

## Revision of the East Palaearctic and Oriental species of the *Acupalpus* subgenus *Stenolophidius* Jeannel, 1948 (Coleoptera: Carabidae: Harpalini: Stenolophina)

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### Abstract

The taxon *Stenolophidius* Jeannel, 1948, originally introduced as a distinct genus, is here regarded a subgenus of *Acupalpus* Latreille, 1829. The *Acupalpus* subgenera *Pseudanthracus* Habu, 1973 and *Palcuapus* Habu, 1973 are considered junior synonyms of *Stenolophidius* Jeannel, 1948. The East Palaearctic and Oriental species of the subgenus *Stenolophidius* Jeannel, 1948 are revised. *Acupalpus inornatus* Bates, 1873, *A. sinuellus* Bates, 1892, *A. ustus* Andrewes, 1930, *A. rhombotus* Andrewes, 1936, and *A. punctatus* Jedlička, 1936 are redescribed. *Anthracus coloratus* Jedlička, 1936 and *Acupalpus guttiger* Schaubberger, 1938 are considered junior synonyms of *Acupalpus rhombotus* Andrewes, 1936. Five new species are described: *A. hiekei* sp. nov. from Thailand, Vietnam and Malaysia, *A. andrewesi* sp. nov. from India and Sri Lanka, *A. hartmanni* sp. nov. from Nepal, *A. maculipennis* sp. nov. from India and Pakistan, and *A. distincticollis* sp. nov. from S Vietnam. A key to the East Palaearctic and Oriental members of *Stenolophidius* is provided. First and additional distribution records are presented for: *A. rhombotus* Andrewes: first records for India, Vietnam and Laos. *A. punctatus* Jedlička: first records for Thailand, Laos, Cambodia, Vietnam, Indonesia (Java), Sri Lanka, and for the Philippine Isles of Mindanao and Mindoro. *A. sinuellus* Bates: first records for India, Laos and Vietnam. *A. inornatus* Bates: additional records for China.

### Zusammenfassung

#### Revision der ostpaläarktischen und orientalischen Arten der *Acupalpus*-Untergattung *Stenolophidius* Jeannel, 1948 (Coleoptera: Carabidae: Harpalini: Stenolophina)

Das ursprünglich als eigenständiges Genus etablierte Taxon *Stenolophidius* Jeannel, 1948 wird hier als Untergattung zur Gattung *Acupalpus* Latreille, 1829 gestellt. Die *Acupalpus*-Untergattungen *Palcuapus* Habu, 1973 und *Pseudanthracus* Habu, 1973 wer-

den als jüngere Synonyme zu *Stenolophidius* gestellt. Die ostpaläarktischen und orientalischen Arten von *Stenolophidius* werden revidiert. Für *Acupalpus inornatus* Bates, 1873, *A. sinuellus* Bates, 1892, *A. ustus* Andrewes, 1930, *A. rhombotus* Andrewes, 1936 und *A. punctatus* Jedlička, 1936 werden Redeskriptionen vorgelegt. *Anthracus coloratus* Jedlička, 1936 und *Acupalpus guttiger* Schaubberger, 1938 werden als jüngere Synonyme zu *Acupalpus rhombotus* Andrewes, 1936 gestellt. Fünf neue Arten werden beschrieben: *A. hiekei* sp. nov. aus Thailand, Vietnam und Malaysia, *A. andrewesi* sp. nov. aus Indien und Sri Lanka, *A. hartmanni* sp. nov. aus Nepal, *A. maculipennis* sp. nov. aus Indien und Pakistan und *A. distincticollis* sp. nov. aus Vietnam.

Neue Verbreitungsdaten werden für *A. rhombotus* Andrewes (Erstnachweise für Indien, Vietnam und Laos, sowie weitere Nachweise für Java), *A. punctatus* Jedlička (Erstnachweise für Thailand, Laos, Kambodja, Vietnam, Java, Sri Lanka und für die Philippinen-Inseln Mindanao und Mindoro), *A. sinuellus* Bates (Erstnachweise für Indien, Laos und Vietnam) und *A. inornatus* Bates (weitere detaillierte Nachweise für Taiwan und China) aufgeführt.

**Key words:** *Palcuapus*, *Pseudanthracus*, taxonomy, redescrptions, new species, new synonyms, key to species, first records, India, China, Russia, Korea, SE Asia

### Introduction

The taxon *Stenolophidius* was erected by JEANNEL (1948) as a distinct genus standing near *Stenolophus* and comprised at that time four species described or recorded from Madagascar. BASILEWSKY (1951, 1967) and BRUNEAU DE MIRÉ (1990) described or added later seven species from continental Africa, so that *Stenolophidius* contains 11 Afrotropical species at present. According to BRUNEAU DE MIRÉ (1990) and my own studies, *Anthracus boops* Sahlberg, 1900, known from Egypt, should be also regarded as a member of

*Stenolophidius*. The revision of the type material of the East Palaearctic, Oriental and Australian species of the genera *Acupalpus* and *Anthracus* revealed that *Stenolophidius* is not restricted to the Afrotropical region and represents a senior synonym of the Asian *Acupalpus* subgenera *Pseudanthracus* Habu, 1973 and *Palcuapus* Habu, 1973. According to my present studies, nine further taxa (including two synonyms) from the East Palaearctic, Oriental and Australian Regions, which were described and/or subsequently placed in the genera *Acupalpus* or *Anthracus*, and five species here newly described belong actually to *Stenolophidius*.

In contrast to the Ethiopian *Stenolophidius* species, which were revised by BASILEWSKY (1951) and supplemented by descriptions of BASILEWSKY (1967) and BRUNEAU DE MIRÉ (1990), only a part of the East Palaearctic, Oriental and Australian members were treated taxonomically by HABU (1961, 1973) who provided redescriptions for *A. inornatus* Bates and *A. sinuellus* Bates, and by DARLINGTON (1968) who presented descriptive notes for *A. brunnicolor* Sloane and *A. ustus* Andrewes which he recorded for New Guinea. Otherwise the species were only treated in regional keys (LAFFER 1989), listed in world catalogues (CSIKI 1932, LORENZ 1998, 2005), in the Catalogue of Palaearctic Coleoptera (JAEGER & KATAEV 2003), or in various regional catalogues, check- or collection lists, e.g. for British India (ANDREWES 1930b), Sumatra (ANDREWES 1933), Borneo (STORK 1986), Nepal (HABU 1978, CHAUDHARY 2005), Thailand (JEDLIČKA & CHŮJŮ 1964) and Russia (KRYZHANOVSKIY & al. 1995).

The following contribution provides a revision of the East Palaearctic and Oriental species of *Stenolophidius* Jeannel, 1948, here regarded as a subgenus of *Acupalpus*, comprising a diagnosis of the subgenus, redescriptions of formerly described species, and descriptions of five new species from India, Sri Lanka, Nepal and SE Asia, as well as an identification key to all treated species. *Acupalpus brunnicolor* (Sloane, 1898) described from northern Australia and most probably erroneously recorded for Borneo (ANDREWES 1930b, STORK 1986) will be treated in a separate paper (JAEGER in prep.) on the Australian and New Guinean species of the subgenus *Stenolophidius*.

## Material and Methods

The following revision is based on about 970 specimens and types deposited in the following institutions and private collections:

BMNH	Natural History Museum, London, Great Britain, Chr. Taylor, Cl. Gent and B. Garner
CNC	Canadian National Collections, Ottawa, Canada, Dr. Y. Bousquet
MCSNG	Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy, Dr. R. Poggi
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, USA, Dr. Ph. D. Perkins
MHNG	Museum d'Histoire Naturelle, Geneva, Switzerland, Dr. I. Löbl and Dr. G. Cuccodoro
MFNB	Museum für Naturkunde Berlin, Germany, Dr. M. Uhlig
MNHN	Museum National d'Histoire Naturelle, Paris, Dr. T. Deuve and A. Taghavian
MZH	Finnish Museum of Natural History, University of Helsinki, Helsinki, Finland, Dr. O. Biström
NHMB	Naturhistorisches Museum Basel, Switzerland, Dr. M. Brancucci, Dr. E. Sprecher and M. Geiser
NHMW	Naturhistorisches Museum Wien, Vienna, Austria, Dr. H. Schönmann and Dr. H. Schillhammer
NIAES	National Institute for Agro-Environmental Sciences (incl. Coll. A. Habu); Tsukuba, Japan, Dr. H. Yoshitake
NME	Naturkundemuseum Erfurt, Germany, Dipl.-Biol. M. Hartmann
NMP	Narodny Muzeum v Praze, Prague, Czech Republic, Dr. J. Hájek
OLML	Oberösterreichisches Landesmuseum Linz, Austria, Mag. F. Gusenleitner
RMNH	Nationaal Natuurhistorische Museum „Naturalis“ (incl. collections of the former Zoologisch Museum Amsterdam), Leiden, The Netherlands, F. van Assen, H. Huijbregts and B. Brugge
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany, Dr. L. Zerche and L. Behne

SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany, Dr. W. Schawaller
SMTD	Senckenberg Museum für Tierkunde, Dresden, Germany, O. Jäger
ZISP	Zoological Institute, Academy of Sciences, St. Petersburg, Russia, Dr. B.M. Kataev
ZMUC	Zoologisk Museum, Kobenhavns Universitet, Denmark, Dr. A. Solodovnikov and S. G. Selvantharan)
cBAS	Coll. J. Bašta, Brno, Czech Republic
cBUL	Coll. P. Bulirsch, Prague, Czech Republic
cDOS	Coll. A. Dostal, Wien, Austria
cJAE	Coll. B. Jaeger, Berlin, Germany
cKME	Coll. R. Kmeco, Litovel, Czech Republic
cKUC	Coll. E. Kučera, Soběslav, Czech Republic
cPÜT	Coll. A. Pütz, Eisenhüttenstadt, Germany
cSCHM	Coll. J. Schmidt, Admannshagen, Germany
cSCHN	Coll. P.H. Schnitter, Halle, Germany
cWEIG	Coll. A. Weigel, Wernburg, Germany
cWEIP	Coll. J. Weipert, Plaue, Germany
cWRA	Coll. D.W. Wrase, Berlin, Germany

Label data of examined type material are cited in full, using a “/” to separate different lines of the label in question. If not otherwise stated labels are printed in black on white paper. Collection data of revised non-type material are presented according to the following form: „locality, month, year, collector(s) (number of specimens – deposition)“.

Measurements, as defined in JAEGER (2009: 1636), were taken at magnifications of 30 times (body length, elytra and pronotum partly) or 70 times (head and pronotum) using an ocular micrometer attached to a stereomicroscope Nikon SMZ 1500.

The following abbreviations are used in the text and/or in the figure legends and in Tables 1 and 2: **HW** – width of the head including eyes, **HWbE** – width of head between inner margins of eyes, **PL** – length of pronotum, **PBW** – width of pronotal base, **PW** – width of pronotum at its broadest point, **EL** – length of elytra, **EW** – width of elytra, **HT** – Holotype, **PT** – Paratype, **ST** – Syntype and **hw** – handwritten.

Microsculpture was examined at magnification of 112 times.

Dissections were made, using standard techniques; genitalia were preserved in Euparal on acetate strips and pinned beneath the specimens from which they had been removed.

Descriptions/redescriptions of the species do not include general characters of the genus and do not repeat features already mentioned in the description of the subgenus, except when these characters show distinct modifications or variation between different species.

Photographs of habitus, head and pronotum were taken using a Canon Powershot G2 or a Canon EOS 60D DSLR camera fitted with a Promicron photo adapter attached to a Nikon SMZ 1500 stereomicroscope. Photographs of male and female genitalia were taken using the above-mentioned equipment attached to a Leica DM LB2 compound microscope. In both cases several single images from different focal planes were taken, which were later combined, using the Combine ZP (©Alan Hadley) and Auto-Montage Essentials (©Synoptics Ltd) software. Both the head and the pronotum of mounted specimens are often distinctly bent downward or aligned to the left or right of centre and therefore not at the same focal plane as the elytra. If so, separate images of each body part were produced, which were subsequently combined with Adobe Photoshop software. Thus, the final images presented here, may often not reflect the original mounting condition.

The distribution maps were generated using the online mapping software SimpleMappr (©David P. Shorthouse).

### **The *Acupalpus* subgenus *Stenolophidius* Jeannel, 1948**

subgenus *Stenolophidius* Jeannel, 1948: 708–710, **status nov.**

Type species: *Stenolophus terminalis* Chaudoir, 1843.

*Pseudanthracus* Habu, 1973: 326, **syn. nov.**

Type species: *A. sinuellus*: HABU, 1961: 277–278 [misidentification, see notes below]

= *Acupalpus rhombotus* Andrewes, 1936

*Palcuapus* Habu, 1973: 332, **syn. nov.**

Type species: *Acupalpus inornatus* Bates, 1873.

### Notes on the type species of *Pseudanthracus* Habu

HABU (1973: 326) designated as the type species of the *Acupalpus* subgenus *Pseudanthracus*, *Acupalpus sinuellus* Bates referring to his redescription of this species (HABU 1961:277–278). However, Habu's redescription was based on three specimens from Thailand, Chiang Mai which actually belong to *Acupalpus rhombotus* Andrewes (the mature and figured specimen) and to *Acupalpus punctatus* Jedlička (the two teneral specimens) but not to the true *Acupalpus sinuellus* Bates. In accordance with article 70.3.2 (ICZN 1999) I select and fix here *A. rhombotus* Andrewes as the type species of

*Pseudanthracus* because it is one of the two taxonomic species actually involved in the misidentification by HABU and characterized and figured when redescribing *A. sinuellus*.

Notes on synonymy and taxonomic rank of *Stenolophidius*

When erecting the *Acupalpus* subgenera *Pseudanthracus* and *Palcuapus* in the Fauna Japonica, HABU (1973) differentiated both taxa only from the *Acupalpus* subgenera *Acupalpus* s.str. and *Setacupalpus* Habu, which occur in Japan. Later, in his key to Asian subgenera of *Acupalpus*, HABU (1978) separated them additionally from the new subgenus *Subacupalpus* Habu. However, HABU never compared his subgenera *Pseudanthracus* and *Palcuapus* with the African *Stenolophina* genus *Stenolophidius* Jeannel. Thus, he overlooked that his taxa agree with the latter genus in various important characters, such as antennomere 2 glabrous, tarsomere 5 glabrous on ventral surface, prosternum with some long and erect setae medially, and the distinctly reduced lateral sclerotization of the median lobe of the aedoeagus, which is often replaced by a more or less developed reddish bulb-like dilation. Based on these congruencies *Pseudanthracus* and *Palcuapus* Habu are considered here junior synonyms of *Stenolophidius* Jeannel, 1948. The differences, as pronotal basal angles angulate or rounded and mandibles short or long, given by HABU to separate *Pseudanthracus* from *Palcuapus*, have proved rather variable within various species belonging to *Stenolophidius*, and therefore considered as not sufficient to regard them different taxa of subgeneric or generic level.

JEANNEL (1948), BASILEWSKY (1951, 1967) and BRUNEAU DE MIRÉ (1990), who worked on the Afrotropical species, treated *Stenolophidius* as a distinct genus. However, because *Stenolophidius* shares a number of important characters such as the chaetotaxy of the antennomeres, tarsomeres and prosternum, as well as the fused mentum and submentum with Ethiopian and Oriental members of *Acupalpus*, *Stenolophidius* is here regarded a subgenus of *Acupalpus*, following HABU (1973, 1978), who treated the junior synonyms of *Stenolophidius*, *Palcuapus* and *Pseudanthracus*, also as subgenera of *Acupalpus*.

**Description:** (based on East Palaearctic and Oriental species)

Macropterous species with general appearance as figured (Figs 1, 12, 19, 22, 25, 28, 31, 34, 37, and 40).

Body length varies from 3.1–5.6 mm. Colour of upper surface of various kinds, comprising immaculate forms with ground colour dark yellowish or pale reddish, brown or blackish brown, or forms with pronotum and/or elytra maculate.

Head rather broad, with eyes usually rather large and markedly prominent. Mandibles rather long, and moderately sharp to faintly obtuse at apex, more rarely left mandible shortened and truncate apically. Labrum with apex rounded, sometimes slightly to markedly asymmetric at right side. Mentum and submentum fused, at least laterally, then at middle usually divided only by a diffuse edge, instead of a distinct suture. Ligula rather narrow and truncate at apex with one pair of long ventral setae inserted subapically. Paraglossae extended somewhat beyond ligula which is separated from the latter by a distinct notch. Antennae with antennomeres 1 and 2 glabrous, except for one longer dorso-lateral and one shorter ventral seta in antennomere 1 and one ventral seta in antennomere 2, and 3–11 distinctly pubescent.

Pronotum with sides more or less distinctly sinuate in front of base, more rarely sides rectilinearly narrowed without any sinuation. Hind angles rather sharp to faintly obtuse, rarely widely rounded. Pronotal base, at least at baso-lateral impressions often with rather coarse punctation.

Elytra moderately convex, somewhat widened posteriad. Subapical sinuation moderate. Humeri rounded, or more or less angulate, sometimes with a very fine denticle. Striae complete, distinctly impressed and impunctate, but faintly crenulate on ground. Scutellar striae fully developed. Intervals rather flat and wide, becoming slightly convex and narrowed only in front of apex. Basal pore and pore in apical half of third interval near second stria present. Series umbilicata 5+1 – 4+4 (2+2), the first four punctures of the posterior series are divided from the remaining four punctures by a rather wide gap which is as wide as or wider than the length of the first posterior group.

Posternum medially with 6 to 10 long and erect setae usually arranged in two rows, and sometimes also with a row of a few long, erect setae close to front margin. Prosternal process glabrous, without setae. Metepisterna rather long and narrowed posteriad. Abdominal sternites 4–6, rarely only 6 with moderate pubescence.

Tarsomere 5 glabrous on ventral side. Protarsomeres not or only very weakly dilated, without significant differences between males and females. Mesotarsomeres simple. Protarsomeres 2–4 and often mesotarsomeres 3–4 of males with very faint adhesive hairs (often difficult to observe).

Median lobe of aedoeagus (Figs 47–92) with lateral sclerotization at medial portion strongly reduced so that often only a narrow sclerotized band remain ventrally, which connected the bulb and the apical portion. The reduced lateral sclerotization is often replaced by a more or less distinctly developed reddish swelling or bulb-like dilatation. The internal sac comprises in most species a longitudinal spiny group in left half (seen from figure), and a more or less expanded field of fine spines/scales in the centre, sometimes somewhat shifted to right side. In some species the fine spines/scales in the centre field are slightly modified.

Female genitalia (Figs 36, 93–101) typical for the genus *Acupalpus* and related genera, with basal segment of gonocoxites distally with a row of 3–4 shorter spines, and apical segment with one short spine at outer margin and two fine nematiform subapical setae at inner margin. Hemisternite with few smaller spines at membranous apical portion.

**Remarks:** The *Acupalpus* subgenus *Stenolophidius* shares a number of distinctive characters such as mentum and submentum fused (at least laterally), prosternum medially with some long and erect setae and tarsomere 5 without one pair of ventrally arranged setae with the genus *Anthracus* Motschulsky, 1850 and with the Asian *Acupalpus* subgenera *Subacupalpus* Habu and partly also with *Setacupalpus* Habu, but differs from all mentioned taxa by the glabrous antennomere 2 and the peculiar construction of the median lobe of the aedoeagus.

From the genus *Anthracus* whose members (except taxa of the *A. annamensis* group) are similar in the shape of the pronotum with a more or less distinct sinuation in front of the well marked and angulate posterior angles, *Stenolophidius* can be distinguished also by the bisetose ligula, shorter antennae and the glabrous prosternal process.

From the *Acupalpus* subgenus *Setacupalpus* Habu, 1973, which comprises two species from the Russian Far East and Japan, *Stenolophidius* can be separated also by the presence of a few long setae arranged in two

rows at the medial face of prosternum, and sometimes also with some long setae close to its apical margin, instead of having more numerous short setae not restricted to the medial part of the prosternum, and the lack of distinct setae on the prosternal process.

Considering the two main characters defining *Stenolophidius* within the *Acupalpus*/*Anthracus* lineage, the lack of pubescence of the second antennomere occurs in various genera of the subtribe Stenolophina and is therefore of secondary value to consider it a natural group. In contrast to this, the strongly modified construction of the median lobe of the aedoeagus, with lateral sclerotization at medial portion reduced and often replaced by a more or less distinctly reddish dilatation, has obviously particular phylogenetic importance. JEANNEL (1948) when describing *Stenolophidius* and BASILEWSKY (1951) when revising the Afrotropical species have already described the modified median lobe in detail and suspected that the reddish dilatation growing up at the period of sexual maturity, and according to JEANNEL it probably facilitated the evagination of the internal sac. Independently if JEANNEL'S suspicion is correct, the peculiar construction of the median lobe constitutes probably an apomorphic character state, useful to postulate *Stenolophidius* as a monophyletic group. However, as stated in my paper on the *Acupalpus* subgenus *Subacupalpus* Habu (JAEGER 2010: 147) single specimens of its type species, *Acupalpus sikkimensis* Andrewes, shows also a suggested reddish swelling on lateral and dorsal surface of the median lobe of aedoeagus similar to that found in *Stenolophidius*, but in contrast to the latter, specimens without such reddish swelling have not the typical reduced lateral sclerotization recognized in members of *Stenolophidius*. Further studies are necessary to clarify whether the dilatation in *Subacupalpus* constitutes only a similar character state of some other origin, or if it represents an early, intermediate step in development of the character which has been fully developed only in *Stenolophidius*.

**Included taxa:** The subgenus *Stenolophidius* comprises 11 Afrotropical species, *A. boops* Sahlberg, 1900 from Egypt, and according this revision 10 East Palaearctic and Oriental species, and additionally *A. papua* Darlington, 1968 from New Guinea and *Acupalpus brunnicolor* Sloane, 1898 from northern Australia.



***Acupalpus (Stenolophidius) rhombotus* Andrewes, 1936**

(Figs 1–17, 47–52, 93, 102)

*Acupalpus* ? : BATES, 1892: 351

*Acupalpus rhombotus* Andrewes, 1936 [April]: 219–220 (type locality: Java: Residency Kediri: Toeloengagoeng).

*Acupalpus rhombotus* Andrewes: LORENZ 1998: 338 [world catalogue], 2005: 360 [world catalogue]

*Anthracus coloratus* Jedlička, 1936a [May]: 100 (type locality: Philippines: Manila) **syn. nov.**

*Anthracus coloratus* Jedlička: LORENZ 1998: 339 [world catalogue], 2005: 360 [world catalogue]

*Acupalpus (Anthracus) guttiger* Schaubberger, 1938: 50–51 (type locality: Kambojja. Pnom-Penh) **syn. nov.**

*Acupalpus (Acupalpus) guttiger* Schaubberger: LORENZ 1998: 338 [world catalogue], 2005: 359 [world catalogue]

*Acupalpus sinuellus* sensu HABU, 1961: 277–278 (partim, nec *A. sinuellus* Bates)

**Type material examined:** *Acupalpus rhombotus* Andrewes, 1936: Holotype: ♀ (BMNH) labelled “C. J. LOUWERENS / Java 84 m / Toeloengagoeng”, “Ex Coll. / C. J. Louwerens”, “Type” [red paper], “*Acupalpus / rhombotus / Type* Andr. / H.E. Andrewes det.” [first three lines hw Andrewes], “H.E. Andrewes Coll / B.M. 1945–97”. The holotype is in good condition, without missing body parts.

Paratypes: 2 exs.: 1 ♂ (BMNH) labelled “Tharrawaddy, / Burma. / G.Q. Corbett”, “Co- / type” [circle label with green margin], “*Acupalpus / rhombotus / Cotype* Andr. / H.E. Andrewes det.” [first three lines hw Andrewes] and “H.E. Andrewes Coll / B.M. 1945–97”. The paratype specimen is strongly immature, with right mid-leg, right antennomeres 9–11, and metatarsomeres 4–5 missing. 1 ♀ (RMNH) labelled “BOJOLANGOE / RES. KEDIRI / OOST JAVA” [hw], “Mus.Leiden / ex. collection / C. J. Louwerens / rec. 1979”, “Co- / type” [circle label with green margin], “*Acupalpus / rhombotus / cotype* Andr. / H. E. Andrewes det.” [first three lines hw Andrewes] and “type” [red paper]. The Paratype is markedly immature, but otherwise in good condition without missing body parts. The holotype and the paratype from British Museum additionally with my identification label “*Acupalpus / (Pseudanthracus) / rhombotus / Andrewes, 1936 / det. B. Jaeger 2009*”, the paratype from Mus. Leiden with “*Acupalpus / (Stenolophidius) / rhombotus / Andrewes, 1936 / det. B. Jaeger 2010*”.

*Anthracus coloratus* Jedlička, 1936: Holotype: ♂ (BMNH) labelled “Type” [circle label with red margin], “Philippine Is. / Coll. Böttcher. / B. M. 1929–201.”,

“Philippine Islands / Manila / III:III: 1914 / Coll. Böttcher”, “*Anthracus / coloratus / type* sp.n. / DET. ING. JEDLIČKA” [red label with first three lines hw Jedlička] and “*Acupalpus / (Pseudanthracus) / rhombotus / Andrewes, 1936 / det. B. Jaeger 2009*”. The holotype has the right antennomeres 2–11 and the left pro-leg missing.

*Acupalpus (Anthracus) guttiger* Schaubberger, 1938: Holotype: ♀ (SDEI): labelled “Kambodja / Pnom-penh” [hw], “Friederichs” [hw], “*Anthracus / guttiger* Schaub. / det. Dr. E. Schaub. 37” [hw, but last line printed, except 37], “Type” [hw, red], “Holotypus” [red paper], “DEI / Eberswalde” and “*Acupalpus / (Stenolophidius) / rhombotus / Andrewes, 1936 / det. B. Jaeger 2010*”.

Paratypes: 14 exs.: 6 ♀♀, 3 ♂♂ (SDEI) labelled “Kambodja / Pnom-penh” [6 ex.] respectively “Kambodja” [3 ex.] [hw], “Friederichs”, “Cotype” [hw on red paper], “*Anthracus / guttiger* Schaub. / det. Dr. E. Schaub. 37” [hw, but last line printed, except 37], “DEI / Eberswalde”. 1 ♀ additionally with “*Acupalpus* (?) / sp. n. / H.E. Andrewes det.” [hw, except last line printed]. 1 ♂, 4 ♀♀ (OLML): 1 ♂, 3 ♀♀ labelled: “Kambodja” [hw], “Friederichs”, “Cotype” [hw on red paper], “*Anthracus / guttiger / Schaub. / loc. class.*” [hw Schaubberger, label partly red], “*guttiger / Schaub. / det. Dr. E. Schaub.*” [hw Schaubberger, except last line printed]. 1 ♀ with additional label “*guttiger* Schaub. / f. apicemaculat.” [hw Schaubberger], 1 ♀ additionally with “f. apicemaculata” [hw Schaubberger] and “*Anthracus / guttiger / Schaub.*” and 1 ♂ additionally with “f. quadrimacu-/lata” [hw Schaubberger]. 1 ♀ labelled: “Kambodja / Pnom-Penh” [hw Schaubberger], “Cotype” [hw on red paper], “*Anthracus / guttiger / Schaub. / loc. class.*” [hw Schaubberger, label partly red], “*guttiger / Schaub. / det. Dr. E. Schaub.*” [hw Schaubberger, but last line printed], “*guttiger* Schaub. / f. quadrimaculat.” [hw Schaubberger]. All paratypes from OLML with my identification label “*Acupalpus / (Pseudanthracus) / rhombotus / Andrewes, 1936 / det. B. Jaeger 2009*”, those from SDEI with “*Acupalpus / (Stenolophidius) / rhombotus / Andrewes, 1936 / det. B. Jaeger 2010*”.

**Notes on Synonymy:** In April 1936 ANDREWES described *Acupalpus rhombotus* from 3 specimens from Java and Burma. JEDLIČKA described in May 1936 *Anthracus coloratus* from one specimen collected at Manila from the Philippine Island of Luzon.

SCHAUBERGER (1938), obviously without knowledge of Andrewes' and Jedlička's descriptions or at least omitting these, described *Acupalpus guttiger* from 16 specimens from Cambodia. A revision of the types and additional material revealed that all three taxa are conspecific (see also under "Geographical variation") and the name *A. rhombotus* has priority over *A. coloratus* and *A. guttiger*.

**Redescription:** General appearance as figured (Fig. 1). Body length 3.6–4.6 mm (mean 4.0 in males, 4.1 in females, holotype of *A. rhombotus* 3.9); width 1.3–1.7 mm. Head dark or blackish brown, with clypeus and mandibles (inner margin and apices blackened) brown, labrum yellowish brown. Palpi yellowish, antennae with antennomeres 1–2 yellowish, remaining ones infuscated. Pronotum either entirely reddish-yellow in populations from Java and Philippines, and single continental specimens (Figs 1–5), or with a large dark brown central macula, leaving the margins more or less widely and sometimes the median line narrowly reddish in continental populations (Figs 6–7). Elytra either mostly dark to blackish brown, leaving only two patches in apical third yellowish (Fig. 8), or elytra with a large dark rhombus-like central macula, leaving two spots behind shoulders reddish, and two spots before apex yellowish (Figs 1 and 9–11). Ventral surface reddish to reddish brown, or in continental specimens dark brown, with prosternum and often also sternites, at least in posterior half, lighter yellowish- or pale brown. Epipleura reddish to yellowish. Legs yellowish brown.

Head (Figs 1–7) including eyes, comparatively wide, 0.85–0.91 times as wide as pronotum, with eyes large and distinctly prominent (head 1.60–1.80 times as wide as head between eyes). Labrum (Fig. 6–7) distinctly asymmetric, its apical margin markedly bent backwards at right side. Left mandible rather short, markedly thickened, and distinctly truncate at apex. Antennae rather short 2.03–2.31 (exceptionally up to 2.43) times as long as pronotum and 0.72–0.86 times as long as elytra. Microsculpture on labrum and clypeus with distinct isodiametric to weakly transverse meshes, on frons meshes either absent or with very lightly impressed isodiametric meshes, on vertex absent or with lightly impressed meshes (Javanese specimens), or with distinctly impressed isodiametric meshes between and posterior to eyes becoming weakly transverse in front of pronotal apical margin (other populations).

Pronotum (Figs 1–7) 1.25–1.35 times as wide as long, 1.10–1.17 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear or weakly arcuate, faintly bordered laterally. Anterior angles narrowly rounded at tips, sometimes weakly projecting forward. Sides convex in anterior two thirds and at posterior third sometimes almost parallel (Figs 1–3), or rectilinearly narrowed (in some Javanese specimens), or more or less distinctly sinuate in front of pronotal base (Figs 4–7). Posterior angles well marked, rather sharp to faintly obtuse. Basal margin between posterior angles slightly wider as apical margin between anterior angles, and 0.80–0.86 times as wide as maximum pronotal width, weakly arcuate medially and somewhat oblique to posterior angles, not or faintly bordered at sides. Lateral furrows narrow, becoming confluent with the baso-lateral impressions at basal quarter. Baso-lateral impressions shallow, distinctly delimited from pronotal disc and median part of base, flattened to basal and lateral margin. Base with coarse punctation in and between impressions, punctation often extending somewhat forward along sides. Pronotal surface also with some single punctures, or rather distinct punctation at anterior quarter in front of anterior impression. Median line fine and weakly impressed, disappearing before reaching apical and basal margin, punctate in basal third, sometimes also in medial part and apical third. Anterior transverse impression moderate. Microsculpture almost lacking (except for isodiametric meshes in basal impressions) in Javanese specimens, or with distinctly impressed, almost isodiametric to weakly transverse meshes on disc and base, becoming more faintly and strongly transverse at sides in other populations.

Elytra (Figs 1, 8–11) with sides almost parallel, only weakly widened posteriorly, widest at middle, 1.60–1.73 times as long as wide, 2.67–2.86 times as long and 1.22–1.34 times as wide as pronotum. Basal bead weakly curved to humerus, forming an indistinct obtuse angle with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on intervals with lightly impressed, faint transverse meshes, on scutellum with distinct isodiametric meshes.

Metepisterna at inner margin 1.5–1.6 times longer as wide at basal margin. Prosternum with 6–8 longer setae medially and a row of 4–6 longer setae close to apical

margin. Abdominal sternite 3 sometimes with few shorter setae medially and 4–6 usually moderately to densely pubescent, but in sternite 4 pubescence restricted to medial two-thirds. Last visible sternite in males with two and in females with four longer setae at apical margin. Protarsomeres 2–4 and mesotarsomeres 3–4 of males with biserially arranged adhesive hairs on ventral surface. Median lobe of aedeagus (Figs. 47–52) with typically reduced lateral sclerotization at medial portion, which is often replaced by a reddish swelling or dilatation that varies from absent to strongly developed laterally and dorsally. In 25 dissected males 4 specimens have no dilatation (e.g. Figs 47, 50–52), 8 specimens have a suggested lateral dilatation, 4 specimens have a moderate lateral dilatation and 9 specimens have a strong lateral and dorsal dilatation (e.g. Figs 48–49). Internal sac with the typical ground construction described for the subgenus, but additionally with a small, but distinct spiny group at right apical half that does not occur in other Oriental species of *Stenolophidius*. Female hemisternite and gonocoxite with shape and chaetotaxy as figured (Fig. 93)

**Geographical variation:** Populations from Java (Figs 1–3) differ from continental ones (Figs 5–7) by the uniformly reddish yellow pronotum without any central macula, the reddish-yellow proepisterna, the shape of pronotum with sides less distinctly sinuate in front of base and posterior angles less sharp, the almost completely reduced microsculpture on pronotal surface (except mesh rudiments at basal impressions), instead of being distinct and almost isodiametric in continental specimens. Specimens from Philippines (Fig. 4) are closer to continental ones than those from Java regarding pronotal shape and microsculpture.

Because the studied specimens from continental SE Asia, as well as those from Philippines and Java agree in important characters, such as shape of left mandible, strongly asymmetric labrum, elytral colouration, and the peculiar inner structures of aedeagus, they represent with no doubts members of one species. At the moment I prefer to treat the populations as geographical forms without formal taxonomic rank. Further studies of other material from so far unrecorded areas as Sumatra, Kalimantan and Malaysia, where the species obviously also occurs, may help to determine if and which populations require probably a formal rank (as subspecies).

**Comparisons:** *Acupalpus rhombotus* Andrewes differs from all other East Palaearctic and Oriental members of *Stenolophidius* species by its characteristic elytral colour (Figs 1, 8–11), the strongly asymmetric labrum, the short, thick and truncate left mandible, and its peculiar internal structures of the aedeagus.

**Distribution:** *Acupalpus rhombotus* occurs from NE India in the northwest to Luzon in the east and to Java in the southeast (Fig. 102). It has been so far recorded from Java and Myanmar by ANDREWES (1936), as *A. coloratus* from the Philippines (JEDLIČKA 1936), as *A. guttiger* from Cambodia (SCHAUBERGER 1938), and as *A. sinuellus* from Thailand (HABU 1961). Here it can be recorded for the first time from India, Laos and Vietnam.

**Examined material:** In addition to the type material 152 specimens from the following localities have been studied:

**India:** Meghalaya: Khasi Hills, Mawsynram, 25°18'N, 91°29'E, 800+/-100m, VI. 2006, P. Pacholátko (5 – BMNH, cJAE); SW of Cherrapunjee, 25°13'–15°N 91°40'E, 900m, V. 2004 + V. 2007, Dembický (2 – NHMB). – West Bengal: Sarda, Bengal., Champion (1 – BMNH).

**Myanmar:** Kathá, VI. 1885, Fea (1 – MCSNG); Taukkyan, Rangoon, I. 1997, Klichá (3 – cWRA, cJAE).

**Thailand:** Chiang Mai: Chieng Mai, I. 1959, Ikoma (1 – NIAES); Chieng Mai, 325 m, X. 1984, Karlsholt, Lomholdt & Nielsen (1 – ZMUC). – Kanchana Buri: Sangkhlaburi, 15° 07'N 98° 32'E, 200 m, Pacholátko & Kubáň. (59 – NHMB, cJAE); Thimonghta, 15°02'N 98°35'E, 350m, IV. 1991, Pacholátko & Kubáň (54 – NHMB, cJAE); Thong Pha Phum, 14°43'N, 98°39'E, 150m, IV. 1991, Pacholátko (1 – NHMB). – Khon Kaen: Khon Kaen, II. 1981, lux, Saowakontha (1 – MFNB).

**Laos:** Vientiane: Ban Houay Pamon env., Viangchan Prov., V. 2003, Šafránek (3 – cWRA); Vientian, I. + II. 1986, Kabakov (4 – ZISP); Vientiane env., Mekong river bank, 150m, N17°56.8' E 102°37.3', IV. 1998, Jendek & Šauša (1 – cBUL).

**Cambodia:** Pnom Penh, IV. 1970, Gretschof (2 – ZISP).

**Vietnam:** Nam Cat Tien Nat. Park, V. 1994, Pacholátko & Dembický (2 – NHMW).

**Philippines:** Luzon: Manila, lux, Böttcher (2 – MFNB).

**Indonesia:** Java: Bandoeng, Res. Kediri, Coll. C. J. Louwerens (1 – BMNH); Jakarta, International Airport, I. 2004, LF [at light], Weigel (1 – NME); Kediri, Coll.



Louwerens (1 – RMNH); Semarang, II. 1906, Drescher (1 – SDEI); Toeloengagoeng, Louwerens (3 – RMNH); Toempoeik, Res. Kediri, Coll. C. J. Louwerens (1 – BMNH), Zuider Geb., Res. Kediri, Coll. Louwerens (1 – RMNH).

***Acupalpus (Stenolophidius) punctatus (Jedlička, 1936)***

(Figs 12–18, 53–58, 94, 103)

*Anthracus punctatus* Jedlička, 1936b: 135 (type locality: Philippines: Luzon: Manila)

*Acupalpus (Pseudanthracus) punctatus* Jedlička: LORENZ 1998: 338 [world catalogue], 2005: 360 [world catalogue]

*Acupalpus sinuellus* sensu HABU 1961: 277–278 (partim, nec *A. sinuellus* Bates)

**Type material examined:** Holotype: ♂ (BMNH) labelled “Type” [circular label with red margin], “Philippine Is. / Coll. Bottcher. / B.M. 1929–201.” [first line yellow underlined], “Philippine Islands / Manila / 14:III: 1914 / Coll. Bottcher” [date hw] and “Anthracus / punctatus / type sp.n. / DET. ING. JEDLIČKA” [hw Jedlička, except last line printed]. The holotype is in good condition except right mid-leg lacking.

Paratypes: 31 exs.: 11 ♂♂, 8 ♀♀ (BMNH) and one card with specimen lost, labelled “Philippine Is. / Coll. Bottcher. / B.M. 1929–201.” [first line yellow underlined], “Philippine Islands / Manila / 14:III: 1914 / Coll. Bottcher” [date hw]; “Cotype” [red label with black margin] and “Anthracus / punctatus / sp.n. / det. Ing. Jedlička” [hw Jedlička, except last line printed]. 1 ♂ (BMNH) with same labels, except locality label lacking. 1 ♂ (BMNH) with same labels, except “Cotype” label lacking. 2 ♂♂, 1 ♀ (NHML) with same labels but “Cotype” label lacking and identification label modified as follows “Anthracus / punctatus / Jedl. / det. Ing. Jedlička”. 1 ♂ (BMNH) with same labels but “Philippine Islands / Manila / 4:II: 1914 / Coll. Bottcher”. 3 ♂♂, 2 ♀♀ (NMP) labelled “Philippine Is. / Coll. Bottcher. / B.M. 1929–201.” [first line yellow underlined], “Philippine Islands / Manila / 14:III: 1914 / Coll. Bottcher” [date hw]; “Cotype” [red label with black margin] and “Anthracus / punctatus / sp.n. / det. Ing. Jedlička” [hw Jedlička, except last line printed] or 1 ♂ with “Anthracus / punctatus / sp.n. / DET. ING. JEDLIČKA” [reddish label, hw Jedlička, except last line printed].

Remarks: Some paratypes have few segments of antennae and/or tarsomeres broken and missing, in one

specimen the head and in another specimen the right elytron is missing.

One paratype, collected at “4:II: 1914” is strongly teneral and does obviously not belong to *A. punctatus*. Its species identity remain unsure.

The holotype and all paratypes, except one, are labelled additionally “Acupalpus / (Stenolophidius) / punctatus (Jedlička, 1936) ♂ or ♀ (as appropriate) / det. B. Jaeger 2009, 2010, or 2011”.

**Redescription:** General appearance as figured (Fig. 12). Body length 3.2–4.1 mm (mean 3.7 in males, 3.8 in females, HT 3.7); width 1.3–1.6 mm.

Colour: Dorsal surface mainly paler to darker yellowish or reddish brown, but head usually dark to blackish brown, with clypeus often, and labrum and mandibles always paler reddish brown, with inner margin and apices of the latter blackish brown. Elytra sometimes with an indistinct infuscation in apical half. Palpi yellowish, antennae with first two antennomeres yellowish, remaining ones brown. Ventral surface darker to lighter brown. Epipleura pale brown. Legs yellowish.

Head (Figs 12–18) including eyes, comparatively wide, 0.83–0.91 times as wide as pronotum, with eyes large and distinctly prominent (head 1.65–1.86 times as wide as head between eyes). Labrum often somewhat asymmetric, then apical margin slightly bent backwards at right side. Left mandible rather long, sharp to faintly obtuse at apex, not thickened or truncate. Antennae moderately long, 2.38–2.70 times as long as pronotum and 0.78–0.92 times as long as elytra. Microsculpture on labrum with almost isodiametric, on clypeus with weakly transverse meshes, on frons and apical half of vertex with indistinct and lightly impressed isodiametric meshes, becoming moderately impressed on posterior half of vertex and more transverse in front of pronotal apex.

Pronotum (Figs 12–18) 1.29–1.41 times as wide as long, 1.10–1.23 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear, faintly bordered laterally. Anterior angles narrowly rounded at tips, not or very weakly projecting forward. Sides convex in anterior two thirds and at posterior third almost parallel, or rectilinearly narrowed, or faintly sinuate in front of pronotal base. Posterior angles well marked and rather sharp at tips. Basal margin between posterior angles as wide or slightly wider as apical margin be-

tween anterior angles, and 0.80–0.84 times as wide as maximum pronotal width, arcuate medially and oblique to posterior angles, not or very faintly bordered at sides. Lateral furrows narrow, becoming confluent with the baso-lateral impression at basal quarter or third. Baso-lateral impressions rather shallow, distinctly delimited from pronotal disc and median part of base, flattened to basal and lateral margin. Base with rather coarse punctation in the baso-lateral impressions, punctation sometimes extending somewhat forward along sides; between impressions with single punctures. Pronotal surface at anterior quarter impunctate in Philippine and some Javanese specimens, or with few punctures in continental populations and single Javanese specimens. Median line very fine, disappearing before reaching apical and basal margins, entirely impunctate or faintly punctate at basal area. Anterior transverse impression moderate. Microsculpture in Philippine populations with moderately impressed, almost moderately transverse meshes on disc and base, becoming more faintly and strongly transverse at sides, rarely smaller patches of almost isodiametric meshes occur within the transverse microsculpture. In continental specimens microsculpture on pronotal disc distinct and almost isodiametric to weakly transverse, becoming strongly transverse at sides. In Javanese specimens on pronotal disc with distinct isodiametric to weakly transverse meshes, becoming strongly transverse at sides.

Elytra (Figs 12) with sides weakly widened posteriad, widest at or just posterior to middle, 1.53–1.63 times as long as wide, 2.80–3.11 times as long and 1.33–1.44 times as wide as pronotum. Basal bead moderately curved to humerus, forming a distinct obtuse angle with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on elytral intervals with lightly impressed faint transverse lines, on scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin 1.5–1.6 times longer as wide at basal margin. Prosternum medially with 6–8 and close to apical margin with a row of 4 longer setae. Abdominal sternite 3 sometimes with few shorter setae medially and 4 to 6 usually moderately to densely pubescent, but in sternite 4 pubescence restricted to medial two-thirds. Last visible sternite in males with two and in females with four longer setae at apical margin.

Protarsomeres 2–4 and mesotarsomeres 3–4 of males with biserially arranged adhesive hairs on ventral surface. Median lobe of aedoeagus (Figs. 53–58) with lateral sclerotization at medial portion strongly reduced and often replaced by a reddish dilation which varies from completely reduced (Figs 53, 56–58) to strongly developed laterally and dorsally (Fig. 54). Internal structures with the typical ground construction described for the subgenus, but the scales near the base of the left spiny group are modified at their apical margin which is tri- or quadrifid (Fig 58a). This modification is in most other species absent or only suggested.

Female hemisternite and gonocoxite with shape and chaetotaxy as figured (Fig. 94).

**Geographical variation:** Populations from SE Asian continent differ from Philippine specimens by the pronotal microsculpture which is more distinctly impressed and almost isodiametric on disc, becoming only weakly transverse at sides, whereas in Philippine specimens the pronotal microsculpture consists of less distinctly impressed, almost weakly transverse meshes. On elytral intervals the microsculpture is faintly transverse and well visible (at 112x) in continental specimens, whilst in Philippine specimens it is much finer and only very slightly impressed, often only rudiments are visible. There are also differences in the pronotum (Figs 17–18), which is often sparsely punctate at apical third and looks like broader and more distinctly and longer sinuate in front of the somewhat wider base in continental specimens. However, the pronotal shape and its punctation show a considerable individual variation in both populations, so that various intermediate specimens can be found.

Specimens from Java differ from those from Philippines by the shape of pronotum (Figs 15–16) which looks broader and have the sides usually more distinctly sinuate before posterior angles which are weakly produced laterad. The pronotal microsculpture is a little bit more distinct but shows otherwise no significant differences compared with those of continental specimens.

Two male specimens from Sri Lanka with the typical structures of the internal sac and one female from Celebes are rather similar to Philippine populations regarding pronotal shape and microsculpture.

The studied populations from the Philippines, the SE continent, from Java and single specimens from Sri Lanka and Sulawesi agree in aedoeagal characters,

particularly in their peculiar internal structures, and/or in other general characters and they represent with no doubts members of one species. It should be remarked that the described differences between the populations show only a trend in character variation. Each examined population varies considerably in pronotal shape, microsculpture and other characters so that intermediate specimens can be found, which fill the gap between characters typical for one population. *A. punctatus* represents obviously a polytypical species being in speciation process. Their insular units represent rather young derivatives of the continental populations. Here, I regard them only different geographical forms without formal taxonomic rank.

**Comparisons:** *A. punctatus* is in general appearance most similar to *A. hiekei* spec. nov. and has been collected together with the latter in some localities in Thailand and Vietnam. It can be separated from *A. hiekei* by the generally paler upper surface, more slender elytra, the microsculpture on pronotal surface with consists of distinctly impressed and almost isodiametric meshes (in continental specimens), instead of very fine and lightly impressed strongly transverse meshes in *A. hiekei*, the microsculpture on elytral intervals which is fine, but still visible, instead of almost obliterated in *A. hiekei*. The internal sac of the aedoeagus (Figs. 53–58a) differs by the presence of modified scales near the base of the spiny group at left medial part of the median lobe. From other Oriental species *A. punctatus* can be distinguished by the different body colour, and/or different size, pronotal shape and the peculiar structures of the internal sac of the aedoeagus.

**Distribution:** *Acupalpus punctatus* is widely distributed in SE Asia (Fig. 103) from N Laos in the north to Java in the south, and from Thailand in the west to the Philippines and Sulawesi in the east. One rather isolated record has become known from Sri Lanka.

Until now, the species had been reported only from the Philippine Island of Luzon. Here it can be recorded for the first time from Thailand, Laos, Cambodia, Vietnam, Indonesia (Java and Sulawesi), Sri Lanka and the Philippine Islands of Mindanao and Mindoro.

**Examined material:** In addition to the type material 234 specimens from the following localities have been studied:

**Thailand:** Ayutthaya: Ayutthaya Umg., Weide, I. 1995, Weigel (13 – NME, cWEIG, cJAE). – Chainat: 10km W Han-Kha, 90m, 60km Suphan Buri, III.+IV. 1990, Thielen (16 – NHMB, cJAE). – Chaiyaphum: Phu Khieo Wildlife Sanctuary, VI. 1984, Hämäläinen (1 – RMNH). – Chiang Mai: Chiang Dao, V. 1997, Snizek (1 – cWRA); Chiang Mai, 320m, V. 1986, Schwendinger (1 – MHNG); Chiang Mai, I. 1998, to the light, Grigerenko (1 – ZISP); Chiang Mai, Zoo, 98°57'E 18°49'N, LF, VI. 1988, Malicky & Chantaramongkol (4 – NHMW); Chiang Mai, I. + IV. 1959, Ikoma (2 – NIAES); Fang, 19°55'N 99°12'E, 300m, V. 1991, Král (1 – NHMB); ca. 10 km E Samoeng, river, 18°51'40.2"N, 098°38'49.5"E, I. 1998 (1 – NHMB). – Chon Buri: 5 km E Pattaya Elephant Camp, II. 1995, Weigel (1 – cWEIG). – Kanchana Buri: Nam Tok env., W Thailand, V. 2004, Bily (1 – NMP), Sangkhlaburi, 15°07'N 98°32'E, 200m, IV. 1991, Pacholatko & Kubán (10 – NHMB, cJAE); Thimonghta, 15°02' N 98°35'E, 350m, IV. 1991, Pacholatko & Kubán (10 – NHMB, cJAE); Thong Pha Phum, 14°43' N 98°39'E, 150m, IV. 1991, Pacholatko & Kubán (4 – NHMB, cJAE). – Khon Kaen: Khon Kaen, lux, III.+IV. 1980 and I.+II. 1981, Saowakontha (51 – MFNB, cJAE). – Phetchaburi: Kang Krachan National Park, light trap, X. 1982, Hämäläinen (1 – RMNH). – Tak: Lansang n. p., 16°48'N 98°57'E, 500m, IV. 1991, V. Kubán (1 – NHMB). – Uthai-Thani: Lan Sak, 25km NW, X. 1989, Thielen (1 – cWRA); Lan Sak, 25 km NW, VI. 1990, Thielen (2 – cSCHM); Lan Sak, 25 km NW, 110m, IX. + X. 1990 (21 – MFNB, cJAE); 2 km SW Pak Muang, 55km W Uthai-Thani, 120m, IX.+XII. 1991 + I. 1992 (17 – MFNB). – Yala: Lake Bang Lang, 40 km NE Betong, 350 m, VI. 2007, Linek (3 – cBAS, cDOS).

**Laos:** Khammuan: Nakai, 25km env., 17°41'N, 105°03'E, 200–300m; XII. 2008 – I. 2009, Linek (15 – cBUL, cJAE). – Luang Namtha: Louang Namtha, 15km NW, N 21°07.5, E 101°21.0, alt. 750 ±100 m, V. 1997, Jendek & O. Šouša (1 – cBUL). – Vientiane: Vientiane env., 150m, Mekong river bank, 17°56.8' N 102°37.3' E, IV. 1998, Jendek & Šouša (1 – cBUL); Vientian, X. 1984 + I. 1986, Kabakov (2 – ZISP).

**Cambodia:** Siem Reap town area, 013°21'17.8"N, 103°51'18.6"E, light trap, IV. 1998 (1 – NHMB).

**Vietnam:** Nam Cat Tien Nat. Park, V. 1994, Pacholatko & Dembicky (4 – NHMW, cJAE).

**Indonesia:** Java: “Java”, II. 1922 (2 – SMTD); Bandoeng, Res. Kediri (1 – RMNH); Batavia, IX. + XI. 1948, VIII. 1949, XI. 1949, van Nidek (8 – RMNH); G. Oengaran, VI. 1907, Drescher (2 – RMNH); Gambiran, Res. Kediri, Louwerens (1 – MCZ); Meester Cornelis [= Jatinegara], II. 1929, Sonneveldt [1 – RMNH]; Semarang, XII. 1905, III. + VI. 1906, Drescher (10 – SMTD, cJAE); Soerabaja, X. 1916, Drescher (2 – BMNH, RMNH); Toeloengagoeng, 84m, Louwerens (2 – RMNH, BMNH); Weltenvreden [ancient part of Jakarta], V. 1921, Buitendijk (1 – RMNH). – Sulawesi: Celebes, Mak. [= Makassar], Coll. Kraatz (1 – SDEI). **Philippines:** Luzon: Manila, X. 1913, Böttcher (1 – SMTD); Manila, XI. 1914, lux [Coll. Böttcher] (3 – MFNB). – Mindanao: Maramag Prov., Portulin, 1700m, I. 1991, Bolm (1 – NHMB). – Mindoro: 10km W Puerto Galera, XI. 1992, Schillhammer (1 – NHMW). **Sri Lanka:** Anuradhapura, 1899, Horn (2 – BMNH).

***Acupalpus (Stenolophidius) hiekei spec. nov.***

(Figs 19–21, 59–64, 95, 104)

**Type material:** Holotype: ♂ (MFNB) labelled “NO. Thailand / Khon Kaen, lux / 23.1.1981, leg. / Dr. S. Saowakontha“ and “HOLOTYPE ♂ / Acupalpus / (Stenolophidius) / hiekei spec. nov. / des. B. Jaeger 2011” [red label]. The holotype is in good condition except left antennomeres 9–11 are missing.

Paratypes: Thailand: 1 ♂, 1 ♀ (MFNB) with same data as the holotype. 1 ♂ (MFNB) labelled “NO-Thailand / Khon Kaen / 26.1.1981 lux / leg. S. Saowakontha“. 1 ♀ (MFNB) labelled “NO-Thailand / Khon Kaen / 21.2.1981 lux /, leg. S. Saowakontha“. 1 ♂, 1 ♀ (MFNB) labelled “Thailand x. 1990, 110m / 25 km NW Lan-Sak / 65km NW Thai-Thani / 220 km NW Bangkok” [yellow paper]. 1 ♂ (NHMB) labelled “THAI, 13.–15. IV. 1991 / THONG PHA PHUM 150m / 14°43'N 98°39'E / Vit Kubán leg.” and „Thailand '91/ “Thanon Tong Chai / D. Král & V. Kubán”. 7 ♂♂, 3 ♀♀ (NHMB, cJAE) labelled “THAI, 13.–15. IV. 1991 / THONG PHA PHUM 150m / 14 43'N 98 39'E / P. Pacholatko leg.”. 1 ♂, 4 ♀♀ (NHMB, cJAE) labelled “THAI, 8.–9. IV. 1991 / SANGKHLABURI 200m / 15 07'N 98 32'E / P. Pacholatko leg.”. 1 ♂, 1 ♀ (NHMB) labelled “THAI, 9.-13.IV. 1991 / THIMONGHTA 350 m / 15 02'N 98 35'E / P. Pacholatko leg.”. 1 ♂ (NHMB) la-

belled “Thailand, Chumphon / prov., 27.iii.–14.iv. 1996 / Pha To env. 9°48'98°47' / K. Majer leg.”

Vietnam: 12 ♂♂, 1 ♀ (NHMW, cJAE) labelled “S-VIETNAM / Nam Cat Tien Nat. Park / 1.–15.5. 1994 / Pacholatko & Dembicky” [printed]. 1 ♂ (NME) labelled “VIETNAM, N, Ninh Binh / Pr., 90 km SW Hanoi / Cuc Phuong NP, primat. / rescue centre, 25.IV.” and “2012, 190m, 20°14'24”N / 105°42'53”E, leg. A. / Weigel, light trap”.

Malaysia: 1 ♂ (cBAS) labelled “MALAYSIA, W, Pahang, / 70km SW of Kuala Rompin / N.P. Endau Rompin, / 13.6.–3.5.2009, 600m, / P. Čechovský lgt.,” All specimens additionally labelled: “PARATYPE ♂ or ♀ (as appropriate) / Acupalpus / (Stenolophidius) / hiekei spec. nov. / des. B. Jaeger 2011 or 2012” [red label].

Some of the paratypes have missing antennomeres or tarsomeres. A part of the specimens from S Vietnam (Nam Cat) are slightly, one is moderately immature.

**Etymology:** The species is dedicated to Dr. Fritz Hieke, the former curator of the Coleoptera collection of the Museum für Naturkunde Berlin and outstanding specialist of the Carabid genus *Amara*. I am deeply indebted to him for various help and support when I started my studies of Stenolophina, as well as for many interesting general and particular discussions about taxonomical and zoogeographical problems within the past 30 years.

**Description:** General appearance as figured (Fig. 19). Body length 3.6–4.3 mm (mean 4.0 in males, 4.1 in females, HT 4.2 mm); width 1.4–1.7 mm.

Colour: Head dark or blackish brown, but clypeus, labrum and mandibles paler reddish brown, with inner margin and apices of the latter dark to blackish brown, palpi yellowish. Pronotum and elytra usually paler than head, mainly brown to dark brown, with basal and lateral margins of the former and lateral margins and apex of the latter paler yellowish brown. Ventral surface mainly brown, with prostepisterna, sometimes also metepisterna somewhat darkened, and epipleura paler. Antennae with first two antennomeres yellowish, remaining ones brown. Legs yellowish. Pronotum and elytra weakly iridescent.

Head (Figs 19–21) including eyes, comparatively wide, 0.81–0.86 times as wide as pronotum, with eyes large and distinctly prominent (head 1.64–1.79 times as wide

as head between eyes). Labrum with apical margin rounded, at middle usually somewhat produced, sometimes slightly asymmetric at right side. Left mandible moderately long, somewhat thickened and truncate at apex (seen from front). Antennae moderately long, 2.37–2.71 times as long as pronotum and 0.86–0.95 times as long as elytra. Microsculpture on labrum with distinctly impressed isodiametric, on clypeus with weakly transverse meshes. On frons with lightly, and on vertex with moderately impressed isodiametric meshes, becoming moderately to strongly transverse in front of pronotal anterior margin.

Pronotum (Figs 19–21) 1.31–1.43 times as wide as long, 1.16–1.23 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear or slightly emarginate, faintly bordered laterally. Anterior angles narrowly rounded at tips, slightly to moderately projecting forward. Sides convex in anterior two thirds and more or less distinctly sinuate at posterior third in front of pronotal base. Posterior angles distinct and sharp, often nearly 90°, tips usually slightly produced laterad. Basal margin between posterior angles slightly wider as apical margin between anterior angles, and 0.84–0.88 times as wide as maximum pronotal width, arcuate medially and somewhat oblique laterally, not bordered at sides. Lateral furrows narrow, becoming confluent with the baso-lateral impression at basal third. Baso-lateral impressions rather large and shallow, distinctly delimited from the convex pronotal disc and the somewhat depressed medial part of base, flattened to basal and lateral margin, the latter sometimes slightly reflexed. Base with rather coarse punctation (punctures often fused) at baso-lateral impressions, punctation sometimes extending somewhat forward along sides; between impressions with only single punctures. Pronotal surface at anterior quarter impunctate. Median line fine, disappearing before reaching apical and basal margins, moderately to distinctly punctate at basal quarter. Anterior transverse impression suggested. Microsculpture consisting of faintly impressed, very closely arranged strongly transverse meshes.

Elytra (Fig 19) slightly widened posteriorly, widest at or just behind middle, 1.48–1.59 times as long as wide, 2.69–2.94 times as long and 1.31–1.41 times as wide as pronotum. Basal bead markedly curved to humerus, forming a distinct obtuse angle with lateral margin.

Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on elytral intervals with only traces of very faint and lightly impressed transverse lines, on scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin 1.4–1.5 times longer as wide at basal margin. Prosternum medially with 4–8 and close to apical margin with 3–4 longer setae. Abdominal sternite 3 sometimes with few shorter setae medially and 4–6 moderately pubescent, but in sternite 4 pubescence restricted to medial two-thirds. Last visible sternite in males with two and in females with four longer setae at apical margin.

Protarsomeres 2–4 and mesotarsomeres 3–4 of males with fine biserially arranged adhesive hairs beneath.

Median lobe of aedoeagus (Fig. 59–64) with typical reduced lateral sclerotization at medial portion which is often replaced by a reddish dilatation that varies from absent to markedly developed. Internal structures with the typical ground pattern described for the subgenus, without remarkable specific modifications.

Female hemisternite and gonocoxite with shape and chaetotaxy as figured (Fig. 95).

**Comparisons:** *A. hiekei* is in general appearance very similar to continental populations of *A. punctatus* and has been collected together with this at some localities in Thailand and S Vietnam. It can be separated from the latter by characters mentioned under this species. From other oriental species *A. hiekei* can be easily distinguished by its pronotal shape with sharp, almost right posterior angles. From *A. rhombotus*, at least from its continental populations, which occur in Thailand together with *A. hiekei* and has also rather sharp, sometimes almost rectangular pronotal posterior angles, it differs by the immaculate elytra and pronotum, the unmodified labrum, the different internal structures of the aedoeagus and various body proportions.

**Distribution:** *Acupalpus hiekei* is widely distributed in SE Asia (Fig. 104) from NE Thailand and N Vietnam in the North to Malaysia in the South. One additional record from Sulawesi is based on one female with uncertain identification (see below).

**Additional material:** In addition to the type material four specimens have been studied which are very close to *A. hiekei* in general characters but differ from the types as noted below and were therefore excluded from the type series.



2 ♂♂ (BMNH) from “S Thailand, Krabi, 8°N – 99°E.” and 1 ♀ (ZISP) from “SO Sulawesi, nr. Kasiputih” differ from members of the type series from Thailand and Vietnam by the shape of pronotum which is more cordate, with sides more distinctly constricted posteriorly and more parallel in front of the narrower pronotal base (pronotal basal margin 0.79–0.83 times as wide as pronotum at its broadest point, in typical specimens of *hiekei* 0.84–0.88). The specimens from Krabi have also the elytral apex markedly lighter yellowish. However, the three specimens agree in most general external characters with the types, and the aedeagi of the Krabi specimens show no significant differences compared with those of the types of *A. hiekei*. More material from the same localities is necessary to prove whether the differences in pronotal shape are constant and the specimens represent a similar species very close to *A. hiekei*, or if other specimens from the same population provide intermediate character states useful to regard the Krabi and Sulawesi specimens as individual variants within the variation range of *A. hiekei*.

1 ♀ (ZISP) from N Vietnam, Hanoi differs from the types by its larger size (4.5 mm), markedly prolonged elytra (EL/EW 1.61), and its head/pronotum proportions (HW/PW 0.88). More material from the same area must show whether it is an aberrant specimen of *A. hiekei*, or represents a member of a similar undescribed species occurring in this area.

#### *Acupalpus (Stenolophidius) sinuellus* Bates, 1892

(Figs 22–24, 65–70, 96, 105)

*Acupalpus sinuellus* Bates, 1892: 86 (type locality: Myanmar: Bhamò and Palon (Pegu)).

*Acupalpus (Anthracus) sinuellus* Bates: JEDLIČKA & CHÚJÓ 1964: 167–168 [collection list].

*Acupalpus (Pseudanthracus) sinuellus* Bates: HABU 1978: 9 [collection list Nepal]; LORENZ 1998: 338 [world catalogue]; JAEGER & KATAEV 2003: 399 [Palearctic catalogue]; CHAUDHARI 2005: 87 [checklist Nepal]; LORENZ 2005: 360 [world catalogue].

**Type material examined:** 3 Syntypes: 1 ♂ (BMNH) labelled “Palon / (Pegù) / L. Fea.VII.IX.87”, “Mus. Civ. / Genova”, “Co- / type” [circular label with green margin], “Acupalpus / sinuellus Cotype Bates” [hw Andrewes] and “H.E. Andrewes Coll / B.M. 1945–97”. 1 ♀ (MCSNG) labelled “Bhamò / Birmania / Fea VIII 1885” [month hw], “Acupalpus / sinuellus / Bates” [hw Bates], “Typus” [red ink, on white label with red margin], “sinuellus / Bates” [hw], “Acupalpus / sinuel-

lus / (ex. tip.) Bates” [hw], “SYNTYPUS / Acupalpus / sinuellus / Bates, 1892” [red label, three last lines hw] and “Museo Civico / di Genova”. 1 ♂ (MNHN) labelled “Bhamò / Birmania / Fea VIII 1885” [month hw]; “Acupalpus / sinuellus / Bates” [hw Bates] and “SYNTYPE ♂ / Acupalpus / sinuellus Bates, 1892 / des. B. Jaeger 2011”. All syntypes additionally with my identification label “Acupalpus / (Stenolophidius) / sinuellus / Bates, 1892 / ♂ or ♀ (as appropriate) / det. B. Jaeger 2009, 2010 or 2011”.

**Remarks:** The syntypes from BMNH and MCSNG are in good condition without missing appendages, the syntype from MNHN has the right hind leg missing.

**Redescription:** General appearance as figured (Fig. 22). Body length 3.4–4.7 mm (mean 3.8 in males, 4.1 in females, ST 3.4 and 3.8); width 1.4–1.9 mm.

Head blackish brown, labrum and mandibles reddish brown, with inner margin and apices of the latter blackish brown, palpi yellowish. Pronotum dark brown, with lateral margin and sometimes also lateral part of base paler, yellowish. Elytra blackish brown, with margins and apex pale brown, sometimes also first interval somewhat paler. Antennae with the first, or with the first two antennomeres yellowish, remaining ones dark brown. Legs yellowish. Ventral surface darker to lighter brown, with pro-, mes- and metepisterna darker brown, epipleura pale brown. Upper surface shiny, elytra iridescent.

Head (Figs 22–24) including eyes 0.83–0.87 times as wide as pronotum, with eyes large and distinctly prominent (head 1.62–1.85 times as wide as head between eyes). Labrum, with apical margin more or less evenly rounded. Left mandible rather long, sharp to faintly obtuse at apex, not thickened or truncate. Antennae comparatively long, 2.67–2.95 times as long as pronotum and 0.84–0.92 times as long as elytra. Microsculpture on labrum and clypeus with moderately impressed weakly transverse to isodiametric meshes, on frons sometimes smooth, or with indistinct, partly reduced isodiametric meshes, on vertex with distinct isodiametric meshes becoming moderately to strongly transverse in front of pronotal apex.

Pronotum (Figs 22–24) 1.38–1.45 times as wide as long, 1.15–1.20 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear, faintly bordered laterally. Anterior angles narrowly rounded at tips,

not or rarely very weakly projecting forward. Sides convex in anterior two thirds and at posterior third rectilinearly narrowed, or very faintly sinuate in front of pronotal base. Posterior angles distinct, but obtuse and narrowly rounded at tips. Basal margin between posterior angles slightly wider as apical margin between anterior angles, and 0.79–0.86 times as wide as maximum pronotal width, arcuate medially and oblique laterally, not bordered at sides. Lateral furrows narrow in anterior half, becoming wider at posterior half and confluent with the baso-lateral impressions at posterior third. Baso-lateral impressions rather large and deep, distinctly delimited from the convex pronotal disc and the weakly depressed median part of base, flattened to the markedly reflexed basal and lateral margin. Base with rather distinct and close punctation in the lateral impressions, between impressions impunctate or with only few single punctures. Pronotal surface at anterior quarter impunctate. Median line fine and impunctate, disappearing before reaching apical and basal margins. Anterior transverse impression only suggested. Microsculpture with very faint almost strongly transverse meshes, laterally sometimes reduced.

Elytra (Fig. 22) with sides weakly to moderately widened posteriorly, widest at or just behind middle, 1.52–1.60 times as long as wide, 3.02–3.33 times as long and 1.41–1.52 times as wide as pronotum. Basal bead moderately curved to humerus, forming a gentle bow with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on elytral intervals practically invisible at 112x, sometimes only very lightly impressed transverse lines visible. Scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin 1.4–1.6 times as long as wide at basal margin. Prosternum medially with about 8–10 longer erect setae. Abdominal sternite 3 at medial third, 4 at medial two quarters and 5–6 entirely with rather dense pubescence. Last visible sternite in males with two and in females with four longer setae at apical margin.

Legs: Protarsomeres 2–4 and mesotarsomeres 3–4 of males with biserially arranged adhesive hairs on ventral surface.

Median lobe of aedeagus (Fig. 65–70) with typical reduced lateral sclerotization at medial portion which is often replaced by a reddish dilation that varies from completely reduced to markedly developed. The struc-

tures of the internal sac agree with the ground patterns described for the subgenus and show no remarkable specific modification.

Female hemisternite and gonocoxite with shape and chaetotaxy as figured (Fig. 96).

**Comparisons:** *A. sinuellus* Bates, at least larger specimens, are often very similar to *A. hartmanni* spec. nov. in general appearance and colouration; and occurs sympatrically (at least in Nepal). It can be separated from the latter by its usually smaller size, longer antennae, the pronotal microsculpture with meshes on disc much finer and strongly transverse, the extended abdominal pubescence (in *hartmanni* usually restricted to sternite 6), and the smaller size and different internal structures of the aedeagus. From most other Oriental members of *Stenolophidius*, *A. sinuellus* differs by its dark immaculate elytra with only apex indistinctly brownish and/or the characteristic shape of pronotum with sides and basal margin rather distinctly reflexed at posterior angles. It should be remarked that *A. sinuellus* is probably closely related to *A. papua* Darlington, 1968 from Papua New Guinea (type material from MCZ examined) which represents obviously a southern vicariant of *A. sinuellus*. Both taxa are rather similar in general appearance, colour and also in aedeagal features which show no significant differences. However, though similar *A. papua* differs externally by the pronotal shape which is at the average more transverse and has rather acute hind angles, usually with sharp tips (in *sinuellus* more obtuse with tips usually narrowly rounded), the shorter elytra (EL/EW 1.38–1.48 in *papua* and 1.50–1.62 in *sinuellus*) and the microsculpture on head with rather distinct meshes on frons (instead of obliterated or represented by mesh rudiments in *sinuellus*).

**Distribution:** The species had been described from Myanmar and was subsequently reported from Nepal (HABU 1978: 9) and Thailand (JEDLIČKA & CHŮJŮ 1964: 167–168). The latter record from Thailand needs verification, because of probable misidentification. HABU's (1961) "sinuellus record" from Thailand was based on specimens of *A. rhombotus* Andrewes and *A. punctatus* Jedlička.

According to revised material *A. sinuellus* occurs from Nepal in the northwest to S Vietnam in the southeast (Fig. 105). An additional old record from "Celebes" needs verification. The species can be recorded for the first time from India, Laos and Vietnam.

**Examined material:** In addition to the type material 128 specimens from the following localities have been examined. Few records indicated below as “with uncertain identification” are based on single atypical, or immature male or female specimens. According to present knowledge they fall in the range of variation of *A. sinuellus* but more material from the same localities is necessary to confirm this opinion.

**Nepal:** Kaski District: Pokhara – See, X. 1992, Schmidt (4 – cSCHM); Pokhara-See, Fluß-Mündung, 850m, V. 1993, Schmidt (2 – cSCHM). – Lalitpur District: Kathmandu-Tal, Bagmati-Fluß, V. 1993, Kleeberg (1 – cSCHM); Kathmandu, Bagmati River, 1300m, IV.+VI. 1995, Hartmann or Weipert (28 – NME, cWEIP, cJAE); Kathmandu, Bagmati-River am Gorkhana-Park, 1400m, 27°43,22'N 85°22,59'E, V. 1997, Weipert or Grill (16 – NME, cWEIP, cGRI, cJAE); same data but 1300m, 27°43,2'N 85°22,6'E, Hartmann (9 – NME, cJAE); Kathmandu, Bagmati-River, Pashupatinath, 1300m, IV. 1995, Weigel (23 – NME, cWEIG, cJAE); same data, but 1350m, 27°43'N 85°21'E, Ufer, HF, IV. 2000, Weigel (1 – cWEIG); Kathmandu, Thamel, Hotel Norbhu Linkha, LF, IX. 1996, Hartmann (4 – NME, cJAE).

**India:** Assam: Naga Hills 5000, IV. 1924, S. N. Chatterjee (3 – BMNH). – Meghalaya: Khasi Hills, Mawsynram, 28°18'N 91°29'E, 800 +/- 100m, VI. 2006, Pacholátko (2 – BMNH); 3 km E Tura, 1150m, 25°30'N, 90°14'E, V. 1999, Dembicky & Pacholátko (6 – NHMB, cJAE). – West Bengal: Sarda, Bengal, Champion (3, partly with uncertain identification – BMNH).

**Laos:** Khammuan Province: Ban Khoun Ngeun, 200m, 18°07'N 104°29'E, IV. 2001, Kubán (1 – NHMB).

**Myanmar:** Pegu (1 – BMNH).

**Vietnam:** Hanoi, H. Perrot, Coll. Andrewes (1 – BMNH), Hanoi, at lighth, X.+XI.+XII. 1961, VI.+X. 1962, Kabakov (13 – ZISP, cJAE); NW khr. Tam-Dao, Shon Zuong, 200 m, III. 1962, Kabakov (1 – ZISP); S Vietnam, Nam Cat Tien Nat. Park, V. 1994, Pacholátko & Dembicky (1 with uncertain identification – NHMW).

**Indonesia:** Sulawesi: Celebes, Coll. Kraatz (1 with uncertain identification – SDEI).

***Acupalpus (Stenolophidius) hartmanni spec. nov.***

(Figs 25–27, 71–75, 97, 106)

**Type material:** Holotype: ♂ (NME) labelled “NEPAL, Kathmandu / Thamel, Hotel Norbhu / Linkha, LF, 16./17.IX. / 1996, leg. M. Hartmann” and “HOLOTYPE ♂ / *Acupalpus* / (*Stenolophidius*) / *hartmanni* spec. nov. / des. B. Jaeger 2012”.

Paratypes: (107 ex.) 1 ♀ (NME) labelled “NEPAL, Kathmandu / City, Hotel Rara LF / 17.IX. 1992, 1370 m / NN, leg. Hartmann”. 1 ♀ (cWEIG) labelled “NEPAL, Kathmandu / Valley, Pashupatinath / Bagmati River, 1300 m NN / 14.X. 1992, leg. A. Weigel”. 1 ♂ (cSCHM) labelled “NEPAL, Kathmandu-Tal / Bagmati-Fluß / 5.5.93 leg. Kleeberg”. 22 ♂♂, 15 ♀♀ (NME, cWEIG, cJAE) labelled “NEPAL, Kathmandu, N / Bagmati river Pasha- / putinath 1300m 27. / IV. 1995 leg. A.Weigel”. 7 ♂♂, 11 ♀♀ (NME, cWEIP, cJAE) labelled “NEPAL, Kathmandu / Bagmati-River / 1300 m NN / 27.IV.1995 / leg. J. Weipert”. 4 ♂♂, 8 ♀♀ (NME, cJAE) labelled “NEPAL, Kathmandu, N / Bagmati-River 1300 / m NN 27.IV.1995 / leg. M. Hartmann”. 1 ♂, 2 ♀♀ (NME, cJAE) labelled “NEPAL, Kathmandu, N / Safaripark, Mauer 06. / VI.1995 1300m Ü.NN / leg. A.Weigel”. 2 ♂♂, 2 ♀♀ (NME, cJAE) labelled “NEPAL, Kathmandu, N / Bagmati-River 1300 / m NN 06.VI. 1995 / leg. M. Hartmann”. 1 ♂, 1 ♀ (NME) with same label data as the holotype. 1 ♀ (NME) labelled “NEPAL, Kathmandu / valley, NE Bagmati / river, near Gorkhana / Park, 29.IX. 1996 / leg. M. Hartmann”. 3 ♂♂, 3 ♀♀ (NME, cJAE) labelled “Nepal, District Bagmati / NO-Katmandu, 28.05.1997, / 1400mNN, Nähe Gorkhara / Park, Ufer Bagmati, / leg. Grill, HF27°43'22"N, / 85°22'59"E" [sic!]. 1 ♂, 1 ♀ (NME) labelled “Nepal, District Bagmati / Katmandu, 29.05.1997, / 1395mNN, Ufer Bagmati, / Nähe Pashupatinath, /leg. Grill, HF, 27°42'39"N, / 85°21'26"E". 5 ♂♂, 4 ♀♀ (NME, cWEIP, cJAE) labelled “NEPAL, Kathmandu / 27°43,22'N, / 85°22,59'E" / Bagmati River am / Gorkhana Park / 1400 m NN; 28.V.1997 / leg.: J. Weipert”. 3 ♂♂, 2 ♀♀ (NME, cJAE) labelled “NEPAL, Kathmandu / NE, Gorkhana Park / 1300mNN, Bagmati river / 27°43,2'N, 85°22,6'E / 28.V.1997, leg. Hartmann”. 1 ♀ (NME) labelled “NEPAL Kathmandu NE/ / Gorkhana Park, Bagmati / 27°43'22"N, 85°22'59"E / 26.VI.1997 1400m / leg. A. Weigel Mauer”. 1 ♂, 2 ♀♀ (NME,

cJAE) labelled “NEPAL Kathmandu, N / Gorkhana Park, Bagmati / 27°43'22"N, 85°22'59"E / 28.V.1997 1400m / leg. A. Weigel". 1 ♂ (NME) labelled “NEPAL Kathmandu, NE / Pashupatinath 1400m / Tempelhügel 29.V. / 1997 leg. A. Weigel”.

All Paratypes additionally with my label “PARATYPE ♂ or ♀ (as appropriate) / *Acupalpus* / (*Stenolophidius*) / *hartmanni* spec. nov. / des. B. Jaeger 2012”.

**Etymology:** The species is dedicated to Dipl.-Biol. Matthias Hartmann, head of the Natural History Museum Erfurt and specialist of the Carabid genus *Asaphidion*, who collected a part of the type series of this species, and provided other interesting *Acupalpus* collections from Nepal for study.

**Description:** General appearance as figured (Fig. 25). Body length 4.5–5.6 mm (mean 5.1 in males, 5.3 in females, HT 5.2); width 1.7–2.2 mm.

Head blackish brown, with clypeus, labrum and mandibles (inner margin and apices blackish) dark brown or dark reddish brown. Pronotum dark brown, rarely blackish brown, with lateral margin and base laterally paler yellowish brown. Elytra dark brown, rarely almost blackish brown, with lateral margin and apex more or less widely lighter brown. Antennae with the first two antennomeres yellowish, remaining ones dark brown. Palpi and legs dark yellowish brown. Ventral surface darker to lighter brown, with pro-, mes- and metepisterna somewhat darker brown, epipleura pale brown. Elytra moderately iridescent.

Head (Figs 25–27) including eyes 0.81–0.87 times as wide as pronotum, with eyes rather large and prominent (head 1.61–1.73 times as wide as head between eyes). Labrum with apical margin weakly rounded. Left mandible rather long, weakly obtuse at apex, not markedly thickened or truncate. Antennae moderately long, 2.26–2.60 times as long as pronotum and 0.74–0.85 times as long as elytra. Microsculpture on labrum and clypeus with moderately impressed isodiametric to weakly transverse meshes, on frons almost lacking, rarely with some indistinct isodiametric mesh rudiments, and on vertex posterior to eyes with distinct isodiametric to moderately transverse meshes.

Pronotum (Figs 25–27) 1.33–1.42 times as wide as long, 1.15–1.23 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear, faintly

bordered laterally. Anterior angles narrowly rounded at tips, not or very weakly projecting forward. Sides convex in anterior half and at posterior half rectilinearly narrowed to pronotal base, or more rarely, very faintly sinuate in front of posterior angles. Posterior angles distinct, but obtuse and narrowly rounded at tips. Basal margin between posterior angles a little wider as apical margin between anterior angles, and 0.76–0.81 times as wide as maximum pronotal width, arcuate medially and oblique laterally, not bordered at sides. Lateral furrows narrow in anterior two thirds, not or only weakly widened at posterior third where they are merged with baso-lateral impressions. The latter rather large and deep, distinctly delimited from the convex pronotal disc and median part of base, flattened to basal and lateral margin, the latter sometimes weakly reflexed. Base with distinct and close punctation in the latero-basal impressions, between impressions impunctate or with only few single punctures. Pronotal surface at anterior quarter impunctate. Median line very fine and indistinct, impunctate, disappearing before reaching basal and apical margins. Anterior transverse impression obsolete or only suggested. Microsculpture with almost isodiametric to weakly transverse meshes on disc, becoming finer and strongly transverse laterally.

Elytra (Fig 25) with sides slightly widened posteriorly, widest at or just posterior to middle, 1.59–1.71 times as long as wide, 2.94–3.15 times as long and 1.30–1.40 times as wide as pronotum. Basal bead distinctly curved to humerus, forming a distinct obtuse angle with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on intervals with very lightly impressed rudimentary transverse lines, scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin about 1.5 times as long as wide at basal margin. Prosternum medially with 6–8 longer erect setae. Abdominal sternite 3 glabrous, 4 glabrous, or rarely with few single hairs, 5 with some single hairs, and 6 with moderate pubescence medially. Last visible sternite in males with two and in females with four longer setae at apical margin.

Legs: Protarsomeres 3–4 and mesotarsomere 4 of males with biserially arranged adhesive hairs on ventral surface.

Median lobe of aedoeagus (Fig. 71–75) large, with typical reduced lateral sclerotization as mentioned in

the subgenus characteristic. Amongst dissected males I found none with the typical reddish dilatation laterally or dorsally. The internal sac shows a characteristic composition of fine structures, with an additional spiny row at right apical half.

Female hemisternite and gonocoxite with shape and chaetotaxy as figured (Fig. 97).

**Comparisons:** *A. hartmanni* spec. nov. is the largest species within East Palaearctic and Oriental members of *Stenolophidius* and differs from other known species by its larger size, and/or the dark upper surface, the pronotal shape, the reduced abdominal pubescence and the large median lobe with characteristic internal structures. Smaller specimens are sometimes rather similar to *A. sinuellus*, which was collected together with *A. hartmanni* in Nepal, but can be separated from *A. hartmanni* by characters given under *A. sinuellus*. It should be noted that *A. hartmanni* is in general appearance, particularly in size, colour and pronotal shape also rather similar to *A. (Stenolophidius) leroyi* Basilewsky from Afrotropical region but differ from this species by the different microsculpture on head (frons with distinct meshes in *leroyi*) and on pronotal surface (with very dense and close fine transverse lines in *leroyi*, which cause distinct iridescence), and the aedeagus with different internal structures.

**Distribution:** *A. hartmanni* is so far known only from the Kathmandu region in Nepal, but is obviously more widely distributed.

#### *Acupalpus (Stenolophidius) ustus* Andrewes, 1930

(Figs 28–30, 76, 77, 98, 105)

*Acupalpus ustus* Andrewes, 1930a: 195 (type locality: Indonesia: Kalimantan: Pontianak).

*Acupalpus ustus* Andrewes: ANDREWES 1933: 326 [catalogue Sumatra]; DARLINGTON 1968: 73, 75 [descriptive notes]; STORK 1986: 12 [checklist Borneo].

*Acupalpus (Anthracus) ustus* Andrewes: CSIKI 1932: 1258 [world catalogue].

*Anthracus ustus* (Andrewes): LORENZ 1998: 339 [world catalogue], 2005: 360 [world catalogue]

**Type material examined:** Holotype: ♀ (BMNH) labelled “Pontianak / Borneo V.d.P.” [hw], “Ex. coll. / T. Sloane”; “*Anthracus?* / Congeneric with / *Thenarotes?* / brunnicolor Sl / 38” [hw], “Type” [red paper], “*Acupalpus* / *ustus* / Type Andr. / H. E. Andrewes det.” [hw except last line] and “H.E.Andrewes Coll. / B.M.1945–97.”

Paratypes: 1 ♀ (BMNH) labelled “Pontianak / Borneo V.d.P.” [hw], “Ex. coll. / T. Sloane”, “*Anthracus?* / Congeneric with / *Thenarotes?* / brunnicolor Sl. / 36” [hw], “Co- / type” [circular label with green margin], “*Acupalpus* / *ustus* / cotype Andr. / H.E. Andrewes det.” [hw except last line] and “H.E.Andrewes Coll. / B.M.1945–97.” 1 ♂ (Mus. Leiden) labelled “Soeroel / 8. 78” (hw), “Coll. Veth”, “Cotype”; “Museum Leiden / *Acupalpus* / *ustus* / Cotype Andr. / Det. H.E. Andrewes” [second and third line hw] and “type” [red paper]. 1 ♂ (Mus. Leiden) labelled “Ma Loe / II. 77” [hw, abbreviation standing for Moeara Laboe], “Coll. Veth”, “*Stenolophus* / ? n sp ?” [hw], “Cotype”; “Museum Leiden / *Acupalpus* / *ustus* / Cotype Andr. / Det. H.E. Andrewes” [line 2–4 hw Andrewes] and “Paratype” [red paper].

All type specimens with my identification label “*Acupalpus* / (*Stenolophidius*) / *ustus* / Andrewes, 1930 / det. B. Jaeger 2010 or 2013”.

Remarks: The holotype, and the paratype from Soeroel are in good condition without missing body parts. The paratype from Moeara Laboe has antennomeres 4–11 missing and the paratype from Pontianak is in poor condition with antennae, both hind legs, left meso- and protarsomeres, and right protibia and tarsi missing.

**Redescription:** General appearance as figured (Fig. 28). Body length 3.2–3.4 mm (mean 3.2 in males, 3.4 in females, HT 3.3); width 1.3–1.4 mm.

Head dark brown, with clypeus, labrum and mandibles (inner margin and tips darkened) paler brown. Palpi and antennae yellowish, but antennomeres 4–11 sometimes with a suggested thin longitudinal dark strip. Pronotum slightly paler than head, brown to pale reddish brown with lateral margin somewhat lighter. Elytra brown to dark brown (fresh specimen) with first interval and lateral margin yellowish or pale reddish brown (fresh specimen). Ventral surface uniformly yellowish- to pale reddish-brown. Elytra distinctly, pronotum weakly iridescent. The colour of the types are generally lighter than those of the fresh specimen. Some of the types seem to be somewhat immature, others have obviously become lighter over the years since Andrewes’ description, because the colour of head and elytra were described as “piceous” by ANDREWES.

Head (Figs 28–30) including eyes, moderately wide, 0.80–0.82 times as wide as pronotum, with eyes rather



small and moderately prominent (head 1.59-1.65 times as wide as head between eyes). Left mandible rather short, sharp to somewhat obtuse at apex, not thickened or truncate. Labrum at apical margin evenly rounded, not asymmetric. Antennae rather short 2.46-2.50 times as long as pronotum and 0.84-0.88 times as long as elytra. Microsculpture on labrum and clypeus with isodiametric meshes, on frons with very lightly impressed isodiametric meshes, on anterior part of vertex with lightly impressed isodiametric meshes, becoming strongly transverse on posterior part of vertex.

Pronotum (Figs 28-30) 1.31-1.36 times as wide as long, 1.22-1.25 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear, faintly bordered laterally. Anterior angles narrowly rounded at tips, weakly projecting forward. Sides convex in anterior two thirds, rectilinearly narrowed at posterior third, not or very faintly sinuate in front of pronotal base. Posterior angles distinct and sharp. Basal margin between posterior angles slightly wider as apical margin between anterior angles, and 0.78-0.80 times as wide as maximum pronotal width, arcuate medially, almost rectilinear or very weakly oblique laterally, not or very faintly bordered at sides. Lateral furrows narrow, becoming widened at basal third or quarter where they are merged with baso-lateral impression. Baso-lateral impressions distinctly delimited from the convex pronotal disc and the somewhat depressed middle portion of base, flattened to basal and lateral margin, which are weakly reflexed. Base with rather coarse, but not very close punctation in the baso-lateral impressions, sometimes extending somewhat forward along sides, between impressions impunctate or with few small punctures. Surface otherwise impunctate. Median line very fine and impunctate, disappearing before reaching apical and basal margins. Anterior transverse impression only suggested. Microsculpture very lightly impressed, only here and there traces of fine transverse lines or meshes are visible, which are more distinct at baso-lateral impressions.

Elytra (Fig 28) rather short and wide, with sides weakly to moderately widened posteriorly, widest behind middle, 1.44-1.54 times as long as wide, 2.83-2.97 times as long and 1.42-1.51 times as wide as pronotum. Basal bead distinctly curved to humerus, forming a more or less obtuse angle with lateral margin. Microsculpture

on elytral intervals only with indistinct traces of transverse lines, scutellum with almost isodiametric meshes. Ventral side: Metepisterna comparatively short, though distinctly narrowed posteriorly, at inner margin about 1.3 times longer as wide at basal margin. Prosternum medially with 6 longer erect setae. Abdominal sternite 4 to 6 usually moderately pubescent, in sternite 4 pubescence restricted to medial two-thirds. Last visible sternite in males with two and in females with four longer setae at apical margin.

Legs: Protarsomeres 2-4 and mesotarsomeres 3-4 of males with biserially arranged adhesive hairs on ventral surface.

Aedoeagus (Figs 76-77): Comparatively small, with typical reduced lateral sclerotization. Internal sac without significant specific structures.

Female hemisternite and gonocoxite with shape and chaetotaxy as figured (Fig. 98).

**Comparisons:** *A. ustus* is the smallest species (3.0-3.4 mm) within Oriental *Stenolophidius*, and differs from smaller specimens of other species (*A. rhombotus*, *punctatus*, *sinuellus*, *hiekei*, *andrewesi*) by its smaller and less produced eyes, comparatively short and stout elytra and the characteristic shape of the pronotum (Figs 28-30) with sides not or very slightly sinuated in front of the sharp posterior angles, and the antennae with antennomeres 3-11 yellowish instead markedly infuscated.

**Distribution:** Until now the species (Fig 105) has been reported from Sumatra (ANDREWES 1930a: 195, 1933: 326) and Indonesia (Kalimantan) (ANDREWES 1930a: 195, STORK 1986: 12). The records from New Guinea (DARLINGTON 1968: 75) refer to a similar, closely related, undescribed species which will be treated in a separate contribution on Australian and New Guinean species of *Stenolophidius* (JAEGER in prep.).

**Examined material:** In addition to the type material 1 specimen from the following locality:

**Indonesia:** Sumatra: Alas Valley: Baletutu, 3°43'N.-97°38'E., ca. 320m, jk. No 36, cult. space in lowland, multistratal evergreen forest, at light, VIII. 1972, Krikken (1 - RMNH).

*Acupalpus (Stenolophidius) maculipennis spec. nov.*  
(Figs 31–33, 78–79, 99, 106)

**Type material:** Holotype: ♂ (cWRA) labelled “S. INDIA Tamil Nadu st. / Tuticorin, salt industry ar. / 8°47'N 77°05'E, 22.6.1999 / Kejval & Trýzna leg.”, “Collectio / Rudolf KMECO / Czech republic”, “Coll. WRASE / Berlin” and “HOLOTYPE ♂ / Acupalpus / (Stenolophidius) / maculipennis spec. nov. / des. B. Jaeger 2013”.

Paratypes: 4 ♀♀ (cKME, cWRA) with same locality label as the holotype and one additionally with “Collectio / Rudolf KMECO / Czech republic”. 5 ♀♀ (cKME, cWRA, cJAE) labelled “S. India Tamil Nadu state / Tuticorin salt industry area / 8°47'N 77°05'E, 22.–25.vi.1999 / Z. Kejval et M. Trýzna leg.” 1 ♀ (cWRA) labelled “S-India Tamil Nadu state / S of Tuticorin salt marches / In mouth of Tāmraparni riv. / 8°35'N 78°06'E, 26.vi.1999 / Z. Kejval et M. Trýzna leg.” and “COLL. WRASE / BERLIN”. 1 ♀ labelled “PAKISTAN 27.8.1980 / Sukur / Lgt. J. Seifert”, “COLL. WRASE / BERLIN” and “Acupalpus / spec. / Wrase det. 2007” [first two lines hw].

All paratypes additionally with my label “PARATYPE ♀ / Acupalpus / (Stenolophidius) / maculipennis spec. nov. / des. B. Jaeger 2013”.

**Etymology:** The name “maculipennis” refers to the maculate elytra of the species.

**Description:** General appearance as figured (Fig. 31). Body length 3.7–4.1 mm (mean 3.9 in females, HT 3.8 mm); width 1.3–1.5 mm.

Head blackish to blackish brown, clypeus dark brown, labrum and mandibles paler reddish brown, with inner margin and apices of the latter dark brown, palpi yellowish. Pronotum reddish yellow with disc sometimes indistinctly infuscated. Elytra reddish yellow with a more less expanded dark or blackish brown central macula. In some specimens the macula expanding laterally to interval 9, posteriorly to elytral apex and anteriorly to basal quarter. Ventral surface with head (gula reddish) brown, pro-, meso- and metasternum reddish, pro-, mes- and metepisterna, and abdomen brown to dark brown, but last two abdominal sternites somewhat paler. Epipleura reddish. Antennae with first two antennomeres yellowish, remaining ones brown. Legs yellowish.

Head (Figs 31–33) including eyes 0.84–0.90 times as wide as pronotum, with eyes rather large and prominent (head 1.72–1.82 times as wide as head between eyes). Labrum with apical margin weakly rounded. Left mandible rather long, rather sharp at apex, not thickened or truncate. Antennae moderately long, 2.24–2.46 times as long as pronotum and 0.78–0.84 times as long as elytra. Microsculpture on labrum and clypeus distinct, consisting of isodiametric or weakly transverse meshes, on frons rudimentary with traces of lightly impressed isodiametric meshes, on vertex with moderately impressed isodiametric meshes becoming moderately transverse posteriad.

Pronotum (Figs 31–33) 1.29–1.31 times as wide as long, 1.11–1.19 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear, faintly bordered laterally. Anterior angles narrowly rounded at tips, weakly projecting forward. Sides convex in anterior half and rectilinearly narrowed in posterior half, with a faint sinuation in front of posterior angles. Posterior angles distinct, but obtuse and narrowly rounded at tips, the latter slightly produced laterad. Basal margin between posterior angles a little wider as apical margin between anterior angles, and 0.79–0.83 times as wide as maximum pronotal width, arcuate medially and markedly oblique laterally, faintly bordered at sides. Lateral furrows narrow in anterior half, somewhat widened at posterior half where they are merged with baso-lateral impressions. The latter rather large and moderately deep, delimited from the moderately convex pronotal disc and median part of base, flattened to basal and lateral margin. Base with distinct and close punctation in the lateral impressions, sometimes extending somewhat forward along sides, between impressions impunctate or with only few single punctures. Pronotal surface otherwise impunctate. Median line fine, disappearing before reaching basal and apical margin, with some minute punctures in basal third. Anterior transverse impression obsolete or only suggested. Microsculpture with weakly to moderately transverse meshes on disc, becoming more distinct and somewhat isodiametric in front of apical and basal margin and at baso-lateral impressions.

Elytra (Fig 31) with sides slightly widened posteriorly, widest about at middle, 1.60–1.69 times as long as wide, 2.88–3.00 times as long and 1.31–1.36 times

as wide as pronotum. Basal bead moderately curved to humerus, forming a gentle bow with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on intervals almost lacking, only here and there some transverse mesh rudiments are visible, scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin 1.5–1.6 times as long as wide at basal margin. Prosternum medially with 7–8 longer erect setae. Abdominal sternite 3 glabrous, 4 at medial half and 5–6 entirely with moderate pubescence. Last visible sternite in males with two and in females with four longer setae at apical margin.

Legs: Protarsomeres 2–4 and mesotarsomere 3–4 of males with biserially arranged adhesive hairs on ventral surface.

Median lobe of aedoeagus (Figs 78–79) with typical reduced lateral sclerotization as mentioned in the subgenus characteristic. The internal sac shows some modified scales (similar to those in *punctatus*) near the left longitudinal spiny group.

Female gonocoxite and hemisternite with shape and chaetotaxy as figured (Fig. 99).

**Comparisons:** *A. maculipennis* differs from most Oriental *Stenolophidius* by its elytral colour with a more or less expanded dark central macula (Fig. 31). From *A. rhombotus* and *distincticollis* which also have maculate elytra, it can be separated as follows. From *A. rhombotus* by the left mandible which is rather sharp at apex and not truncate (instead of thickened and strongly truncate at apex) and the unmodified symmetric labrum (instead of markedly asymmetric). From *A. distincticollis* it can be distinguished by the different shape of pronotum (Figs 31–33 respectively Fig. 35) and the microsculpture on pronotal disc which is lacking in *A. distincticollis*.

It should be remarked that *A. maculipennis* is in general appearance and colouration also rather similar to *Acupalpus* (*Stenolophidius*) *boops* Sahlberg, 1900 from Egypt, but differs from the latter by the somewhat shorter elytra, which are also shorter relative to pronotum, the pronotum with base somewhat narrower, and sides more distinctly sinuate in front of posterior angles, which are slightly produced laterad, and the different structures of the internal sac of the aedoeagus.

**Distribution:** *A. maculipennis* is so far known from Pakistan and S India (Fig. 106).

*Acupalpus* (*Stenolophidius*) *distincticollis* spec. nov.

(Figs 34–36, 107)

**Type material:** Holotype: ♀ (ZISP) labelled “S VIETNAM, N Dongnai Pr. / Nam Cat Tien Nat. Park, / Exped. Russ.-Vietnamese / Tropical Centre, at light HQL 450 / 16 X. 2004 D. Fedorenko leg.”; “ZOOLOGICAL / INSTITUTE RAS / ST. PETERSBURG” [yellowish label], “Pseudanthracus / sp. / det. B. Kataev” [first two lines hw], “? sp. n.” [hw on red paper] and “HOLOTYPE / *Acupalpus* / (*Stenolophidius*) / *distincticollis* spec. nov. / des. B. Jaeger 2013”.

**Etymology:** The name “*distincticollis*” refers to the distinct pronotum, which differs markedly from those of other Oriental species of the subgenus.

**Description:** General appearance as figured (Fig. 34). Body length 4.1 mm; width 1.5 mm.

Head dark brown, with clypeus, labrum and mandibles paler reddish brown, with inner margin and apices of the latter blackish. Palpi yellowish brown. Antennae with first two antennomeres yellowish, remaining ones dark brown. Pronotum reddish brown, with lateral margin somewhat paler. Elytra reddish brown, with a large blackish central macula extending laterad to interval 5 and leaving interval 1 reddish brown. Ventral surface more or less uniformly reddish brown, with last abdominal sternites and epipleura somewhat paler. Legs yellowish.

Head (Fig. 35) including eyes 0.86 times as wide as pronotum, with eyes moderately large and prominent (head 1.71 times as wide as head between eyes). Labrum with apical margin rounded, somewhat asymmetric with right side bent moderately backward. Left mandible rather short, moderately obtuse at apex. Microsculpture on labrum and clypeus with distinct isodiametric to moderately transverse meshes, on frons and vertex microsculpture almost lacking, only laterally, posterior to eyes and in front of pronotal apical margin with moderately transverse meshes.

Pronotum (Fig. 35) 1.29 times as wide as long, 1.17 times as wide as head, widest in second quarter, lateral seta inserted just anterior to beginning of second quarter. Apical margin almost rectilinear, faintly bordered laterally. Anterior angles narrowly rounded at tips, very weakly projecting forward. Sides convex in anterior two thirds, at posterior third almost rectilinearly narrowed to base, with a very weak sinuation in front

of posterior angles. Posterior angles distinct, tips narrowly rounded. Basal margin between posterior angles a little wider as apical margin between anterior angles, and 0.78 times as wide as maximum pronotal width, slightly arcuate medially and weakly oblique laterally, faintly bordered at sides. Lateral furrows narrow in anterior two thirds, weakly widened at posterior third where they are merged with baso-lateral impressions. The latter rather deep, distinctly delimited from the strongly convex pronotal disc and median part of base, somewhat flattened to basal and lateral margin, the latter weakly reflexed. Base with some coarse punctures in the baso-lateral impressions, between impressions with some irregular rugosities. Pronotal surface otherwise impunctate. Median line very fine, disappearing at basal quarter and before reaching apical margin, with some fine punctures in basal half. Anterior transverse impression obsolete. Microsculpture on pronotal surface lacking, except for isodiametric meshes at baso-lateral impressions.

Elytra (Fig. 34) with sides almost parallel, only very weakly widened posteriorly, widest at middle, 1.61 times as long as wide, 2.74 times as long and 1.32 times as wide as pronotum. Basal bead weakly curved to humerus, forming an indistinct obtuse angle with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on intervals with very lightly impressed and closely arranged transverse lines (or meshes), scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin about 1.4 times as long as wide at basal margin. Prosternum medially with about 5 longer erect setae (insertion points with setae broken). Abdominal sternite 3 glabrous, 4–5 with some single hairs medially and 6 entirely with moderate pubescence. Last visible sternite (of the female holotype) with four longer setae at apical margin.

Female gonocoxite and hemisternite (Fig. 36) with shape and chaetotaxy as figured.

**Comparisons:** *A. distincticollis* differs from all other Oriental species by its characteristic pronotal shape (Fig. 35) and from most larger species (except Javanese populations of *A. rhombotus*) also by the lack of microsculpture on the pronotal disc.

**Distribution:** *A. distincticollis* is so far known only from the type locality in S Vietnam (Fig. 107) but is obviously more widely distributed.

### *Acupalpus (Stenolophidius) inornatus* Bates, 1873

(Figs 37–39, 80–85, 100, 107)

*Acupalpus inornatus* Bates, 1873: 268–269 (type locality: Japan: Nagasaki and China: “Kiu-Kiang”).

*Acupalpus (Anthracus) inornatus* Bates: SCHAUBERGER 1930: 204 [taxonomic notes], CSIKI 1932: 1257 [world catalogue].

*Acupalpus (Palcuapus) inornatus* Bates: HABU 1973: 333–337 [redescription]; LAFER 1989: 197 [key]; KRZYZHANOVSKIY & al. 1995: 138 [checklist Russia]; LORENZ 1998: 339, 2005: 360 [world catalogue], JAEGER & KATAEV 2003: 399 [Palaeartic catalogue].

**Type material examined:** Syntype: 1 ♀ (MFNB) labelled “59539”, “Nagasaki” [hw Bates], “*Acupalpus* / *inornatus* / Bates” [hw Bates], “*inornatus* / Bates \* / Japonia”, “SYNTYPE / *Acupalpus* / *inornatus* Bates, 1873 / labelled B. Jaeger 2013” and “*Acupalpus* / (*Stenolophidius*) / *inornatus* / Bates, 1873 / det. B. Jaeger 2013”.

The syntype is in poor condition with left antennomeres 5–11, right antennomeres 4–11, left hind leg, right femora and tibia missing.

Remark: The examined syntype from the historical collection of the Zoological Museum Berlin is obviously one of the two specimens from Nagasaki mentioned in the description. The entry “59339” in the inventory catalogue of the historical collection includes a reference to the original description and the information that the specimen was received from Bates, probably in exchange, or as a donation to the former curator E. von Harold who also worked on Japanese Fauna at this time.

The remaining syntypes from Nagasaki and China, Kiu-Kiang are probably deposited in the BMNH or the MNHN collection where other types of Bates are housed. However, regarding the BMNH collection Beulah Garner informed me that none of the *inornatus* specimens deposited there has a locality label “Nagasaki” or “Kiu-Kiang” though some specimens bear an identification label of Bates.

**Redescription:** General appearance as figured (Fig. 37). Body length 3.6–4.2 mm (mean 3.9 in males, 4.0 in females, ST 3.8); width 1.4–1.6 mm.

Dorsal and ventral surface more or less uniformly pale brown, or reddish to yellowish brown, except apices and inner margin of mandibles blackish. Rarely, the head and elytra are slightly darker than pronotum. Palpi and legs yellowish. Antennae with first two antennomeres yellowish, remaining ones brown to dark brown. Elytra sometimes slightly iridescent.

Head (Figs 37–39) including eyes 0.80–0.86 times as wide as pronotum, with eyes rather large and prominent (head 1.70–1.79 times as wide as head between eyes). Labrum with apical margin weakly rounded, sometimes slightly asymmetric with right side bent weakly backward. Left mandible moderately long, rather sharp at apex. Antennae moderately long, 2.55–2.80 times as long as pronotum and 0.81–0.90 times as long as elytra. Microsculpture on labrum and clypeus consisting of distinctly impressed isodiametric meshes, on frons and vertex with moderately impressed isodiametric meshes, becoming transverse in front of pronotal apical margin. Pronotum (Figs 37–39) 1.33–1.41 times as wide as long, 1.17–1.26 times as wide as head, widest in second quarter, lateral seta inserted at beginning of second quarter. Apical margin almost rectilinear, or very weakly emarginate, faintly bordered laterally. Anterior angles narrowly rounded at tips, weakly projecting forward. Sides convex in anterior half and rectilinearly narrowed posteriad, sometimes with a weak sinuation in front pronotal base. Posterior angles obtuse and usually rather widely rounded. Basal margin between posterior angles as wide or little wider as apical margin between anterior angles, and 0.78–0.83 times as wide as maximum pronotal width, weakly arcuate medially and oblique laterally, faintly bordered at sides. Lateral furrows narrow in anterior two thirds, weakly widened at posterior third where they are merged with baso-lateral impressions. The latter distinctly delimited from the convex pronotal disc and median part of base, flattened to basal and lateral margin, the latter sometimes very weakly reflexed. Base with some lightly impressed punctures in baso-lateral impressions, between the latter rarely with some single punctures. Pronotal surface otherwise impunctate. Median line fine and impunctate, disappearing before reaching basal and apical margin. Anterior transverse impression only suggested or obsolete. Microsculpture on pronotum with very lightly impressed lines or strongly transverse meshes on disc, and with more distinct moderately transverse meshes at baso-lateral impressions.

Elytra (Fig. 37) with sides weakly widened posteriorly, widest just posterior to middle, 1.57–1.67 times as long as wide, 3.00–3.24 times as long and 1.36–1.42 times as wide as pronotum. Basal bead moderately curved to humerus, forming a gentle bow with lateral margin. Striae, intervals and chaetotaxy as described

for the subgenus. Microsculpture on intervals partly obliterated, only here and there fine transverse line rudiments are visible, scutellum and its nearest surrounding with distinct isodiametric meshes.

Ventral side: Metepisterna at inner margin about 1.6 times as long as wide at basal margin. Prosternum medially with about 6 longer erect setae. Abdominal sternite 3 with some single hairs medially, 4 with moderate pubescence at medial third, 5 at posterior half, and 6 entirely with moderate, rather long pubescence. Last visible sternite at apical margin with two longer setae in males and four longer setae in females.

Legs: Protarsomeres 2–4 and mesotarsomere 3–4 of males with biserially arranged adhesive hairs on ventral surface.

Median lobe of aedoeagus (Figs 80–85) with typical reduced lateral sclerotization as mentioned in the subgenus characteristic. The internal sac shows the typical ground construction described for the subgenus, but the longitudinal spiny accumulation at right side is more distinct than in other species. The fine scales near the left spiny group are also somewhat modified at apical margin (with two or three thin tips).

Female gonocoxite and hemisternite with shape and chaetotaxy as figured (Fig. 100).

**Comparisons:** *A. inornatus* differs from other Oriental *Stenolophidius* which are distributed further west or south, by its more or less uniformly pale reddish or yellowish brown upper surface without head markedly darker, and/or the pronotum with rather widely rounded posterior angles.

**Distribution:** The species occurs from Russia (Primoriye territory) and Japan (Hokkaido) in the north-east to Taiwan in the south and SW China (Yunnan) in the southwest (Fig. 107).

**Examined material:** In addition to the type material 236 specimens from the following localities have been examined.

**Russia:** Primorskij Kraj: Gorniye klyuchi, 25 km S Lesozavodsk, Ussuri banks, 100m, V. 1993, Zerche (1 – SDEI); Tschernye Gory, Venedivnovo, lux, VIII. 1990, Pütz (1 – cPÜT); Ussurijski preserve, VIII. 1994, Schnitter & Grill (5 – cSCHN); Ussurisk, VII. 1989, Nikodym (1 – cWRA); Ussurisk env., wetland, VI. 2007, Kmeco (1 – cWRA).

**Korea (North):** Sarivon, VII. 1956, Magyar (2 – NMP).

**Korea (South):** Seusan [illegible, ? = Seosan] (1 –



MFNB); Hongik Univ. Seoul, VI. 2010, Kölkebeck (1 – cWRA).

**Japan:** „Japan“ (1 – MFNB); „Japan“, Coll. Thieme (4 – MFNB); „Japan“, Rolle (5 – MFNB). – Honshu: Hyogo Pref.: Awaji Is., Higashiura, V. 1991, Itoh (1 – cWRA); Sanda City, Aono River, IV. 1990, T. Itoh (1 – cWRA). – Ibaraki Pref.: Toride, VIII. 1982, Morita (2 – cWRA); Toride, Riv. Tone, VI. 1988, Ito (1 – cJAE); Yatabeho, VII. 1980, Smetana (5 – CNC); Kanagawa Pref.: Hakone, Dönitz (2 – MFNB). – Kyoto Pref.: Kyoto, VIII. 1980, Besuchet (2 – MHNG); Mizuho, VI. 1974, Hayashi (4 – cJAE); Takaragaike, Park, VIII. 1980, Smetana (1 – CNC); Yawata, Riv. Yodo, V. 1982, Ito (1 – cJAE). – Nagano Pref. Misato, VIII. 1980, Ito (1 – cJAE). – Nara Pref.: Nara, VIII. 1980, Smetana (7 – CNC); Nara, VII. 1980, Besuchet (1 – MHNG). – Niigata Pref.: Kaji, VIII. 1957, Mizusawa (1 – CNC). – Osaka Pref.: Makino, Riv. Yodo, X. 1983, Ito (1 – MFNB). – Saitama Pref.: Kawagoe, VI. 1957, Nagashima (9 – CNC); Ohmiya C., Someya, VI. 1988, Kobori (2 – cWRA). – Tochigi Pref.: Fujioka, IV. 1973, Morita (12 – cWRA). – Tokyo Pref.: Tokio, VI. 1954, Savolainen (2 – MZH); Yamanashi Pref.: Maruno, VII. 1992, Hosoda (16 – cJAE, cWRA). – Kyushu: Nagasaki Pref.: Nagasaki (1 – MFNB); Unzen, 32°46'N 130°16' E, IX. 1934, VIII. 1935, Suenson (8 – ZMUC). – Oita Pref.: Oita, 33°15'N, 131°36' E, X. 1935, Suenson (1 – ZMUC). – Okinawa Pref.: Ishigaki, VI. 1907, Sauter (1 – MFNB). – Shikoku: Kagawa Pref.: Kagawa-ken, V. 1950, Coll. Jedlicka (1 – NMP). – Kagoshima Pref.: Amami Ohshima, Shinmura, VII. 1954, Hisamatsu, Coll. Jedlicka (1 – NMP).

**China:** Fujian: Chong-an, Xingcun, Sangang [= Wuyishan City], 740 m, light trap, VI. 1960, Zhang (3 – BMNH); Foochow [= Fuzhou], VI. 1935, Yang (12 – BMNH); Foochow, Kushan, VIII. 1957, Yang (2 – ZISP); Kushan, 26°04'N 119°25' E, IV. 1935, Suenson (15 – ZMUC); Shaowu env., VI. 1991 (2 – cWRA); Shaowu, Klapperich (1 – NMP); Ziyungdongshan, NW slope, 25°46'N, 117°20' E, 900–1100m, VII. 2007, Turna (1 – cWRA). – Hubei: Wuhan, VIII. 1984, Katschak (1 – SMNS). – Hunan: Chenzhou env., 25.49N 112.59E, VI. 1994 (1 – NHMW); Wuling Shan, Zhangjiajie, –700m, 29°40'N, 110°40' E, VII. 2003, Turna (1 – cWRA?). – Liaoning: Chi-Kuan Shan (1 – MFNB). – Shaanxi: auto route 100, km 65, 57 km

W Xian, 108.20E, 34.09N, river bank sifted, 16.VIII. 1995, Schülke or Pütz (24 – cWRA, NME); Qin Ling Shan, 107.56E, 33.45N, autoroute km 93 S Zhouzhi, 108 km W Xian, mount, forest, 1650m, IX. 1995, Schülke (1 – cWRA); riv. Bank at road Zhouzhi-Foping, 95 km WSW Xi'an, 950m, 33°53'N/108°02'E, (fine to coarse gravel bank), VII. 2001, Schülke (1 – cWRA). – Shanghai: Shanghai Umg. (4 – NMP); Shanghai, 31°13'N 121°25' E, VII. 1924 + XI. 1928 + VII. 1928 + VI. 1934 + V. 1943, Suenson (15 – ZMUC); Shanghai, IV. 1937, Klapperich (1 – NMP); Shanghai, IV. 1938, Höne (1 – NMP). – Sichuan: Daba Shan, 65km N Fengjie, 100m, 31°40'N 109°34'E, VII. 2001, Smetana (1 – CNC); Mt. Emei, 500–1200m, 103.20E/20.30N, V. 1989, Kolibac (4 – NHMB); Wangcang, V. 2002, Kučera (5 – cKUC, cWRA); Wassuland, Chunghwa, Reitter (1 – NMP); 5 km E Yaan, 103.02E, 30.01N, V. 1997, Pütz (1 – cWRA). – Yunnan: Baoshan Pref., Gaoligong Shan, 44 km NNE Tengchong, 15576 m, 25°23'38"N, 98°38'53"E, (creek bank, washed from sand and gravel) [12], VIII. 2009, Schülke (2 – cWRA); Dali, VI. 2010, Kucera (2 – cWRA); Dali Bai Nat. Auton. Pref., Diancang Shan 45km NNW Dali, 2376 m, 26°02'28"N, 99°54'41"E, (valley with rice fields, sandy creek bank) [10], V. 2007, Schülke (1 – cWRA); Dali Bai Nat. Auton. Pref., NE bank of Er Hai, 27 km N Dali, 1980 m, 25°57'N, 100°09'E (embankment, under plants/litter) [33], VI. 2007, Wrase, (8 – cWRA); Dali Bai Nat. Aut. Pref., 4 km E Dali old town, shore terrain of Er Hai Lake, 2020 m, 25°42'N, 100°01.5'E, [16], VIII.–IX.2003, Wrase (3 – cWRA); Dali old town env., VII. 1998 (4 – WRA); Kunmin, 1900 m, V. 1956, Panfilow (1 – ZISP); Tsindun, 1170 m, VI. 1956, Kryzhanovskij (1 – ZISP); Vallis flumin. Soling-ho (2 – NMP). – Zhejiang: Hangchow, 30°18'N 120°07' E, III. 1923, Suenson (1 – ZMUC); Anji County, ca. 450 m, Long Wang Shan N. R., V. 1996, Cooter (1 – cWRA). – Localities not traced: “Kanton”, 1916/1917, Weigold (2 – MFNB); Tsha-Jiu-san, VII.–IX.1910, Mell (1 – MFNB).

**Taiwan:** Taichung Hsien: Wufeng, Wushi (Riv.), 100m, IV. 1990, Smetana (1 – CNC).

***Acupalpus (Stenolophidius) andrewesi* spec. nov.**

(Figs 40–46, 86–92, 101, 106)

**Type material:** Holotype: ♂ (cWRA) labelled “INDIA, Maharashtra / ca 15 km E of Savatvadi / 15°55'N 75°53'E / riveside, alt. ca. 40 m / 22.v.2006, Z.Kejval lgt.” and “HOLOTYPE / *Acupalpus* / (*Stenolophidius*) / *andrewesi* spec. nov. / des. B. Jaeger 2013”.

Paratypes: 1 ♂, 1 ♀ (cWRA, cJAE) with same collecting data as the holotype. 1 ♀ (BMNH) labelled “Khawasa / SEONI DIST. / 2000 ft. / C. P. INDIA. / 17–1–1917 / E.A. D'ABREU” [date hw], “Central Mus. / Nagpur, C. P.” and “H.E.Andrewes Coll. / B.M.1945–97.” 1 ♀ (BMNH) labelled “NAGPUR / Telinkheri / C. P. INDIA. / 1,000 ft. / 28–8–1918 / E. A. D'ABREU” [second line and date hw] on backside “under / pile of / ...alir weeds” [hw], “Central Mus. / Nagpur, C. P.” and “H.E.Andrewes Coll. / B.M.1945–97.” 1 ♂ (MHNG) labelled “INDIA Kerala / 7. XI. 72 / Cardamon H. / Thekkady près Periyar / 900 m / Besuchet Löbl Mussard” [second, fourth and fifth line hw] and “14a” on backside. 1 ♂ (MHNG) labelled “INDIA Kerala / Cardamon H. Periyar / env. Aranya Nivus / 950m. 4. XI. 72 / Besuchet Löbl Mussard” [last word of second line, third and fourth lines hw] and “8a” on backside. 1 ♂, 2 ♀♀ (SDEI) labelled “Anuradhapura / Ceylon / W. Horn 1899”; “Perigona / Dupuis det.” [first line hw]; “*Acupalpus* / brunnicolor / Sloane / H.E. Andrewes det.” [first three lines hw] and “DEI / Eberswalde”, one female additionally with “Coll. Kraatz”. 1 ♂ (BMNH) labelled “Anuradhapura / Ceylon / W. Horn 1899”, “approaches very / near *A. sinuellus* / Bates” [hw Andrewes] and “H.E.Andrewes Coll. / B.M.1945–97.” 2 ♂♂ (BMNH) labelled “Kandy / Ceylon / G.E. Bryant. / VI. 1908” [second line yellow underlined, last line hw] and “H.E.Andrewes Coll. / B.M.1945–97.” 1 ♂, 2 ♀♀ (MFNB) labelled “Ceylon, / Mus. Colombo” [hw on yellow label].

All paratypes additionally with my label “PARATYPE ♂ or ♀ (as appropriate) / *Acupalpus* / (*Stenolophidius*) / *andrewesi* spec. nov. / des. B. Jaeger 2013”.

Remark: Some paratypes have parts of legs and/or antennomeres, one has the abdomen missing. One paratype from Anuradhapura is markedly immature.

**Etymology:** The species is named in memory of the well known British specialist of Oriental Carabidae, H. E. Andrewes, who described most of the formerly known Oriental species of the genus *Acupalpus*.

**Description:** General appearance as figured (Fig. 40). Body length 3.6–4.6 mm (mean 4.1 in males, 4.3 in females, HT 4.1), width 1.5–1.7 mm.

Head blackish brown, with clypeus brown, labrum yellowish-brown and mandibles (inner margin and apices blackish) reddish brown. Pronotum paler than head, dark brown, with lateral and apical margin paler brown. Elytra dark to blackish brown, with lateral margin and first interval paler. Antennae with first two antennomeres yellowish, remaining ones brown. Palpi and legs yellowish. Ventral surface mainly reddish brown with pro-, mes- and metepisterna and sternites laterally somewhat darker, epipleura paler brown. Elytra weakly iridescent. Remark: The colour description is based on fresh specimens from Maharashtra province. In most elder specimens at least the pronotum and the elytra, sometimes also the head are generally somewhat paler. Head (Figs 40–46) including eyes 0.84–0.88 times as wide as pronotum, with eyes rather large and prominent (head 1.61–1.78 times as wide as head between eyes). Labrum with apical margin weakly rounded, sometimes slightly asymmetric with right side bent somewhat backward. Left mandible rather short, markedly obtuse at apex. Antennae moderately long, 2.40–2.68 times as long as pronotum and 0.82–0.89 times as long as elytra. Microsculpture on labrum and clypeus with distinctly impressed isodiametric to weakly transverse meshes, on frons almost smooth or with very lightly impressed isodiametric meshes, on vertex, between and/or posterior to eyes with isodiametric to weakly transverse meshes becoming moderately to strongly transverse in front of pronotal apical margin.

Pronotum (Figs 40–46) 1.28–1.37 times as wide as long, 1.13–1.19 times as wide as head, widest in second quarter, lateral seta inserted just anterior or posterior to beginning of second quarter. Apical margin weakly emarginated or almost rectilinear, faintly bordered laterally. Anterior angles narrowly rounded at tips, weakly to moderately projecting forward. Sides convex in anterior half and at posterior half rectilinearly narrowed to base, usually with more or less distinct rather short sin-

uation just in front of posterior angles. Posterior angles distinct, weakly produced laterad, with tips rather sharp to faintly obtuse at apex. Basal margin between posterior angles a little wider as apical margin between anterior angles, and 0.78–0.83 times as wide as maximum pronotal width, arcuate medially and oblique laterally, not or faintly bordered at sides. Lateral furrows narrow in anterior two thirds, not or only weakly widened at posterior third where they are merged with baso-lateral impressions. The latter distinctly delimited from the convex pronotal disc and median part of base, flattened to basal and lateral margin, the latter sometimes very weakly reflexed. Base with distinct and course punctation in and sometimes also around lateral impressions, sometimes also somewhat extended forward along sides, between impressions usually with some single punctures. Pronotal surface at anterior quarter without punctation. Median line fine and impunctate, disappearing at basal quarter and before reaching the apical margin. Anterior transverse impression only suggested or obsolete. Microsculpture on pronotum with weakly to moderately transverse meshes on disc, becoming strongly transverse laterally, and almost isodiametric at apical third and pronotal base.

Elytra (Fig 40) with sides weakly widened posteriorly, widest at middle, 1.54–1.64 times as long as wide, 2.80–3.00 times as long and 1.33–1.43 times as wide as pronotum. Basal bead markedly curved to humerus, forming a more or less distinct obtuse angle with lateral margin. Striae, intervals and chaetotaxy as described for the subgenus. Microsculpture on elytral intervals with very lightly impressed fine strongly transverse meshes. Scutellum and its nearest surrounding with isodiametric meshes.

Ventral side: Metepisterna at inner margin about 1.5–1.6 times as long as wide at basal margin. Prosternum medially with 6–8 longer erect setae. Abdominal sternite 3 smooth, 4 with few single hairs, 5 (at medial third) and 6 with moderate pubescence. Last visible sternite in males with two and in females with four longer setae at apical margin.

Legs: Pro- and mesotarsomeres 2–4 of males with biserially arranged adhesive hairs on ventral surface.

Median lobe of aedoeagus (Figs 86–92) rather large and elongate with a distinctly delimited apical lamella.

The lateral sclerotization is not or less distinctly reduced than in other species and none of the examined males have a reddish lateral swelling or dilatation. The fine structures of the internal sac possesses a characteristic composition, which differs from the ground patterns described for *Stenolophidius*. The left spiny group is less distinct and sometimes no more than suggested and the typical central spiny field is not realized.

**Variation:** The holotype and the two paratypes from the Maharashtra Province (Figs 40–42) have the pronotum more cordate than other specimens from Central and Southern India (Figs 45–46) as well as those from Sri Lanka (Figs 43–44). However, according to the characteristic median lobe of aedoeagus and its internal structures (Figs 86–92) all specimens represent with no doubts members of one species. According to the material examined here the pronotal shape seems to be subject of rather large individual variation and more material, including longer series from single localities, is necessary to clarify if the species comprises distinctive geographical forms.

**Comparisons and remarks:** *A. andrewesi* spec. nov. differs from all other East Palaearctic and Oriental members of *Stenolophidius* by the shape of the median lobe of the aedoeagus with lateral sclerotization less distinctly reduced and the atypical composition of structures of the internal sac. However, according to external features, e.g. the chaetotaxy of antennae and prosternum and other characters the species is very close to other members of the subgenus and therefore placed into *Stenolophidius*. Externally *A. andrewesi* differs from other medium sized species with immaculate elytra, *A. sinuellus*, *punctatus* and *hiekei*, by its characteristic pronotal shape (Figs 40–46), with a short, rather abrupt sinuation just in front of hind angles which are slightly produced laterad. Paler brown specimens from Sri Lanka are rather similar to specimens of *A. punctatus* from the same area, but differ also by the pronotal characters described above.

**Distribution:** *Acupalpus andrewesi* is so far known from western and southern India as well as from Sri Lanka (Fig. 106).

## Key to Oriental and East Palaearctic species of the *Acupalpus* subgenus *Stenolophidius*

- 1 Smaller species, 3.2–3.3 mm, with antennomeres 3–11 not darkened and pronotum with sides not sinuate in front of the sharp posterior angles (Figs 28–30). Known from Kalimantan and Sumatra. .... ***A. ustus* Andrewes, 1930**
  - Larger species, 3.2–5.6 mm, mostly > 3.4 mm, with antennomeres 3–11 distinctly darkened and pronotum with different shape (Figs 1–7, 12–27, 31–46). ..... **2**
- 2 Species with upper surface uniformly pale reddish or yellowish brown (Fig. 37). Pronotal posterior angles widely rounded (Figs 37–39). 3.6–4.2 mm. Known from Russian Far East, Korean Peninsula, Japan, China and Taiwan. .... ***A. inornatus* Bates, 1873**
  - Species with different colour of upper surface, head dark or blackish brown. Shape of pronotum different, posterior angles sharp, narrowly or widely rounded (Figs 1–7, 12–27, 31–35, 40–46). ..... **3**
- 3 Large species, 4.5–5.6 mm. Abdominal sternite 4–5 smooth or with only few single hairs. Pronotum (Figs 25–27) with posterior angles rather widely rounded, sides rectilinearly narrowed to base, with no distinct sinuation. So far known only from the Kathmandu territory in Nepal. .... ***A. hartmanni* spec. nov.**
  - Smaller species, 3.4–4.7 mm and/or abdominal sternite 4–5 usually with distinct pubescence at least medially. Pronotum with posterior angles narrowly rounded or sharp (Figs 1–7, 12–24, 31–35, 40–46). ..... **4**
- 4 Microsculpture on pronotal disc absent. Shape of pronotum as figured (Fig 35). 4.1 mm. So far known only from S Vietnam. .... ***A. distincticollis* spec. nov.**
  - Microsculpture on pronotal disc present (except for Javanese populations of *A. rhombotus*). Shape of pronotum different (Figs 1–7, 12–24, 31–33, 40–46). ..... **5**
- 5 Elytra with a more or less expanded dark central macula (Figs 1, 9–11, 31), rarely only two, distinctly delimited yellow patches remains apically (Fig. 8). ..... **6**
  - Elytra more or less uniformly yellowish or blackish brown, sometimes the elytral apex indistinctly paler (Figs 12, 19, 22, 40). ..... **7**
- 6 Left mandible short, thick and markedly truncate apically (Figs 6–7). Labrum markedly asymmetric at right side (Figs 6–7). Pronotum more or less distinctly punctate at apical third (Figs 1–7). 3.6–4.6 mm. Known from NE India, continental SE Asia, Philippines and Java. .... ***A. rhombotus* Andrewes, 1936**
  - Left mandible long and more slender, rather sharp at apex. Labrum not or only very weakly asymmetric. Pronotum impunctate at apical third (Figs 31–33). 3.7–4.1 mm. Known from SE Pakistan and S India. .... ***A. maculipennis* spec. nov.**
- 7 Pronotum (Figs 22–24) with sides almost rectilinearly narrowed posteriad, sometimes with an indistinct sinuation in front of posterior angles, the latter usually rather obtuse and laterally distinctly reflexed. Elytra longer relative to pronotum (EL/PL: > 2.99), blackish brown, with apical region somewhat paler. 3.4–4.7 mm. Known from Nepal, NE India and SE Asia. .... ***A. sinuellus* Bates, 1892**
  - Pronotum (Figs 12–21, 40–46) with sides in front of posterior angles either almost parallel, or with a long, or rather short sinuation. Posterior angles not or more faintly reflexed, apices rather sharp and somewhat produced laterad. Elytra shorter relative to pronotum (EL/PL: < 3.00), when longer then elytra pale brown or blackish brown without apical region distinctly paler. .... **8**
- 8 Pronotum (Figs 40–46) with a short, but distinct and rather abrupt sinuation in front of posterior angles. Median lobe of aedeagus (Figs 86–92) rather large, with an distinctly delimited apical plateau and specific internal structures. 3.6–4.6 mm. Known from C, W and S India, and Sri Lanka. .... ***A. andrewesi* spec. nov.**
  - Pronotum (Figs 12–21) with sides almost parallel, or a with rather long and faint sinuation in front of posterior angles. Median lobe of aedeagus (Figs 53–64) smaller, without a distinctly delimited apical plateau, and internal structures different. .... **9**

- 9 Pronotum and elytra paler brown and not iridescent. Microsculpture on disc of pronotum distinct, consisting of isodiametric (continental populations) or weakly transverse meshes (populations from Philippines and Java), on elytral intervals with lightly impressed transverse lines. Internal structures of the aedeagus with modified scales near left spiny group (Fig. 58a). 3.2–4.1 mm. SE Asia, Philippines, Java, Sulawesi and Sri Lanka. .... ***A. punctatus* (Jedlička, 1936)**
- Pronotum and elytra darker brown and weakly iridescent. Microsculpture on disc of pronotum with fine and strongly transverse meshes, on elytral intervals only traces of very lightly impressed transverse lines are visible. Elytra at the average broader. Internal structures of the aedeagus different, without modified scales near left spiny group (Figs 60–64). 3.6–4.3 mm. Known from continental SE Asia. .... ***A. hiekei* spec. nov.**

## Acknowledgements

I thank all colleagues, curators and collection staff mentioned in the material section, who lent the material, which forms the basis for this paper. I am also very grateful to Dr. Roger Booth (London), who kindly checked the English of the final draft. Furthermore, I thank Dr. Manfred Uhlig (Berlin) for some useful comments on a former draft of the manuscript.

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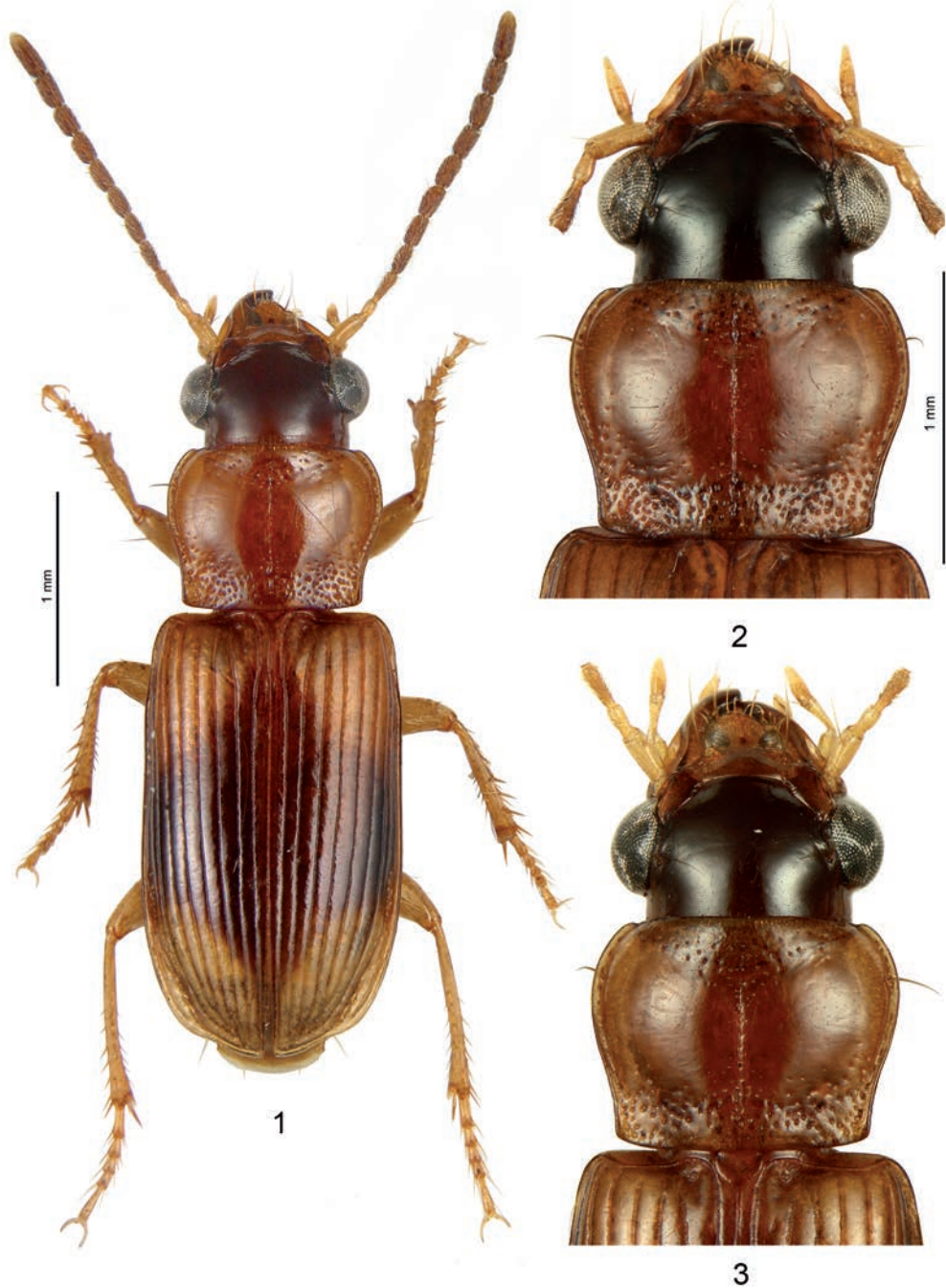
e-mail: acupalpus.bj@gmx.de

Table 1. Variation of ratios among male specimens of subgenus *Stenolophidius*

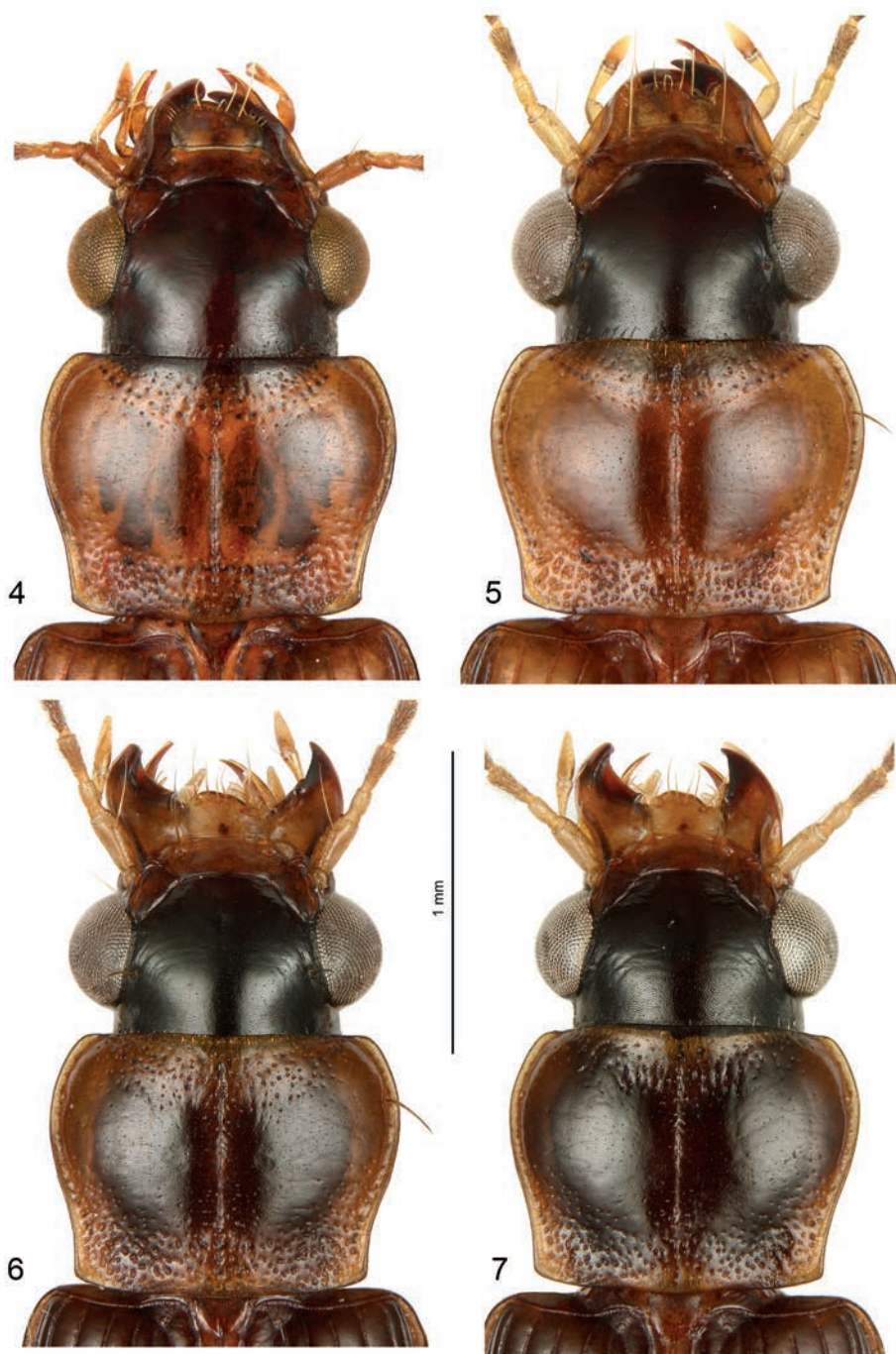
species	n	AL/PL	AL/EL	HW/HWbE	HW/PW	PW/HW
<i>A. rhombotus</i> (Java)	1	2.30	0.83	1.65	0.86	1.16
<i>A. rhombotus</i> (continent)	20	2.04-2.43 (2.25)	0.76-0.86 (0.80)	1.69-1.79 (1.74)	0.86-0.91 (0.88)	1.10-1.17 (1.14)
<i>A. punctatus</i> (Philippines)	16	2.39-2.64 (2.53)	0.79-0.88 (0.84)	1.69-1.81 (1.74)	0.85-0.91 (0.88)	1.10-1.18 (1.14)
<i>A. punctatus</i> (Java)	12	2.47-2.70 (2.55)	0.85-0.91 (0.87)	1.70-1.78 (1.74)	0.83-0.87 (0.85)	1.16-1.20 (1.18)
<i>A. punctatus</i> (continent)	15	2.44-2.67 (2.58)	0.81-0.92 (0.87)	1.74-1.86 (1.80)	0.83-0.88 (0.86)	1.14-1.21 (1.17)
<i>A. hiekei</i>	20	2.42-2.71 (2.52)	0.86-0.95 (0.89)	1.64-1.79 (1.73)	0.81-0.86 (0.84)	1.17-1.23 (1.20)
<i>A. sinuellus</i>	20	2.66-2.95 (2.77)	0.83-0.92 (0.87)	1.62-1.85 (1.76)	0.83-0.87 (0.85)	1.15-1.20 (1.18)
<i>A. hartmanni</i>	20	2.39-2.60 (2.49)	0.80-0.85 (0.82)	1.62-1.73 (1.68)	0.82-0.87 (0.85)	1.15-1.23 (1.18)
<i>A. ustus</i>	2	2.46-2.49 (2.48)	0.87-0.88 (0.88)	1.59-1.65 (1.62)	0.80-0.82 (0.81)	1.22-1.25 (1.24)
<i>A. maculipennis</i>	1	2.46	0.87	1.73	0.84	1.20
<i>A. inornatus</i>	8	2.63-2.80 (2.68)	0.82-0.90 (0.87)	1.72-1.79 (1.76)	0.82-0.86 (0.83)	1.17-1.23 (1.20)
<i>A. andrewesi</i>	9	2.44-2.68 (2.52)	0.85-0.89 (0.87)	1.68-1.78 (1.71)	0.84-0.88 (0.87)	1.13-1.19 (1.15)
		PW/PL	PBW/PW	EW/PW	EL/PL	EL/EW
<i>A. rhombotus</i> (Java)	1	1.29	0.81	1.27	2.78	1.70
<i>A. rhombotus</i> (continent)	20	1.25-1.35 (1.31)	0.81-0.86 (0.83)	1.27-1.32 (1.30)	2.67-2.85 (2.79)	1.60-1.66 (1.64)
<i>A. punctatus</i> (Philippines)	16	1.29-1.40 (1.35)	0.80-0.84 (0.82)	1.37-1.44 (1.40)	2.89-3.11 (2.99)	1.55-1.63 (1.58)
<i>A. punctatus</i> (Java)	12	1.34-1.40 (1.37)	0.81-0.86 (0.85)	1.34-1.39 (1.37)	2.80-3.02 (2.93)	1.54-1.60 (1.57)
<i>A. punctatus</i> (continent)	15	1.33-1.40 (1.37)	0.82-0.85 (0.83)	1.34-1.42 (1.38)	2.86-3.02 (2.96)	1.53-1.64 (1.57)
<i>A. hiekei</i>	20	1.31-1.43 (1.37)	0.84-0.88 (0.85)	1.31-1.41 (1.36)	2.69-2.92 (2.82)	1.48-1.56 (1.52)
<i>A. sinuellus</i>	20	1.38-1.45 (1.41)	0.79-0.86 (0.82)	1.39-1.52 (1.45)	2.99-3.35 (3.18)	1.50-1.61 (1.56)
<i>A. hartmanni</i>	20	1.33-1.42 (1.37)	0.76-0.81 (0.78)	1.30-1.38 (1.34)	2.96-3.12 (3.04)	1.61-1.70 (1.65)
<i>A. ustus</i>	2	1.33	0.78-0.80 (0.79)	1.46-1.47 (1.47)	2.83	1.46-1.47 (1.46)
<i>A. maculipennis</i>	1	1.37	0.79	1.29	2.81	1.61
<i>A. inornatus</i>	10	1.33-1.41 (1.37)	0.78-0.82 (0.80)	1.36-1.42 (1.39)	3.00-3.23 (3.11)	1.57-1.67 (1.62)
<i>A. andrewesi</i>	7	1.31-1.35 (1.33)	0.77-0.83 (0.81)	1.33-1.43 (1.37)	2.81-3.00 (2.90)	1.54-1.64 (1.58)

Table 2. Variation of ratios among female specimens of subgenus *Stenolophidius*

species	n	AL/PL	AL/EL	HW/HWbE	HW/PW	PW/HW
<i>A. rhombotus</i> (Java)	9	2.16-2.27 (2.21)	0.77-0.83 (0.80)	1.60-1.69 (1.65)	0.86-0.90 (0.87)	1.12-1.17 (1.15)
<i>A. rhombotus</i> (continent)	20	2.03-2.29 (2.19)	0.72-0.80 (0.78)	1.65-1.80 (1.71)	0.85-0.91 (0.88)	1.10-1.17 (1.14)
<i>A. punctatus</i> (Philippines)	6	2.38-2.54 (2.43)	0.78-0.84 (0.81)	1.68-1.78 (1.73)	0.86-0.88 (0.87)	1.13-1.17 (1.15)
<i>A. punctatus</i> (Java)	7	2.41-2.57 (2.46)	0.82-0.86 (0.84)	1.65-1.79 (1.73)	0.82-0.86 (0.84)	1.16-1.23 (1.19)
<i>A. punctatus</i> (continent)	10	2.41-2.63 (2.53)	0.81-0.88 (0.84)	1.71-1.83 (1.78)	0.83-0.88 (0.86)	1.14-1.20 (1.16)
<i>A. hiekei</i>	12	2.37-2.60 (2.52)	0.86-0.90 (0.88)	1.67-1.75 (1.71)	0.82-0.86 (0.83)	1.16-1.22 (1.20)
<i>A. sinuellus</i>	20	2.54-2.84 (2.70)	0.80-0.86 (0.83)	1.64-1.79 (1.74)	0.81-0.86 (0.84)	1.16-1.23 (1.19)
<i>A. hartmanni</i>	20	2.26-2.50 (2.43)	0.74-0.82 (0.79)	1.61-1.72 (1.66)	0.81-0.86 (0.84)	1.16-1.23 (1.19)
<i>A. ustus</i>	3	2.50	0.84-0.87 (0.86)	1.62-1.64 (1.63)	0.81-0.82 (0.81)	1.22-1.24 (1.23)
<i>A. maculipennis</i>	10	2.24-2.46 (2.40)	0.78-0.84 (0.82)	1.72-1.82 (1.78)	0.84-0.90 (0.86)	1.11-1.19 (1.16)
<i>A. distincticollis</i>	1			1.71	0.86	1.17
<i>A. inornatus</i>	8	2.55-2.65 (2.58)	0.81-0.85 (0.82)	1.70-1.74 (1.72)	0.80-0.85 (0.82)	1.17-1.26 (1.22)
<i>A. andrewesi</i>	6	2.40-2.50 (2.45)	0.82-0.86 (0.84)	1.61-1.69 (1.66)	0.85-0.88 (0.86)	1.14-1.18 (1.16)
		PW/PL	PBW/PW	EW/PW	EL/PL	EL/EW
<i>A. rhombotus</i> (Java)	9	1.27-1.33 (1.29)	0.81-0.85 (0.83)	1.22-1.29 (1.25)	2.68-2.83 (2.75)	1.67-1.73 (1.70)
<i>A. rhombotus</i> (continent)	20	1.27-1.34 (1.31)	0.81-0.86 (0.83)	1.27-1.34 (1.30)	2.74-2.86 (2.81)	1.62-1.70 (1.65)
<i>A. punctatus</i> (Philippines)	6	1.33-1.36 (1.35)	0.80-0.84 (0.82)	1.38-1.40 (1.39)	2.92-3.06 (2.98)	1.55-1.63 (1.59)
<i>A. punctatus</i> (Java)	7	1.33-1.39 (1.37)	0.84-0.86 (0.85)	1.33-1.38 (1.35)	2.85-3.00 (2.93)	1.55-1.61 (1.58)
<i>A. punctatus</i> (continent)	10	1.34-1.40 (1.37)	0.82-0.85 (0.84)	1.34-1.43 (1.38)	2.84-3.07 (3.00)	1.53-1.63 (1.58)
<i>A. hiekei</i>	12	1.32-1.39 (1.37)	0.84-0.88 (0.86).1)	1.31-1.40 (1.35)	2.70-2.94 (2.84)	1.50-1.59 (1.54)
<i>A. sinuellus</i>	20	1.38-1.46 (1.42)	0.80-0.85 (0.82)	1.35-1.51 (1.45)	3.04-3.47 (3.23)	1.52-1.62 (1.57)
<i>A. hartmanni</i>	20	1.33-1.42 (1.38)	0.76-0.80 (0.78)	1.31-1.40 (1.35)	2.94-3.15 (3.06)	1.59-1.71 (1.65)
<i>A. ustus</i>	3	1.31-1.36 (1.33)	0.80	1.42-1.51 (1.47)	2.86-2.97 (2.90)	1.44-1.54 (1.48)
<i>A. maculipennis</i>	10	1.29-1.38 (1.35)	0.79-0.83 (0.81)	1.31-1.36 (1.33)	2.88-3.00 (2.94)	1.60-1.69 (1.64)
<i>A. distincticollis</i>	1	1.29	0.78	1.32	2.74	1.61
<i>A. inornatus</i>	8	1.33-1.40 (1.37)	0.79-0.83 (0.81)	1.37-1.41 (1.39)	3.01-3.24 (3.14)	1.61-1.67 (1.64)
<i>A. andrewesi</i>	6	1.28-1.37 (1.32)	0.78-0.82 (0.80)	1.35-1.40 (1.38)	2.80-3.00 (2.90)	1.56-1.63 (1.60)

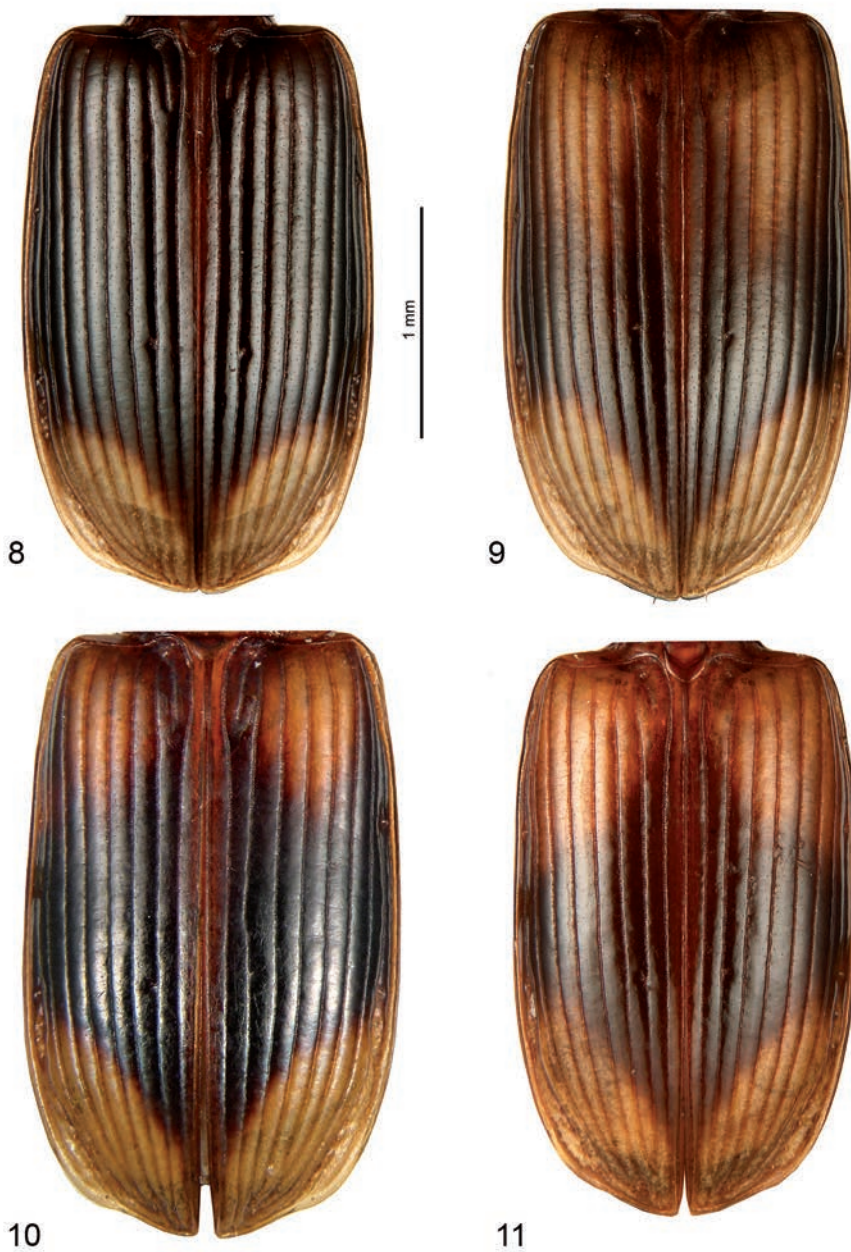


Figs 1–3. *Acupalpus rhombotus* Andrewes. Habitus, head and pronotum. (1) HT; (2) Java, Kediri; (3) Java, Bandoeng.



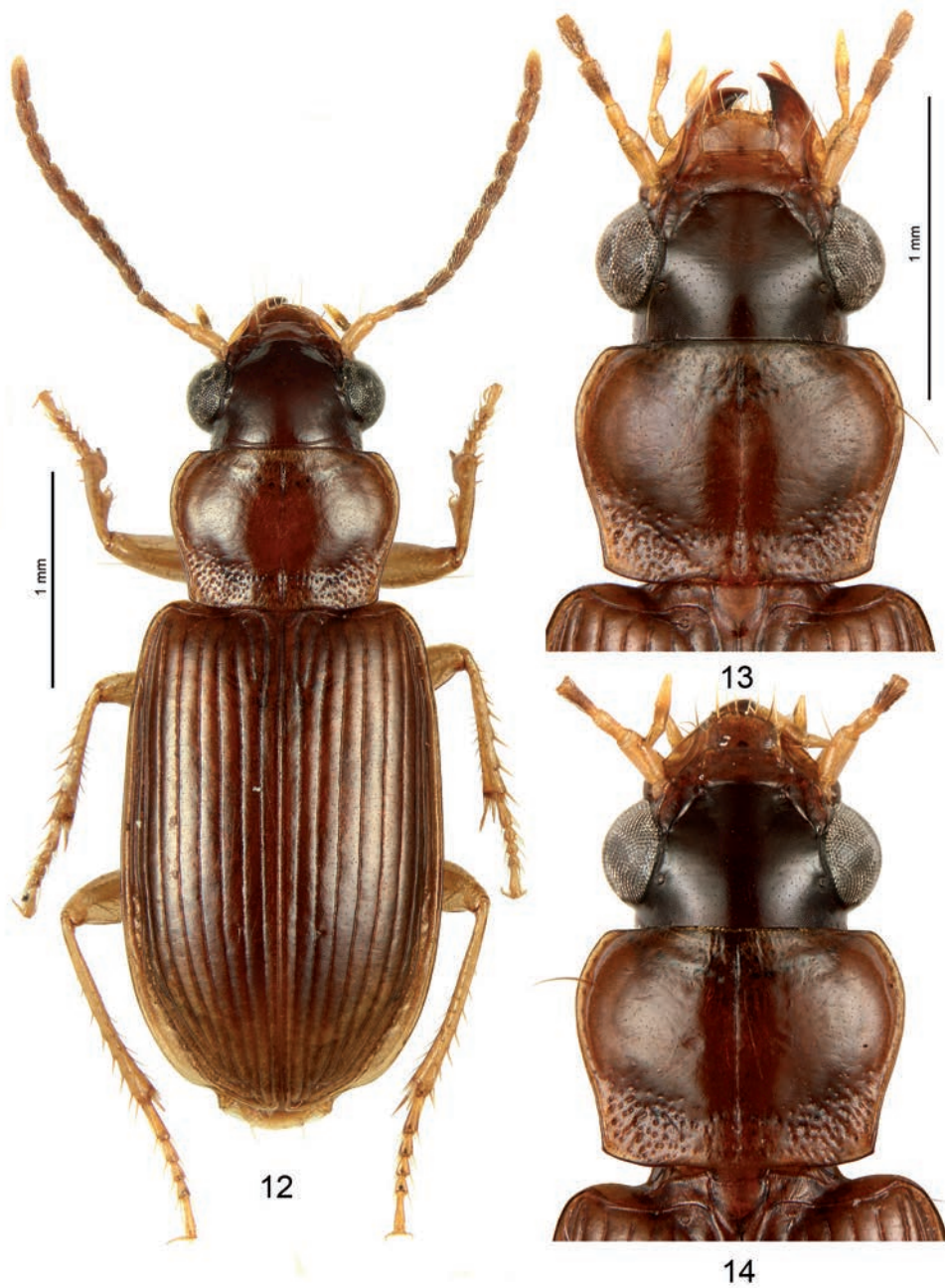
**Figs 4–7.** *Acupalpus rhombotus* Andrewes. Head and pronotum. (4) Philippines, Manila; (5) India, Mawsynram; (6) Thailand, Thimonghta; (7) Thailand, Sanghklaburi.





**Figs 8–11.** *Acupalpus rhombonus* Andrewes. Elytral colour variation. (8) Thailand, Sanghlaburi; (9) Myanmar, Taukkyan; (10) PT, *Anthracus guttiger* Schauburger; (11) Java, Semarang.

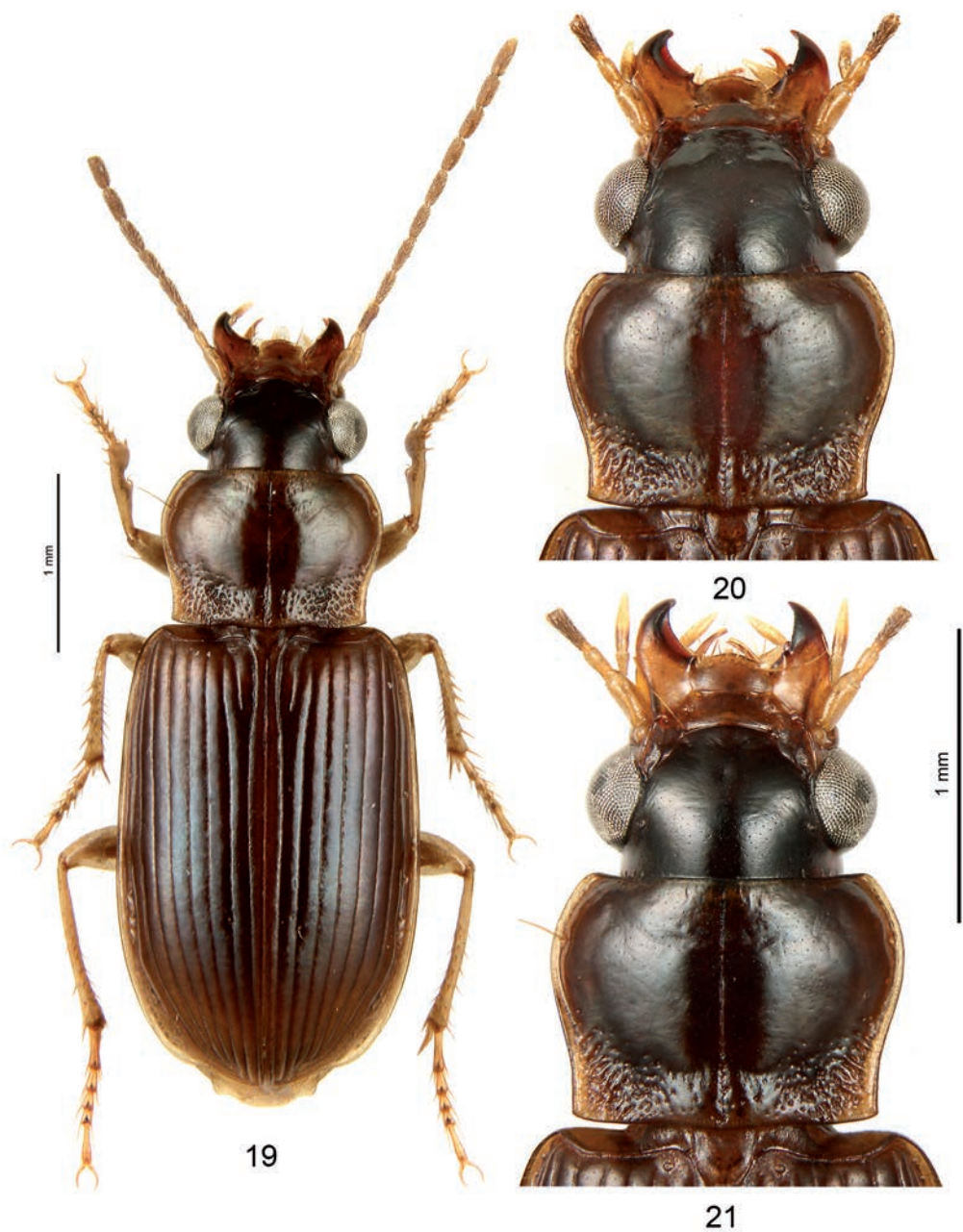




**Figs 12–14.** *Acupalpus punctatus* (Jedlička). Habitus, head and pronotum. (12) PT (13) Philippines, Mindoro, W Puerto Galero; (14) Philippines, Mindanao, Portulin.

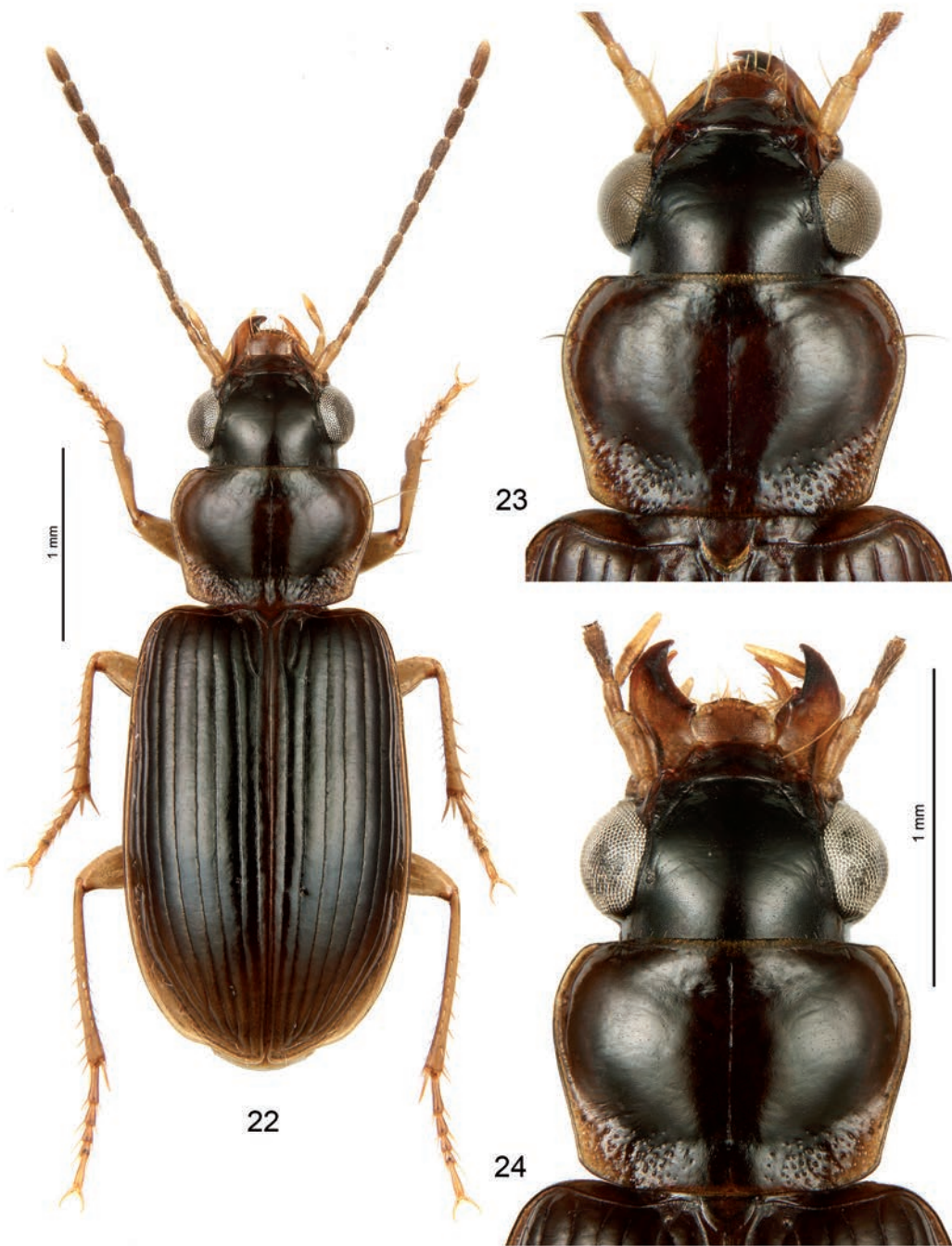


**Figs 15–18.** *Acupalpus punctatus* (Jedlička). Head and pronotum. (15) Java, Bandoeng (16) Java, Semarang; (17) Thailand, Thimonghta; (18) Vietnam, Nam Cat Tien NP.



**Figs 19–21.** *Acupalpus hiebei* sp. n. Habitus, head and pronotum. (19) HT; (20) PT, Vietnam, Nam Cat Tien NP; (21) PT, Thailand, Thong Pha Phum.



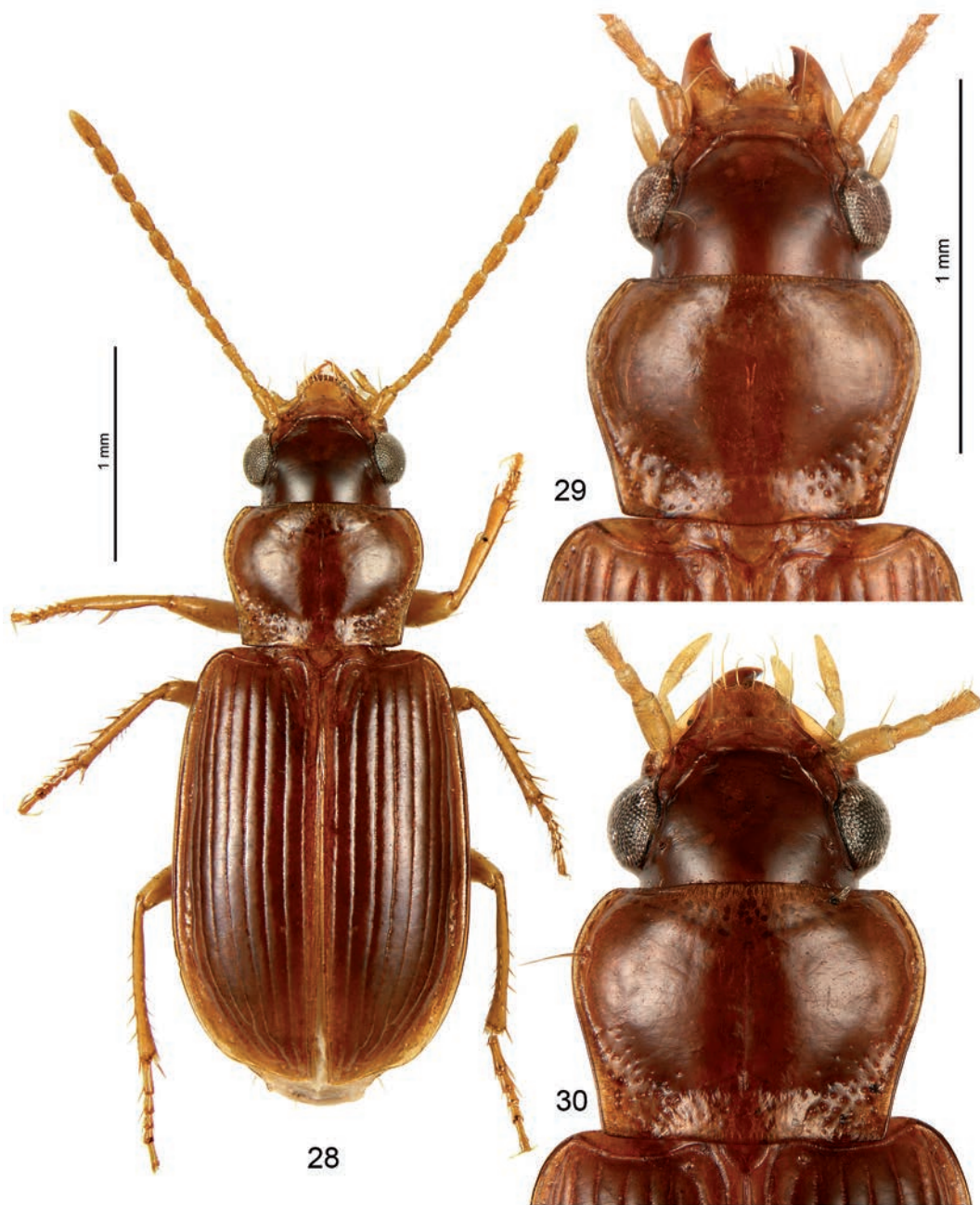


Figs 22–24. *Acupalpus sinuellus* Bates. Habitus, head and pronotum. (22) India, Tura; (23) ST, Myanmar, Bhamo; (24) Nepal, Kathmandu.

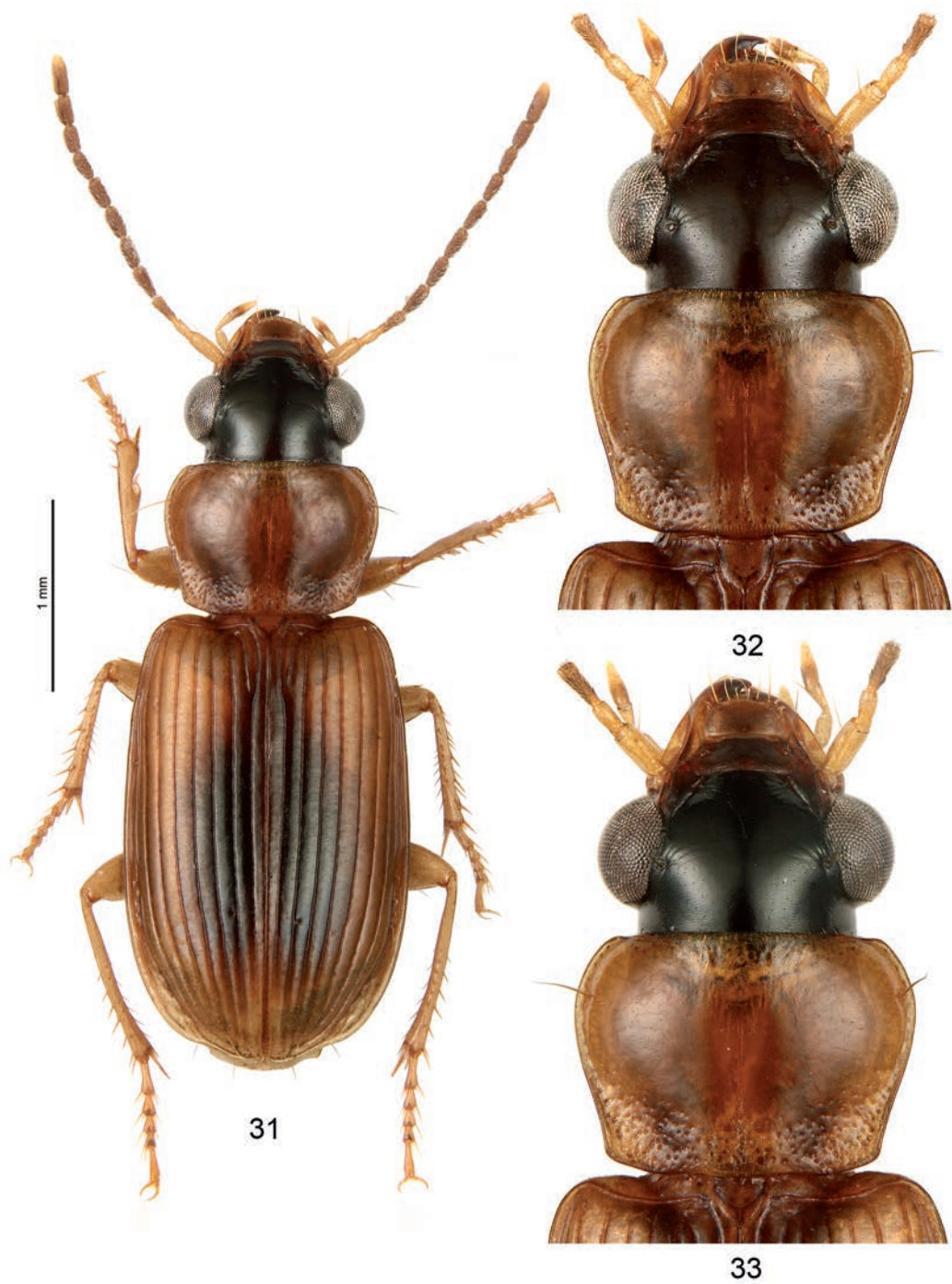


**Figs 25–27.** *Acupalpus hartmanni* sp. n. Habitus, head and pronotum. (25) HT; (26, 27) PT, Nepal, Kathmandu.

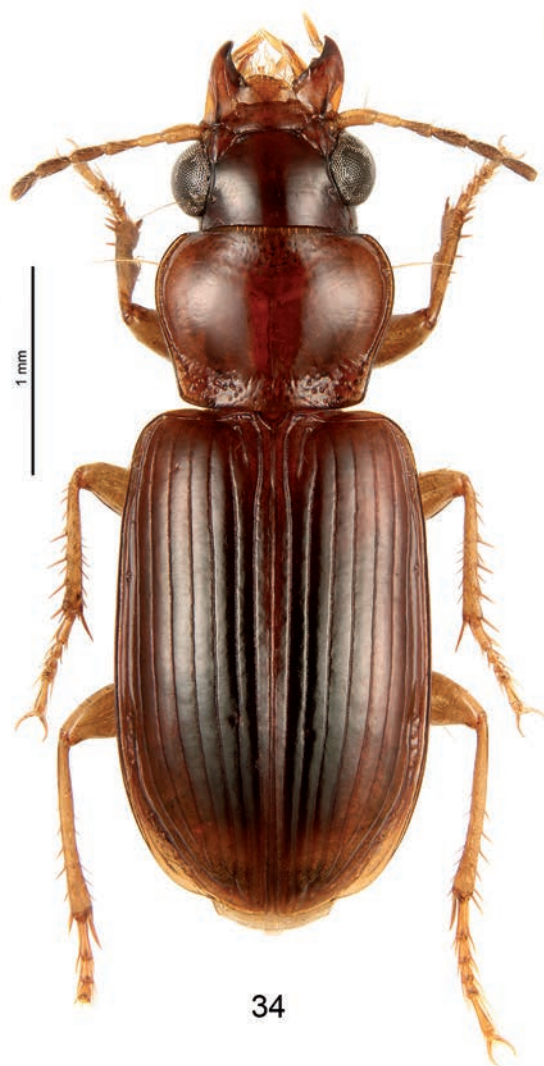




Figs 28–30. *Acupalpus ustus* Andrewes. Habitus, head and pronotum. (28) HT; (29) PT, Sumatra, Soeroelangan; (30) PT, Sumatra, Alas Valley.

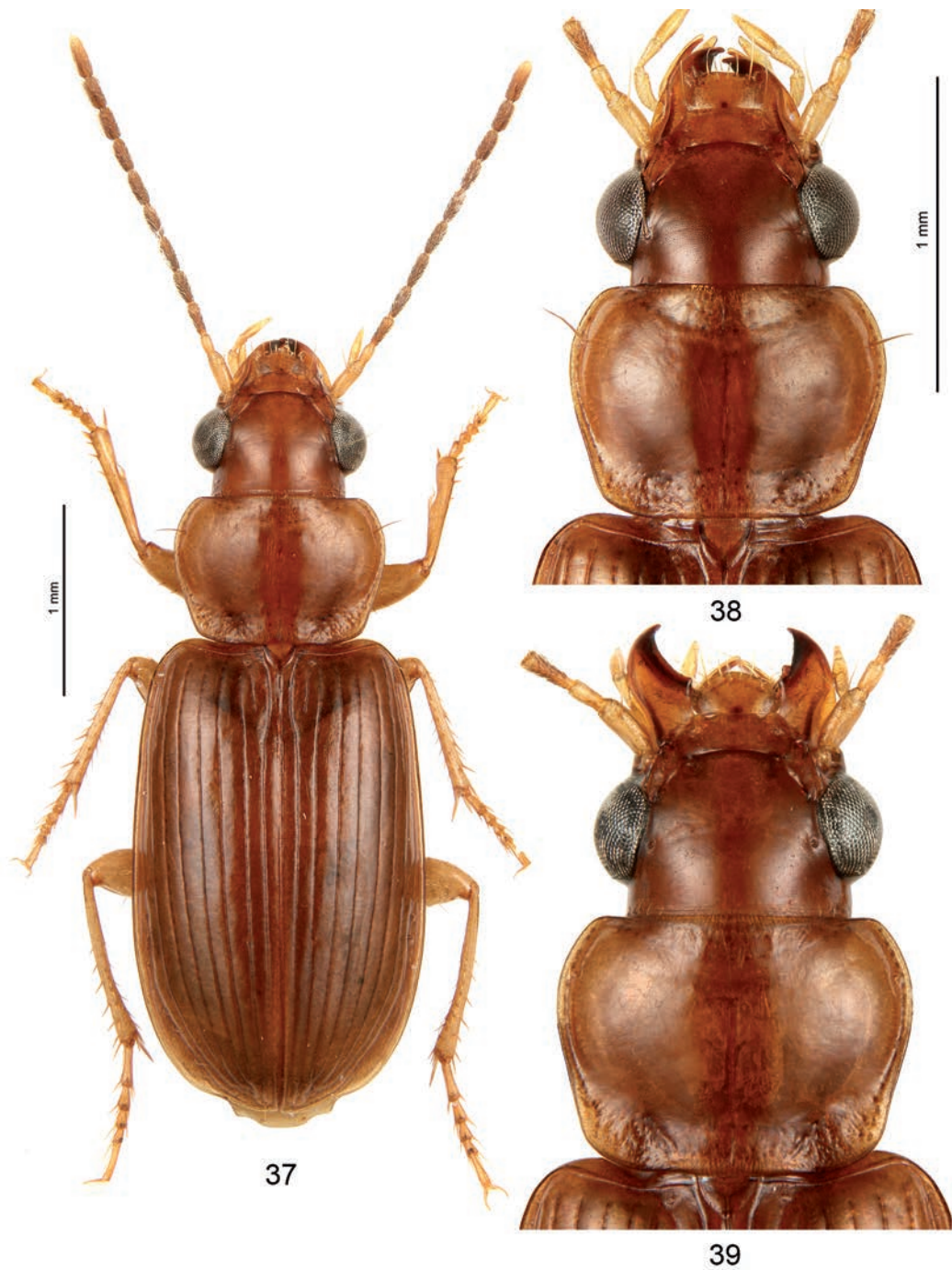


Figs 31-33. *Acupalpus maculipennis* sp.n. Habitus, head and pronotum. (31-33) PT, India, Tuticorin.

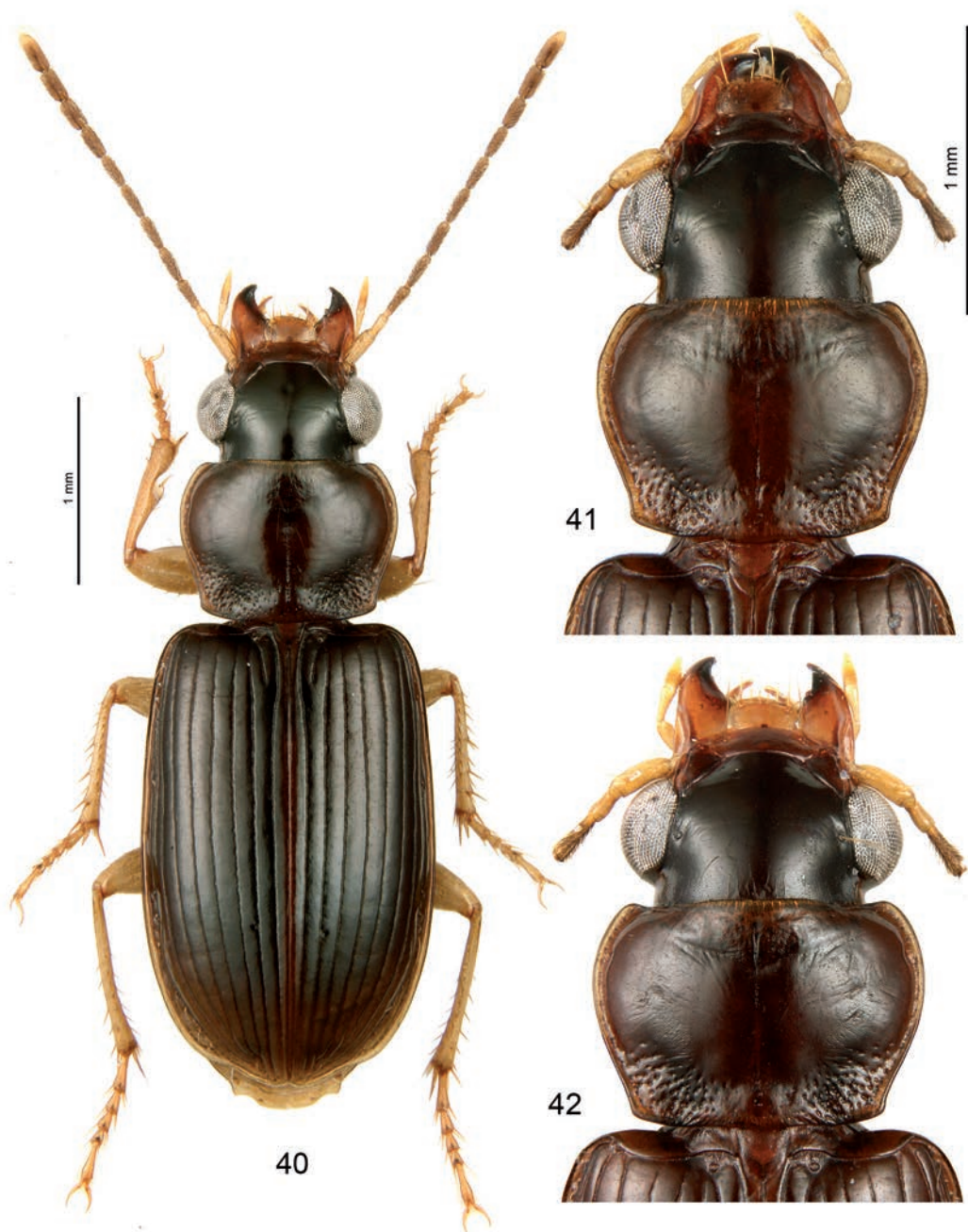


Figs 34–36. *Acupalpus distincticollis* sp.n.. Habitus, head and pronotum, female hemisternite and gonocoxite. (34–36) Holotype.



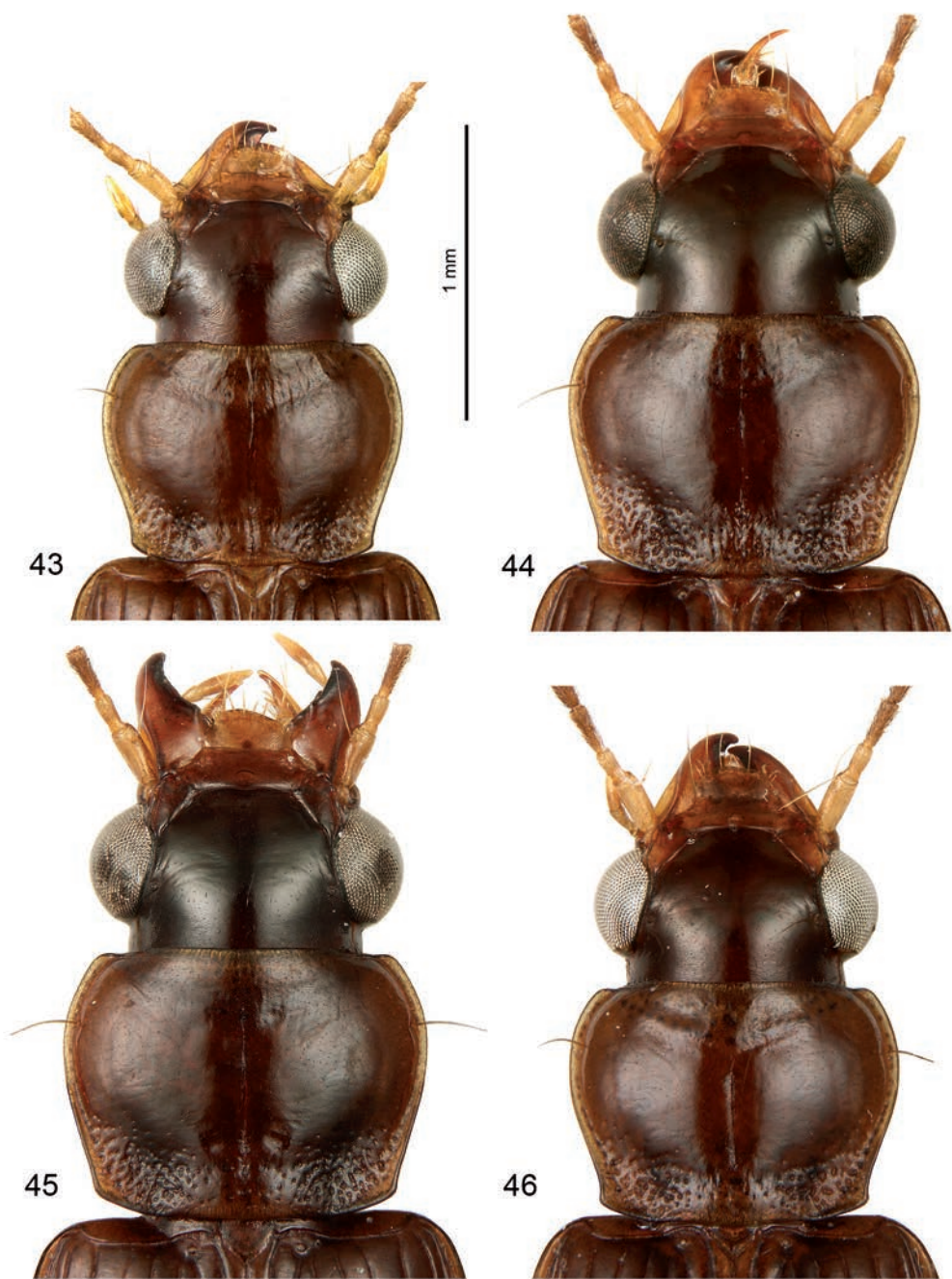


Figs 37–39. *Acupalpus inornatus* Bates. Habitus, head and pronotum. (37–39) Japan, Maruno.

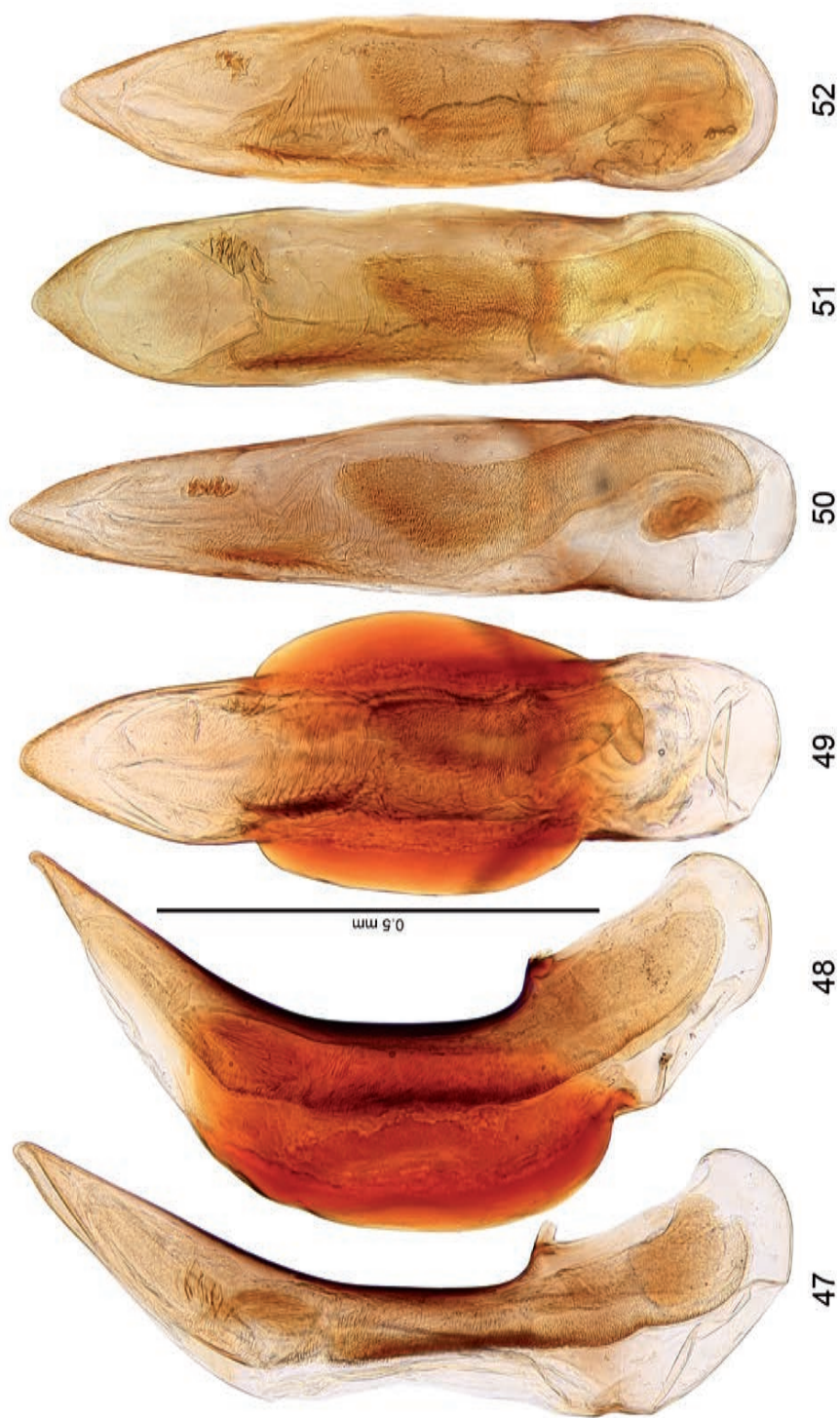


Figs 40–42. *Acupalpus andrewesi* sp.n.. Habitus, head and pronotum. (40) HT; (41, 42) PT, India, Savatvadi.

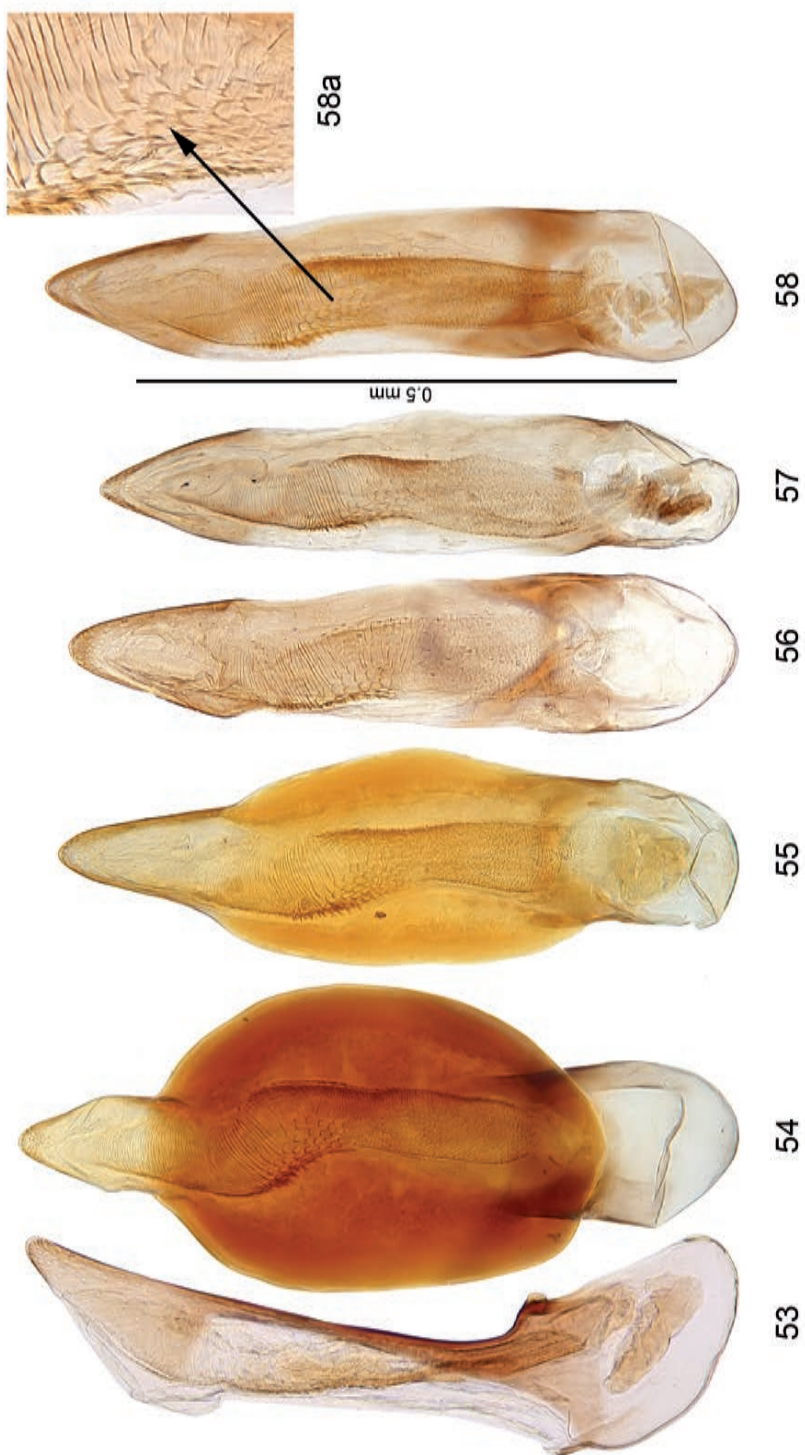




**Figs 43–46.** *Acupalpus andrewesi* sp.n.. Head and pronotum. (43) PT, Sri Lanka, Anuradhapura; (44) PT, Sri Lanka, Kandy; (45, 46) PT, India, Cardamom Hills.



**Figs. 47-52.** *Acupalpus rhombotus* Andrewes. Median lobe of acedogagus, lateral and dorsal aspect. (47, 50) Thailand, Sanghklaburi; (48, 49) Thailand, Thimonghaui; (51, 52) HT, *Anthraxus coloratus* Jedlicka; (52) Java, Kediri.



**Figs. 53-58.** *Acupalpus punctatus* (Jedlička). Median lobe of aedeagus, lateral and dorsal aspect. (53, 54, 58, 58a) Thailand, Khon Kaen; (55) Philippines, Mindanao, Portulin; (56) PT; (57) Indonesia, Java, Soembaja.





**Figs. 59–64.** *Acupalpus hiebei* sp. n. Median lobe of aedeagus, lateral and dorsal aspect. (59) PT, Thailand, Thong Pha Phum; (60, 61) PT, Vietnam, Nam Cat Tien NP; (62) HT; (63) PT, Thailand, Pha To; (64) PT, Malaysia, Endau Rompin.



**Figs. 65–70.** *Acupalpus sinuellus* Bates. Median lobe of aedeagus, lateral and dorsal aspect. (65, 67) India, Turai; (66) ST, Myanmar, Palon; (68) Laos, Ban Khoun; (69) Nepal, Kathmandu; (70) Vietnam, Hanoi.





**Figs. 71-75.** *Acupalpus hartmanni* sp. n. Median lobe of aedeagus, lateral and dorsal aspect (71, 72, 74, 75) PT; (73) HT.



**Figs. 76-79.** *Acupalpus istius* Andrewes and *A. maculipennis* sp. n. Median lobe of aedeagus, lateral and dorsal aspect. (76) Pt. *A. istius*, Sumatra, Moera Laboe; (77, 77a) Pt. *A. istius*, Sumatra, Soeroel; (78, 79) HT. *A. maculipennis*.

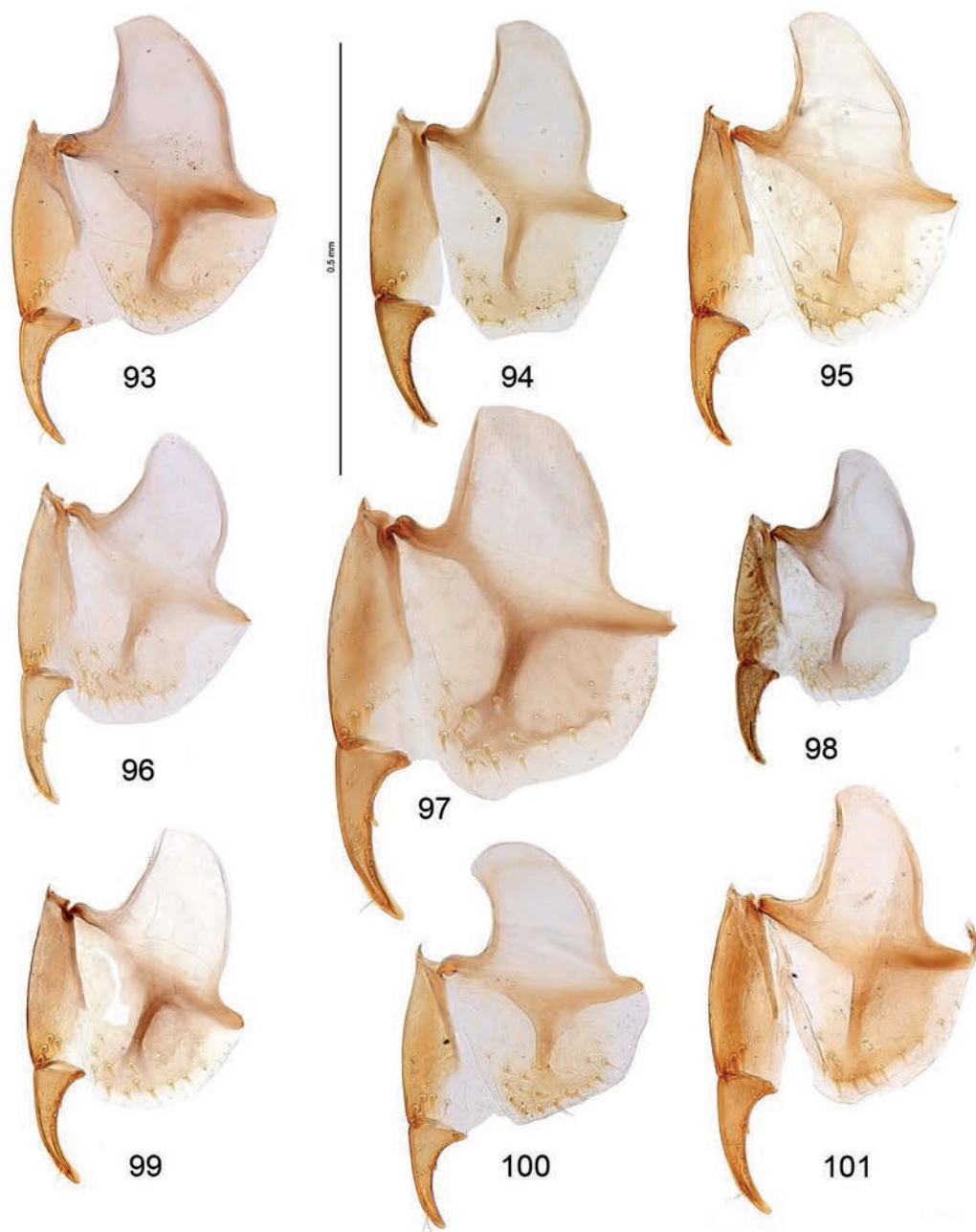


**Figs. 80–85.** *Acupalpus inornatus* Bates. Median lobe of aedeagus, lateral and dorsal aspect. (80) China, Kushan; (81, 83) Japan, Maruno; (82) Japan, Unzen; (84) China, Mt. Enei; (85) China, Dayong.



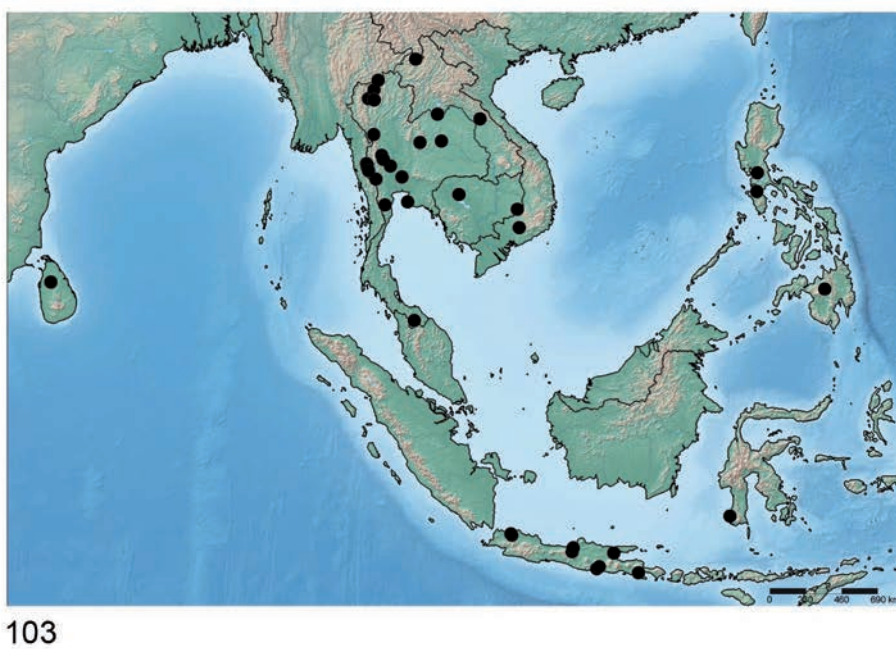
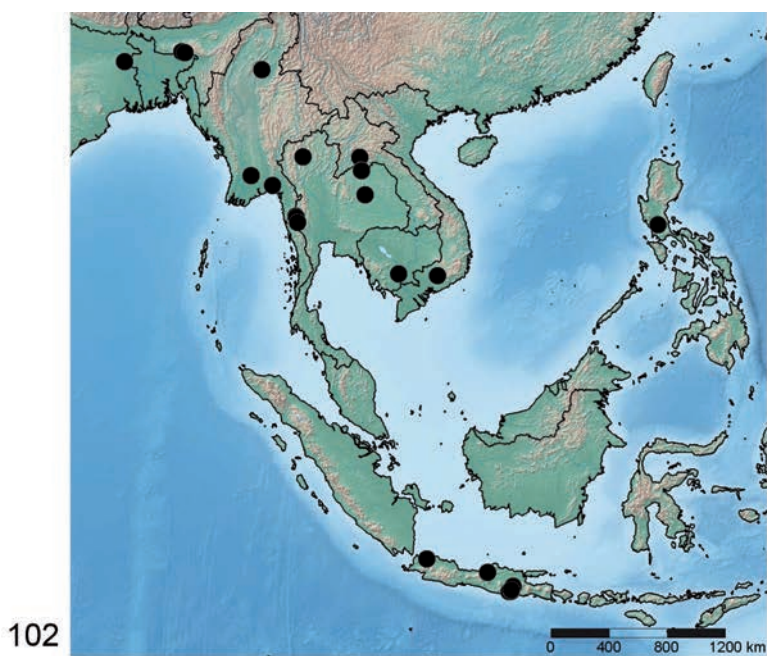


**Figs. 86-92.** *Acupalpus andrewesi* sp. n. Median lobe of aedeagus, lateral and dorsal aspect. (86, 88) HT; (87, 89) PT, India, Cardamom Hills; (90) PT, India, Savatvadi; (91) PT, Sri Lanka, Anuradhapura; (92) PT, Sri Lanka, Kandy.



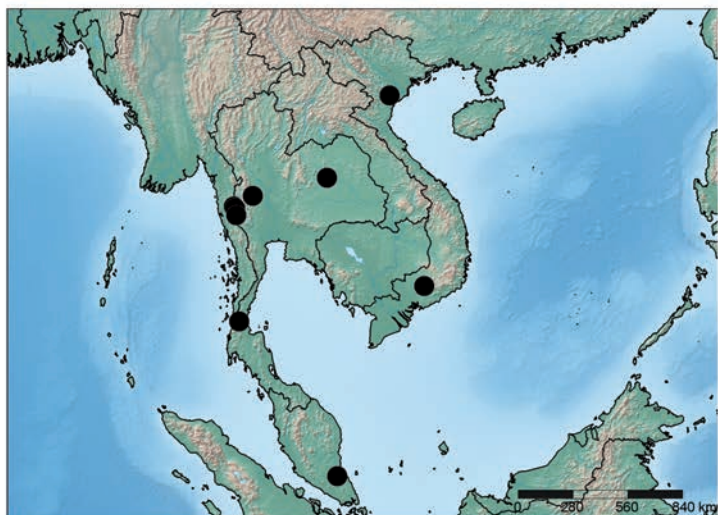
**Figs. 93–101.** Female hemisternite and gonocoxite. (93) *Acupalpus rhombotus* Andrewes; (94) *A. punctatus* Jedlička; (95) *A. hiekei* sp. n.; (96) *A. sinuelus* Bates; (97) *A. hartmanni* sp. n.; (98) *A. ustus* Andrewes; (99) *A. maculipennis* sp. n.; (100) *A. inornatus* Bates; (101) *A. andrewesi* sp. n.



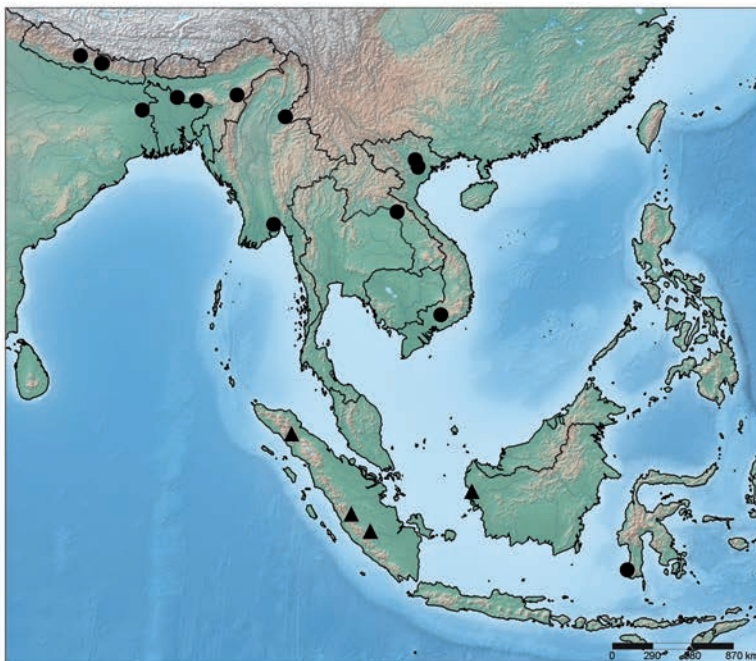


Figs. 102–103. Distribution. (102) *Acupalpus rhombotus* Andrewes; (103) *A. punctatus* (Jedlička).

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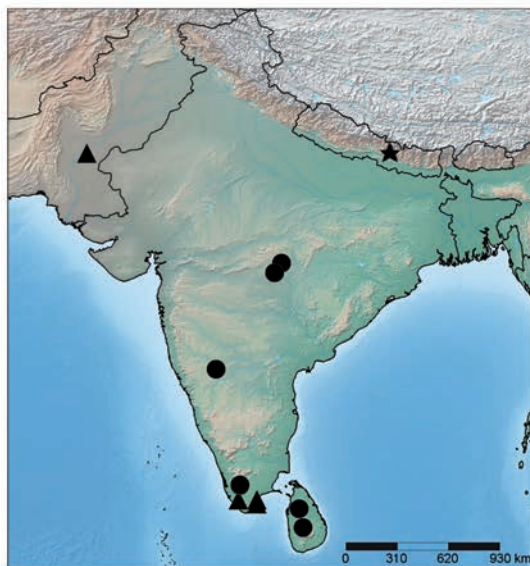


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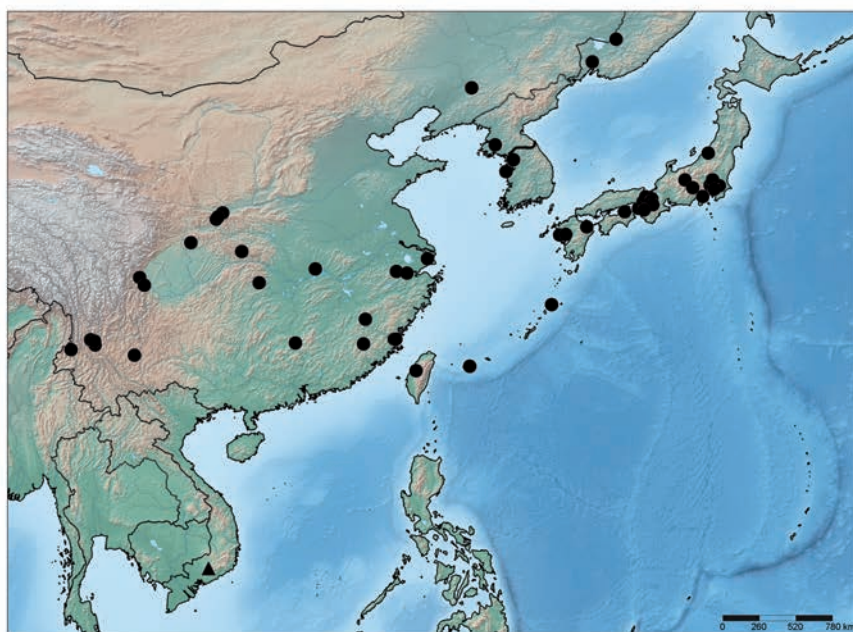


Figs. 104–105. Distribution. (104) *Acupalpus hiebei* sp. n.; (105) *A. sinuellus* Bates (circles) and *A. ustus* Andrewes (triangles).

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**Figs. 106–107.** Distribution. (**106**) *Acupalpus hartmanni* sp. n. (star), *A. maculipennis* sp. n. (triangle) and *A. andrewesi* sp. n. (circles); (**107**) *A. distincticollis* sp. n. (triangle) and *A. inornatus* Bates (circles).



## Nuovo contributo alla conoscenza delle Aleocharinae del Nepal (Insecta: Coleoptera: Staphylinidae)\*

ROBERTO PACE

### Abstract

#### New contribution to the knowledge of the Aleocharinae from Nepal

(Insecta: Coleoptera: Staphylinidae)

Ten tribes (Hypocyphini, Myllaenini, Masuriini, Homalotini, Bolitocharini, Falagriini, Athetini, Lomechusini, Oxypodini, Aleocharini), 24 genera (*Cypha*, *Myllaena*, *Masuria*, *Coenonica*, *Neoleptusa*, *Cordalia*, *Falagria*, *Paraloconota*, *Paraliogluta*, *Liogluta*, *Aloconota*, *Tropimenelytron*, *Bellatheta*, *Atheta*, *Nepalota*, *Amaurodera*, *Orphnebius*, *Zyras*, *Amarochara*, *Ocalea*, *Trichoglossina*, *Oxypoda*, *Pseudoplandria*, *Axiologarthra*) and 74 species are recognized. 25 species are described as new to science: *Myllaena hartmanni* n. sp., *Myllaena bandukensis* n. sp., *Myllaena fustigans* n. sp., *Myllaena schmidt* n. sp., *Coenonica dhaulagiriensis* n. sp., *Falagria (Myrmecocephalus) nepalhimalayica* n. sp., *Falagria (Myrmecocephalus) pahari* n. sp., *Paraliogluta simikotensis* n. sp., *Aloconota invisoides* n. sp., *Tropimenelytron dhaulagiriense* n. sp., *Bellatheta newart* n. sp., *Atheta (Sipalatheta) licchava* n. sp., *Atheta (Microdota) dhaulagirimontis* n. sp., *Atheta (Microdota) khasi* n. sp., *Atheta (Microdota) marangensis* n. sp., *Atheta (Dimetrota) dhaulagiriensis* n. sp., *Atheta (Dimetrota) khariensis* n. sp., *Amarochara nepalica* n. sp., *Ocalea hartmanni* n. sp., *Oxypoda (Podoxya) dhaulagiricola* n. sp., *Oxypoda (Podoxya) bandukensis* n. sp., *Oxypoda (Podoxya) rhododendricola* n. sp., *Pseudoplandria rhododendricola* n. sp., *Axiologarthra nepalensis* n. sp., *Axiologarthra minor* n. sp.). All new species are illustrated and compared with similar species. *Amaurodera verrucosa* Assing, 2003 is proposed as a junior synonym of *Amaurodera martensi* Coiffait, 1982, *Amaurodera fulgens* Assing, 2003 junior synonym of *Amaurodera silvana* Pace, 1992. *Paraliogluta* Pace is genus bonum and not synonym of *Paraloconota* Cameron.

### Zusammenfassung

#### Neuer Beitrag zur Kenntnis von den Aleocharinae Nepals (Insecta: Coleoptera: Staphylinidae)

Zehn Tribus (Hypocyphini, Myllaenini, Masuriini, Homalotini, Bolitocharini, Falagriini, Athetini, Lomechusini, Oxypodini, Aleocharini), 24 Gattungen (*Cypha*, *Myllaena*, *Masuria*, *Coenonica*, *Neoleptusa*, *Cordalia*, *Falagria*, *Paraloconota*, *Paraliogluta*, *Liogluta*, *Aloconota*, *Tropimenelytron*, *Bellatheta*, *Atheta*, *Nepalota*, *Amaurodera*, *Orphnebius*, *Zyras*, *Amarochara*, *Ocalea*, *Trichoglossina*, *Oxypoda*, *Pseudoplandria*, *Axiologarthra*) und 74 Arten werden abgehandelt. 25 Arten werden als neu für die Wissenschaft beschrieben: *Myllaena hartmanni* n. sp., *Myllaena bandukensis* n. sp., *Myllaena fustigans* n. sp., *Myllaena schmidt* n. sp., *Coenonica dhaulagiriensis* n. sp., *Falagria (Myrmecocephalus) nepalhimalayica* n. sp., *Falagria (Myrmecocephalus) pahari* n. sp., *Paraliogluta simikotensis* n. sp., *Aloconota invisoides* n. sp., *Tropimenelytron dhaulagiriense* n. sp., *Bellatheta newart* n. sp., *Atheta (Sipalatheta) licchava* n. sp., *Atheta (Microdota) dhaulagirimontis* n. sp., *Atheta (Microdota) khasi* n. sp., *Atheta (Microdota) marangensis* n. sp., *Atheta (Dimetrota) dhaulagiriensis* n. sp., *Atheta (Dimetrota) khariensis* n. sp., *Amarochara nepalica* n. sp., *Ocalea hartmanni* n. sp., *Oxypoda (Podoxya) dhaulagiricola* n. sp., *Oxypoda (Podoxya) bandukensis* n. sp., *Oxypoda (Podoxya) rhododendricola* n. sp., *Pseudoplandria rhododendricola* n. sp., *Axiologarthra nepalensis* n. sp., *Axiologarthra minor* n. sp. Alle neuen Arten werden illustriert und mit ähnlichen Arten verglichen. *Amaurodera verrucosa* Assing, 2003 ist als ein jüngeres Synonym von *Amaurodera martensi* Coiffait, 1982, *Amaurodera fulgens* Assing, 2003 als jüngeres Synonym zu *Amaurodera silvana* Pace, 1992, begründet. *Paraliogluta* Pace wird als genus bonum und nicht als Synonym von *Paraloconota* Cameron aufgestellt.

**Key words:** Insecta, Coleoptera, Staphylinidae, Aleocharinae, Himalayan region, taxonomy, new species, synonymies

\*281th "Contribution to the knowledge of Aleocharinae".



## Introduzione

La sottofamiglia Aleocharinae diffusa in tutte le regioni zoogeografiche include un grande numero di specie. Esse vivono in ogni ambiente frequentato da Staphylinidae e la maggior parte di esse si trovano in aree forestali. Il Nepal fino al 1944 è rimasto quasi inesplorato per le varie tribù della sottofamiglia Aleocharinae. Dopo la pubblicazione dei primi contributi alla conoscenza delle Aleocharinae del Nepal (SCHEERPELTZ, 1976, COIFFAIT, 1982, PACE, 1984a, 1984b, 1985a, 1985b, 1987a, 1987b, 1988, 1989a, 1989b, 1990, 1991a, 1991b, 1992a, 1992b, 2006) basati su materiali raccolti dal Forschungsinstitut Senckenberg di Francoforte sul Meno, del Muséum d'Histoire Naturelle di Genève e del Naturkundemuseum Erfurt, ora ulteriore nuovo materiale del Nepal è studiato e descritto nel presente contributo.

## Materiale e metodi

Gli esemplari studiati nel presente lavoro mi sono stati affidati in studio da Matthias Hartmann, direttore del Museo di Storia Naturale di Erfurt.

Lo studio tassonomico delle specie di Aleocharinae necessita, tra l'altro, dell'esame delle parti boccali, della formula tarsale, dell'edeago e della spermateca. Gli esemplari studiati sono stati perciò sezionati e le strutture boccali così come gli organi sopra citati sono stati inclusi in balsamo del Canada su piccoli rettangoli trasparenti in materia plastica associati a ogni esemplare. Le strutture anatomiche così preparate sono state studiate con l'aiuto di un microscopio a ingrandimenti fino a 450 x, e disegnate per mezzo di un oculare quadrettato. Le misure sono state prese con un micrometro oculare. I caratteri dell'habitus sono stati osservati con un microscopio stereoscopico fino a 100 x. Le fotografie e tutte le illustrazioni sono state realizzate e composte in tavola dall'autore per mezzo del software Adobe Photoshop. Gli holotipi delle nuove specie e tutti gli altri esemplari sono depositati nel Naturkundemuseum di Erfurt.

## Acronimi

Gli acronimi dei Musei sono i seguenti:

NHML – Natural History Museum, London

NME – Naturkundemuseum Erfurt

SDEI – Senckenberg Deutsches Entomologisches  
Institut di Müncheberg

## Elenco delle specie, raggruppate in tribù, con descrizioni

### HYPOCYPHTINI

#### *Cypha senilis* (Pace, 1985)

*Hypocyphtus senilis* Pace, 1985: 84

1 ♂, Nepal, Dhaulagiri Himal, S-slope, N Banduk vill., 1900–2300 m, 28°27'22"N, 83°35'13"E, 06.V.2009, leg. J. Schmidt (NME).

**Distribuzione:** Nepal.

### MYLLAENINI

#### *Myllaena sudranica* Pace, 1988

*Myllaena sudranica* Pace, 1988: 405

1 ♀, Nepal, Dhaulagiri Mts., upp. Marang Khola Vall., 28°29'50"N, 83°27'37"E, 2500–2700 m, 16.V.2009, leg. J. Schmidt (NME).

**Distribuzione:** Nepal.

#### *Myllaena hartmanni* n. sp. (Figg. 1 e 27–29)

**Holotypus** ♂, Nepal, Dhaulagiri Himal, S-slope, N Banduk vill., 1900–2300 m, 28°27'22"N, 83°35'13"E, 06.V.2009, leg. J. Schmidt (NME).

Paratypi: 72 esemplari, stessa provenienza; 5 sp., Nepal, Dhaulagiri Mts., upp. Marang Khola Vall., 28°29'50"N, 83°27'37"E, 2500–2700 m, 16.V.2009, leg. J. Schmidt; 35 es., Nepal, Dhaulagiri Himal, S-slope, N Banduk vill., 2400–2600 m, 28°28'35"N, 83°35'05"E, 08.V.2009, leg. J. Schmidt; 7 es., Nepal, S slope Dhaulagiri Mts., Bagar Khola, 2250 m, 28°30'44"N, 83°32'36"E, 10.V.2009, leg. J. Schmidt (NME).

**Descrizione:** Lunghezza 3,6 mm. Corpo lucido e bruno, metà posteriore degli uroterghi liberi secondo, terzo e quinto rossiccia, antenne bruno-rossicce, zampe rossicce. Occhi lunghi quanto la regione postoculare, in visione dorsale. Secondo antennumero più lungo del primo, terzo più corto del secondo, quarto a decimo più lunghi che larghi. Corpo interamente coperto di pubescenza sericea. Edeago Figg. 27–28, spermateca Fig. 29.

**Comparazioni:** Per la forma della spermateca, la nuova specie è strettamente simile a *M. bifurcata* Pace, 1992 della Thailandia e della Birmania, ma la parte prossimale della spermateca della nuova specie è corta e larga,

quella di *bifurcata* lunga e meno larga. L'edeago della nuova specie non ha al lato ventrale due larghe espansioni laminari come nell'edeago di *bifurcata*.

**Etimologia:** La nuova specie è dedicata a Matthias Hartmann, direttore del Museo di Erfurt, che mi ha affidato il materiale del presente lavoro.

***Myllaena bandukensis* n. sp.** (Figg. 2 e 30–32)

**Holotypus** ♂, Nepal, Dhaulagiri Himal, S-slope, N Banduk vill., 1900–2300 m, 28°27'22"N, 83°35'13"E, 06.V.2009, leg. J. Schmidt (NME).

Paratypi: 12 es., stessa provenienza (NME).

**Descrizione:** Lunghezza 3,3 mm. Corpo lucido e bruno, margine posteriore degli uroterghi liberi secondo e terzo rossiccio, antenne brune con i tre antennumeri basali gialli, zampe giallo-rossicce. Occhi lunghi quanto la regione postoculare, in visione dorsale. Secondo antennumero più lungo del primo, terzo più corto del secondo, quarto a decimo più lunghi che larghi. Corpo interamente coperto di pubescenza sericea. Edeago Figg. 30–31, spermateca Fig. 32.

**Comparazioni:** Per la forma della spermateca, la nuova specie è molto simile a *M. nitidula* Kraatz, 1859 dello Sri Lanka, di cui io ho esaminato sei esemplari della serie tipica etichettata "Ceylon, J. Nietner, *Myllaena nitidula* Kr." (SDEI). Il bulbo distale della spermateca della nuova specie è privo di introflessione apicale, presente in *nitidula*. La sinuosità ventrale dell'edeago della nuova specie è stretta, mentre è ampia in *nitidula*. Le spine basali interne dell'edeago della nuova specie sono lunghe, molto corte in *nitidula*.

**Etimologia:** La nuova specie prende nome dal villaggio nepalese di Banduk.

***Myllaena fustigans* n. sp.** (Figg. 3 e 33–32)

**Holotypus** ♂, Nepal, Dhaulagiri Himal, S-slope, N Banduk vill., 1900–2300 m, 28°27'22"N, 83°35'13"E, 06.V.2009, leg. J. Schmidt (NME).

Paratypi: 1 ♂ e 3 ♀ ♀, stessa provenienza; 46 es., Nepal, Dhaulagiri, S slope, above Bathlekarka, 2500–2700 m, 28°32'19"N, 83°29'25"E, 12.V.2009, leg. J. Schmidt; 2 ♀ ♀, Nepal, Dhaulagiri Mts., upp. Marang Khola Vall., 28°29'50"N, 83°27'37"E, 2500–2700 m, 16.V.2009, leg. J. Schmidt; 1 ♀, Nepal, Dhaulagiri Mts., Hile Kharka, 28°29'15"N, 83°34'28"E, 3000–3100 m, 09.V.2009, leg. J. Schmidt (NME).

**Descrizione:** Lunghezza 3 mm. Corpo lucido e bruno, pigidio giallo-bruno, antenne brune con i due antennumeri basali gialli, zampe rossicce con tarsi gialli. Occhi più corti della regione postoculare, in visione dorsale. Secondo antennumero più lungo del primo, terzo più corto del secondo, quarto a decimo più lunghi che larghi. Corpo interamente coperto di pubescenza sericea. Edeago Figg. 33–34, spermateca Fig. 35.

**Comparazioni:** Per la forma della spermateca, la nuova specie è simile a *M. himalayica* Cameron, 1939 dell'India, di cui ho esaminato 1 maschio e 1 femmina della serie tipica etichettati "Aglar R. Tehri Garhwal, 28.III.1921, Dr Cameron, *Myllaena himalayica* Cam." (NHML). La nuova specie se ne distingue per il bulbo distale della spermateca trasverso e non ovale e per l'introflessione apicale del bulbo distale lunga e non breve come in *himalayica*. L'edeago della nuova specie ha un flagello interno come in *himalayica*, ma è molto più lungo, con una spira all'interno del bulbo basale e non come in *himalayica* con flagello meno lungo e non avvolto a spira nel bulbo basale.

**Etimologia:** La nuova specie deriva il suo nome dal lungo flagello interno dell'edeago adatto a fustigare o frustare.

***Myllaena schmidti* n. sp.** (Figg. 4 e 36)

**Holotypus** ♀, Nepal, S slope Dhaulagiri Mts., Bagar Khola, 2250 m, 28°30'44"N, 83°32'36"E, 10.V.2009, leg. J. Schmidt (NME).

**Descrizione:** Lunghezza 3 mm. Corpo lucido e bruno, antenne brune con i due antennumeri basali giallo-rossicci e undicesimo rossiccio, zampe rossicce. Occhi più corti della regione postoculare, in visione dorsale. Secondo antennumero più lungo del primo, terzo più corto del secondo, quarto a decimo più lunghi che larghi. Corpo coperto di pubescenza sericea. Spermateca Fig. 36.

**Comparazioni:** Per la forma della spermateca la nuova specie è comparabile con *M. himalayica* Cameron, 1939 dell'India, di cui ho esaminato un maschio e una femmina della serie tipica etichettati "Aglar R. Tehri Garhwal, 28.III.1921, Dr Cameron, *Myllaena himalayica* Cam." (NHML). Il bulbo distale della spermateca della nuova specie è più largo di quello di *himalayica* e la parte prossimale della stessa spermateca è prolungata a ricciolo, non prolungata a ricciolo in *himalayica*. La spermateca della nuova specie è simile anche a quella di *M. bhutia*

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Jahr/Year: 2013

Band/Volume: [32](#)

Autor(en)/Author(s): Jaeger Bernd

Artikel/Article: [Revision of the East Palaearctic and Oriental species of the Acupalpus subgenus Stenolophidius Jeannel, 1948 \(Coleoptera: Carabidae: Harpalini: Stenolophina\) 291-346](#)