina. The genus is compared with the most closely related genus *Lasinus* SHARP.

Key words: Coleoptera, Staphylinidae, Pselaphinae, Tyrini, *Paralasinus* gen. nov., Oriental Region, taxonomy.

Introduction

From the Oriental Region, eleven genera of the subtribe Tyrina have so far been known (NEWTON & CHANDLER, 1989). During our study of the tribe Tyrini, we discovered a new genus to which we assign herewith five new species. The genus, described below, is closely related to *Lasinus* SHARP, *Pselaphodes* WESTWOOD, *Labomimus* SHARP and *Eulasinus* SHARP.

Materials and Methods

The material used for this study is deposited in the following collections: CPH – P. HLAVÁČ private collection, Ružomberok, Slovakia; FMNH – Field Museum of Natural History, Chicago, USA; MHNG – Muséum d’Histoire Naturelle, Genève, Switzerland; MHNP – Muséum National d’Histoire Naturelle, Paris, France; NMW – Naturhistorisches Museum Wien, Austria; NSMT – National Science Museum, Tokyo, Japan; SNM – Slovak National Museum, Bratislava, Slovakia.

Dissections were made using standard techniques; genitalia and small parts were

mounted in Euparal on an acetate label on the same pin with the specimen. Leica MS5 microscope was used for observation in this study.

Genus *Paralasinus* nov.

Type species: *Paralasinus gigas* sp. nov.

Etymology. The new generic name is formed from a greek “para”, beside or near, and *Lasinus*, showing close relation of the genus to *Lasinus*. Gender masculine.

Description. Body very large and elongate, length 2.9–4.0 mm, combined width of elytra 1.25–1.45 mm.

Head elongate, triangular and narrowed anteriorly, regularly and densely punctate, vertexal and frontal foveae well defined, setose pit posterior to insertion of antennal scape present or replaced by long setation on the surface of head immediately in front of eyes, frons slightly bilobed; head varies from being simply narrowed anteriorly (Fig. 3 B) to strongly constricted and impressed at the anterior margins of eyes (Fig. 3 A); tempora weakly rounded; gular fovea very large. Maxillary palpi (Fig. 2 F) small and slender; segment I minuscule, II slightly pedunculate, about as long as IV, segments III and IV symmetrical. Antennae (Fig. 2 A–E) eleven-segmented, reaching or surpassing the apical margin of elytra, finely punctured and pubescent, some of antennomeres VI–X with broad naked line extending part of or whole length of segment; club three-segmented, antennomeres of club simple and elongate; scape very long, much longer than wide and longer than or as long as antennomeres II–IV combined, all antennomeres elongate.

Pronotum approximately quadrate, densely and regularly punctured, with prominent lateral swellings above well-defined ante-basal lateral foveae, median ante-basal fovea also well-defined, all foveae connected by a shallow ante-basal sulcus, evanescent on disc. Venter:—metasternum chagrined, microstructure reticulate, mesosternal lateral foveae present, mesosternal median foveae encountered; metasternum depressed, with two well defined horny processes, metasternal lateral foveae present, metasternal median fovea absent, basal metasternal process with a notch. Elytra glabrous with two basal foveae prolonged by striae, sutural stria reaching the apex and discal stria extending to two-thirds the elytral length. Legs (Fig. 2 G–I) long and slender, with scattered punctures and pubescence, femora clavate, fore and middle legs with trochanters and femora often bearing spines which are species characteristic, small tooth on metatrochanter present (Fig. 2 I); mesotibia curved throughout their length, tarsi three-segmented with segment I small, segment II linear and longer than III, claws equal in length.

Abdomen large and broad, strongly convex, rounded posteriorly, tergites IV to VII each carinate, tergite IV at least twice as long as V; sternite VII setose across base. Aedeagus strongly sclerotized, parameres paired, elongate and sometimes twisted medially, rounded and setose at apex; median lobe stout and bulbous in basal part, with an ovoid membranous part on basidorsal side, apical part broad and various in shape; en-

dophallus represented by a few well developed hooks.

Remarks. This new genus is most closely related to *Lasinus* in similar structure of the small-sized maxillary palpi, with symmetrical segments II–IV. It differs in the pronotum swollen laterally above ante-basal foveae which are connected by shallow ante-basal sulcus, evanescent on the disc, and by the small tooth on the meta-trochanters. It is clearly separated from other related genera, *Pselaphodes*, *Labomimus* and *Eulasinus* by different structure of maxillary palpi.

Key to the Species of the Genus *Paralasinus* for the Males

1. Head regularly narrowed anteriad without constriction (Fig. 3 B) 2.
- Head strongly constricted and impressed at anterior margin of eyes (Fig. 3 A) . . . 3.
2. Scape long, 4.5 times as long as wide, each mesotrochanter with one small spine close to apex, each mesofemur with a small spine in basal third, metasternal horny processes conical *P. antennatus* sp. nov.
- Scape shorter, maximum 4 times as long as wide, mesotrochanters with two spines, mesofemora lacking spine, metasternal horny processes prominent with tip oriented towards abdomen *P. thayerae* sp. nov.
3. Antennomeres IX short and large, not more than 1.5 times as long as wide, mesotrochanter with one apical spine *P. humilis* sp. nov.
- Antennomeres IX long and slender, distinctly more than twice as long as wide, mesotrochanter with two spines. 4.
4. Scape long, 4.5 times as long as wide and 5 times as long as pedicel *P. gigas* sp. nov.
- Scape short, 3.5 times as long as wide and 3.6 times as long as pedicel *P. namcatienicus* sp. nov.

Paralasinus antennatus sp. nov.

(Figs. 2 A, 3 B–C)

Etymology. The specific name refers to very long and slender antennae, each with slightly modified club.

Description. Body reddish brown, maxillary palpi lighter, length 3.9 mm.

Head (Fig. 3 B) without constriction, about 1.2 times as long as wide and longer than pronotum, setose pit posterior to insertion of antennal scape well defined. Antennae (Fig. 2 A): all antennomeres elongate, club three-segmented with slightly, at apex modified antennomere IX, scape 4.5 times as long as wide and about 4 times as long as short pedicel, III as long as pedicel and slightly shorter than IV, antennomere IV 1.3 times as short as V, which is slightly longer than VII and VIII and slightly shorter than VI, antennomere IX 2.3 times as long as wide, longest, 1.2 times as long as X and XI, antennomere X slender, 2.3 times as long as wide, apical segment oval, about 1.8 times as long as wide, naked line present on antennomeres VII–IX.

Pronotum as long as wide, widest at swellings behind apical third. Metasternum with short and conical horny processes. Legs very long and slender, protrochanter at apex with a minuscule spine, profemur with a hooked spine before the middle, mesotrochanters with minuscule spines close to apices, mesofemur with a minuscule spine at basal third, metatrochanter with a basal tooth.

Abdomen very large, tergite IV more than three times as long as V, discal carinae short, reaching basal fourth of tergite, the distance between discal carinae about one-third of tergite width. Aedeagus (Fig. 3 C) damaged during preparation, elongate; parameres slender with apical setae; median lobe narrowed apically; endophallus well defined with two hooks.

Female. Unknown.

Holotype male, Sa Pa, alt. 1,500 m, by light trap, Lao Cai Prov., N.-Vietnam, 8-X-1995, S. NOMURA leg. (NSMT).

Distribution. Northern Vietnam.

Remarks. This new species is similar to *P. thayerae* in having the head without frontal constriction. It is easily separated by the large body and the elongate and slightly modified antennal club.

***Paralasinus gigas* sp. nov.**

(Figs. 1, 2 C, F-I, 4 A, D)

Etymology. Latin “*gigas*” meaning a giant, in reference to the comparatively large size of the species.

Description. Body dark reddish brown, maxillary palpi lighter, length 3.7–4.0 mm.

Head strongly constricted and impressed at anterior margins of eyes, about 1.3 times as long as wide and longer than pronotum, setose pit posterior to insertion of antennal scape replaced by long setation on the surface of head immediately in front of eyes. Antennae (Fig. 2 C):— all antennomeres elongate, club three-segmented, unmodified, scape 4.5 times as long as wide and 5 times as long as pedicel, which is short, III slightly longer than pedicel and slightly shorter than antennomeres IV, V, VII, and VIII, each of which is of the same length, VI 1.5 times longer than adjacent segments, IX 2.3 times as long as VIII and about 2.5 times as long as wide, X slightly (1.2) shorter than IX and 1.9 times as long as wide, the last two rhombic, wider at apices, apical segment oval, about 1.8 times as long as wide and about as long as IX, naked line present on antennomeres VII–X.

Pronotum slightly wider than long, widest at swellings just before mid-length. Metasternum with short, stout and triangular horny processes. Legs (Fig. 2 G–I) long and stout, protrochanter at apex and profemur in the middle with a minuscule spine, mesotrochanter with two spines, outer one longer, mesofemur simple without any spine, metatrochanter with a basal tooth.

Abdomen large, tergite IV about twice as long as V, discal carinae short, reaching

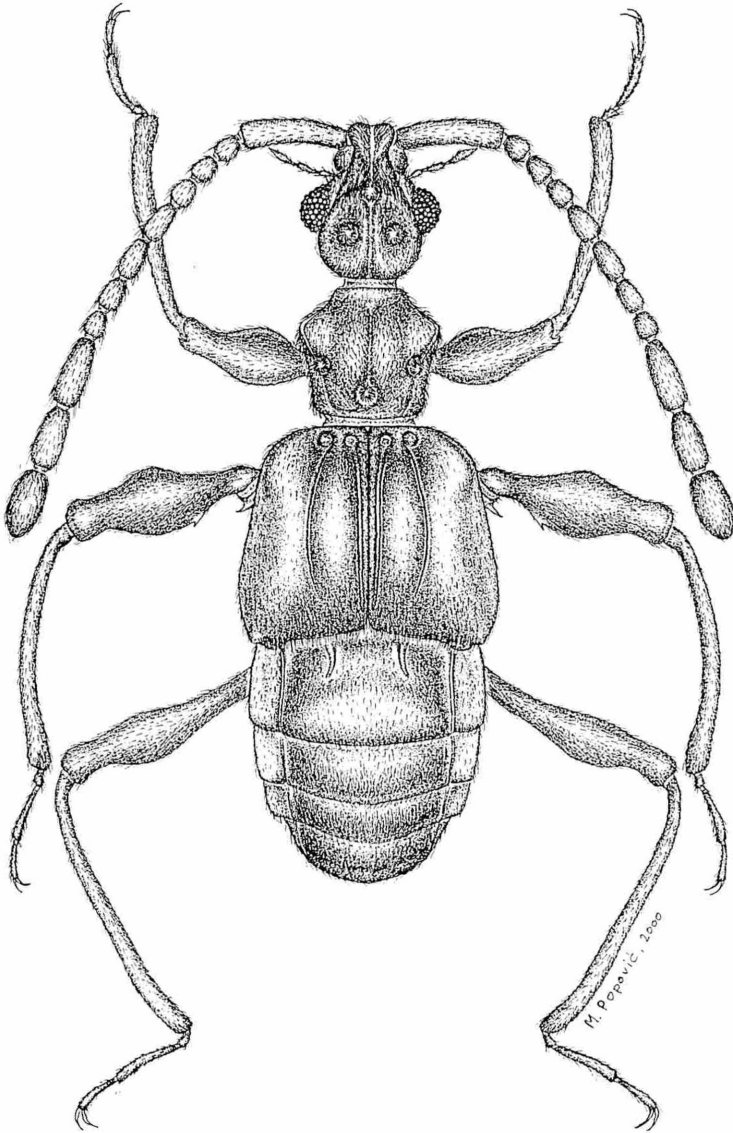


Fig. 1. *Paralasinus gigas* sp. nov., habitus.

basal third of tergite, the distance between discal carinae about one-third of tergite width. Aedeagus (Fig. 4 A, D) elongate; parameres large, each with 4–5 setae at apex; apical part of median lobe gently broadened and weakly curved rightwards; endophallus well defined with two hooks.

Female. Unknown.

Holotype male, 15 km SE of Ban Houaykong, Nong Lom lake env., 800 m alt.,

Bolaven Plateau, Attapu Prov., S.-Laos, 18~30-IV-1999, JENDEK & ŠAUSA leg. (SNM). Paratypes: 51 males, 44 of the same data as the holotype, 2 of the same data as the holotype but 10~18-IV-1999; 1 male, Khao Krok, 300 m alt., nr. Chantha Buri, SE.-Thailand, 25~27-IV-1997, M. TAKAKUWA leg.; 4 males, same locality as above, by light trap, 25~27-IV-1997, S. OHMOMO leg. (CPH, MHNG, MHNP, NMW, NSMT, SNM, FMNH).

Distribution. Southern Laos and southern Thailand.

Remarks. This species is characterized by the large-sized body like *P. antennatus* and *P. namcatienicus*. It is, however, distinguished from the former by the constricted frons and from the latter by the distinctly elongate antennal scape.

***Paralasinus humilis* sp. nov.**

(Figs. 2 D, 4 B, E)

Etymology. Latin, “*humilis*” meaning small, in reference to the small size of the species.

Description. Body dark reddish brown, elytra and maxillary palpi lighter, length 3.2 mm.

Head strongly constricted and impressed at anterior margins of eyes, about 1.3 times as long as wide and longer than pronotum, setose pit posterior to insertion of antennal scape well defined. Antenna (Fig. 2 D): all antennomeres elongate, club three-segmented, unmodified, scape 3.2 times as long as wide and 3.8 times as long as pedicel, antennomeres II–IV of the same length and 0.8 times shorter than V, VI slightly longer than V, and longer than each of VII and VIII, IX rhombic, twice as long as wide and 2.2 times as long as VIII, X oblong, 1.4 times as long as wide and about 1.9 times shorter than IX, apical segment oval, only slightly shorter than IX and 1.7 times as long as wide, naked line present on antennomeres VII–X.

Pronotum slightly wider than long, widest at swellings just before mid-length. Metasternum with short and triangular horny processes. Legs elongate, protrochanter at apex and profemur in the middle with a spine, mesotrochanter with an apical spine, mesofemur with a minuscule spine in basal third, metatrochanter with a median tooth.

Abdomen very large, tergite IV about three times as long as V, discal carinae very short, reaching basal fifth of tergite, the distance between discal carinae about one-fifth of tergite width. Aedeagus (Fig. 4 B, E) elongate; parameres large with short apical setae; apical part of median lobe with a slender projection; endophallus well defined with two hooks.

Female. Unknown.

Holotype male, Buon Luoi, 620–750 m, 40 km NW of An Khe, S.-Vietnam, 28-III~12-IV-1995, PACHOLÁTKO & DEMBICKÝ leg. (SNM). Paratype: 1 male, same data as the holotype (CPH).

Distribution. Southern Vietnam.

Remarks. This new species is characterized by the small body. It differs from

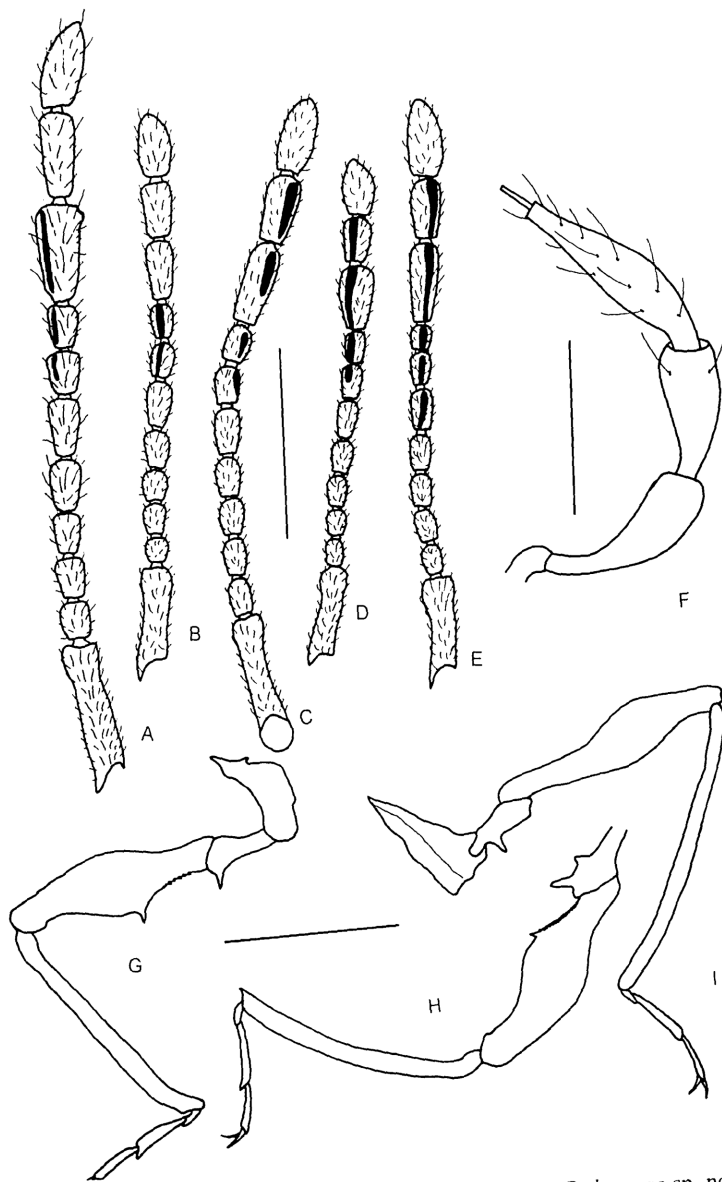


Fig. 2. A-E: Male antennae (A, *Paralasinus antennatus* sp. nov.; B, *P. thayerae* sp. nov.; C, *P. gigas* sp. nov.; D, *P. humilis* sp. nov.; E, *P. namcatienicus* sp. nov.), scale: 1 mm. — F-I: *P. gigas* sp. nov. (F, left maxillary palpus, scale: 0.2 mm; G, fore leg; H, mid leg; I, hind leg; scale: 1 mm).

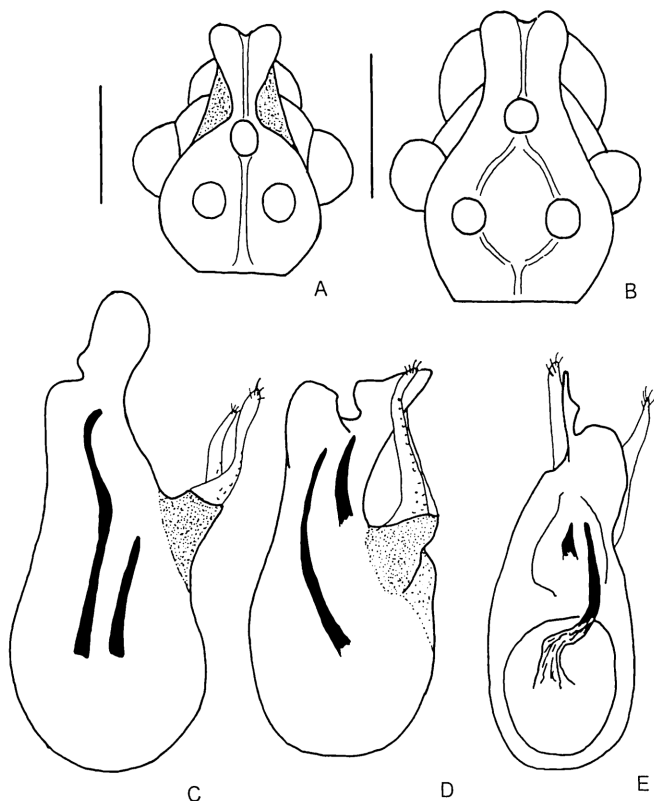


Fig. 3. A: Head of *Paralasinus gigas* sp. nov. B, Head of *P. antennatus* sp. nov. Scale: 0.5 mm. — C–E: Aedeagus (C, *P. antennatus* sp. nov., ventral aspect; D–E, *P. thayerae* sp. nov., ventral and dorsal aspects; scale=0.2 mm).

other congeners by the constricted frons, the elongate antennomere IX and the bispinulate mesotrochanters in the male.

***Paralasinus namcatienicus* sp. nov.**

(Figs. 2 E, 4 C, F)

Etymology. The specific name is given after the type locality of the species.

Description. Body dark reddish brown, maxillary palpi lighter, length 3.7 mm.

Head strongly constricted and impressed at anterior margins of eyes, about 1.4 times as long as wide and longer than pronotum, setose pit posterior to insertion of antennal scape replaced by long setation on the surface of head immediately in front of eyes. Antenna (Fig. 2 E):— all antennomeres elongate, club three-segmented, unmodified, scape 3.5 times as long as wide and 3.6 times as long as pedicel, antennomeres II–IV and VII of the same length, V about 1.15 times shorter than these and about 1.2

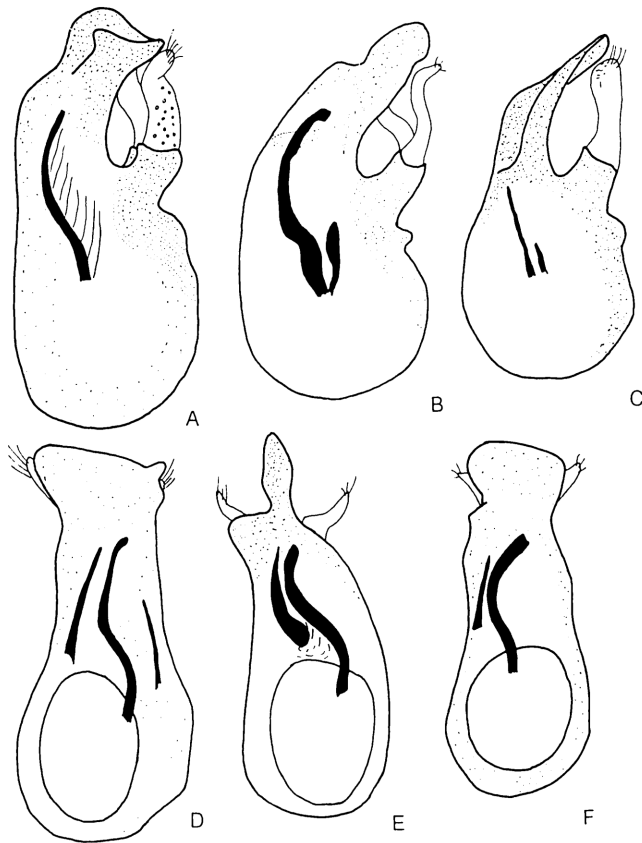


Fig. 4. Aedeagus (above: ventral aspect; below: dorsal aspect). — A, D, *Paralasinus gigas* sp. nov.; B, E, *P. humilis* sp. nov.; C, F, *P. namcatienicus* sp. nov.; scale: 0.2 mm.

times shorter than VI, VIII shortest, IX about 2.7 times as long as VIII and about 2.4 times as long as wide, X slightly (1.15) shorter than IX and 1.9 times as long as wide, the last two rhombic, wider at apices, naked line present on antennomeres VI–X.

Pronotum slightly wider than long, widest at swellings just before mid-length.

Metasternum with a pair of horny processes, each short and triangular. Legs long and stout, protrochanter with a small apical spine, profemur with a minuscule spine in the middle, mesotrochanter with two spines, inner one smaller, mesofemora simple without any spine, metatrochanter with a basal tooth.

Abdomen large and broad, tergite IV about twice as long as V, discal carinae short, hardly reaching basal third of tergite, the distance between discal carinae about 0.35 of tergite width. Aedeagus (Fig. 4 C, F) elongate; parameres large with short apical setae; apical part of median lobe large and almost symmetrical; endophallus well defined with two hooks.

Female. Unknown.

Holotype male: Nam Cat Tien Nat. Park, S.-Vietnam, 1~5-V-1994, PACHOLÁTKO & DEMBICKÝ leg. (NMW).

Distribution. Southern Vietnam.

Remarks. This species is closely allied to *P. gigas*, but is separable by having the shorter and less elongate antennal scape than in *P. gigas*.

***Paralasinus thayerae* sp. nov.**

(Figs. 2 B, 3 D, E)

Etymology. This new species is dedicated to Dr. Margaret K. THAYER, a world-known specialist of Staphylinidae.

Description. Body reddish brown, maxillary palpi lighter, length 3.3 mm.

Head without constriction, about 1.15 times as long as wide and longer than pronotum, setose pit posterior to insertion of antennal scape well defined. Antennae (Fig. 2 B): all antennomeres elongate, club three-segmented, unmodified, scape 4 times as long as wide and about 5 times as long as pedicel, antennomeres II, III, IV, VII and VIII of the same length and 1.2 times shorter than V, antennomere VI 1.3 times longer than V, antennomere IX as long as X and about twice as long as wide, apical segment slightly longer than X and 1.7 times as long as wide, naked line present on antennomeres VII–VIII.

Pronotum slightly wider than long, widest at swellings before mid-length. Metasternal horny processes prominent with tip oriented towards abdomen. Legs long and stout, protrochanter and profemur each with a minuscule spine, mesotrochanter with two minuscule spines, mesofemur with no spine, metatrochanter with small basal tooth.

Abdomen very large, tergite IV slightly more than twice as long as V, discal carinae short, reaching basal third of tergite, the distance between discal carinae less than one-third of tergite width. Aedeagus (Fig. 3 D, E) elongate; parameres long and slender, with 4–5 apical setae; median lobe weakly narrowed distad, with sharpened triangular projection on the right side; endophallus well defined with two hooks.

Female. Similar to male, but the metasternal processes are much shorter, stout and conical.

Holotype male, Cuc Phuong, 340 m alt., Ninh Binh Prov., N.-Vietnam, 1–VI–1998, T. KISHIMOTO leg. (NSMT). Paratype: 1 female, the same data as the holotype but collected on 10–VI–1997 by S. NOMURA (NSMT).

Distribution. Northern Vietnam.

Remarks. This new species is similar to *P. humilis* in the small-sized body, but differs by the head without frontal constriction.

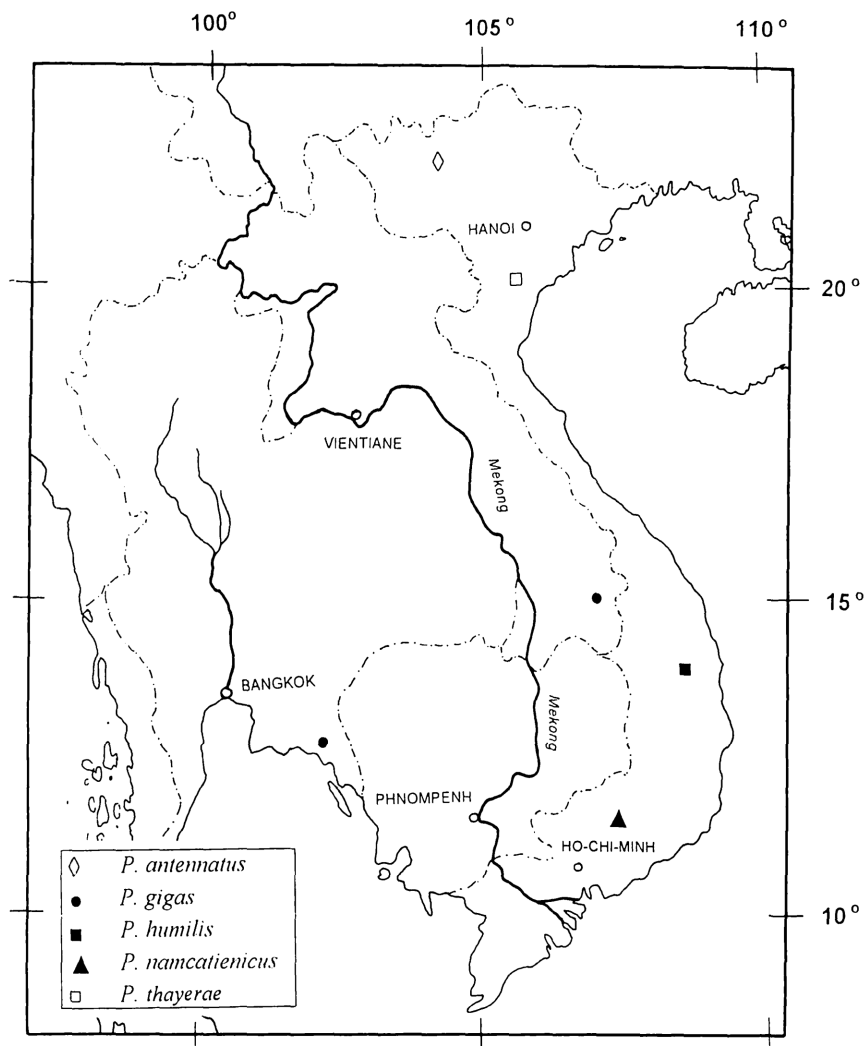


Fig. 5. Map showing the distribution of the genus *Paralasinus*.

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要 約

P. HLAVÁČ・野村周平：東洋区のコケアリヅカムシ族に関する分類学的研究I. インドシナ半島産コケアリヅカムシ亜族の新属 *Paralasinus* (コウチュウ目ハネカクシ科アリヅカムシ亜科)。——コケアリヅカムシ族 *Tyrini*, コケアリヅカムシ亜族 *Tyrina* に属する新属 *Paralasinus* を、インドシナ半島産の以下の5新種に基づいて創設した：*P. antennatus* (ベトナム北部サパ), *P. gigas* (タイプ種。ラオス南部, タイ南部), *P. humilis* (ベトナム南部アンケ近郊), *P. namcatienicus* (ベトナム南部ナムカッティエン国立公園), *P. thayerae* (ベトナム北部クフオン国立公園)。本属は、小さく対称的な小顎肢をもつ点で、日本、中国などから知られるオオトゲアリヅカムシ属 *Lasinus* にもっとも近似するが、前胸部が側方に張り出し、基部の3孔点が横溝によって連結される点で異なっている。

第2著者の野外調査に関しては文部省科学研究費(国際学術研究)課題番号09041167の助成を受けている。

Reference

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