



**ADVANCES IN STUDIES  
ON ASIAN CERAMBYCIDS**  
(COLEOPTERA: CERAMBYCIDAE)

Papers by **Alexandr I. MIROSHNIKOV**,  
dedicated to the memory of  
**Dr. Judson Linsley GRESSITT**

Edited by **Alexandr S. KONSTANTINOV**,  
**S. Adam ŚLIPIŃSKI & Alexey Yu. SOLODOVNIKOV**

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*Clytellus laosicus*  
Gressitt et Rondon, 1970

Russian Entomological Society  
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*To the memory of  
Dr. Judson Linsley Gressitt  
(1914–1982),  
to the day of his  
forthcoming centenary,  
this work  
is being dedicated.*

**A review of the genus *Clytellus* Westwood, 1853,  
with notes on its systematic position  
and descriptions of eleven new species  
(Coleoptera: Cerambycidae)**

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With 273 figures and 4 maps

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**Abstract.** The Oriental genus *Clytellus* Westwood, 1853 is reviewed, rediagnosed, redescribed and mapped for all of its known species. The following 11 species are described as new: *C. dembickyi* sp. n. (southern Vietnam), *C. kubani* sp. n. (western Malaysia), *C. vivesi* sp. n. (Brunei), *C. tatarianae* sp. n. (western Malaysia), *C. belokobylskiji* sp. n., *C. lobanovi* sp. n. (both from northern Vietnam), *C. barclayi* sp. n. (eastern Malaysia), *C. gressitti* sp. n. (western Malaysia and Singapore), *C. kasatkini* sp. n. (Sumatra, Indonesia), *C. makarovi* sp. n. and *C. perhentianus* sp. n. (both from western Malaysia). *Clytellus malayanus* Hayashi, 1977, stat. n., originally described as a subspecies of *C. westwoodii* Pascoe, 1857, is regarded as a separate species. *Clytellus kareli* Holzschuh, 2003 is assumed to be a synonym of *C. kiyoyamai* Hayashi, 1977, but no formal synonymization is proposed. Detailed diagnoses and descriptions of, as well as a key to, all 28 species of the genus are given, with several new or first records, including those of the opposite sex. The systematic position of *Clytellus* is refined as representing a new monotypic subtribe, Clytellini subtribus n., with its differences from the numerous genera of the nominate subtribe Tillomorphina being detailed and discussed. A thorough bibliography list is provided, coupled with abundant colour pictures.

**Key words.** Coleoptera, Cerambycidae, Tillomorphini, new subtribe, *Clytellus*, review, new species, taxonomy, key, distribution, bionomics, bibliography.

## INTRODUCTION

The genus *Clytellus* Westwood, 1853 occurs in the Oriental realm and has hitherto counted 17 species. No revision of this little-known, but highly interesting group has been carried out.

A detailed study of a diverse material from numerous museums and private collections treated here has led to the discovery of 11 new species. In addition, various new important morphological characters

previously not used in the systematics of the genus have been revealed. Previously unknown males or females, which appear to show sexual dimorphic external features, have also been found and described for the first time for a number of species. Last but not least, the distribution of most species has been clarified. To summarize, the present paper provides a global review of the genus *Clytellus*, with the bulk of old type material revised and significant amount of new samples analyzed.

Lacordaire (1869) originally assigned *Clytellus*, together with some other genera such as *Tillomorpha* Blanchard in Gay, 1851, *Euderces* LeConte, 1850, *Epipedocera* Chevrolat, 1863, to the group (tribe) Tillomorphides Lacordaire, 1868. Pascoe (1869), considering different groups like the above as “subfamilies”, included *Clytellus*, *Epipedocera* and the newly described *Halme* Pascoe in Tillomorphinae. Gahan (1906) placed the latter three genera, as well two more, namely, *Centroclytus* Motschulsky, 1863 and *Bicon* Pascoe, 1866, in a separate tribe, Epipedocerini Gahan. However Aurivillius (1912) synonymized this tribe with the Tillomorphini, proposing the latter tribe to contain over 20 genera, including *Clytellus*. Since then this genus has always been considered as a member of the tribe Tillomorphini Lacordaire, 1868.

The taxonomic composition of Tillomorphini has undergone numerous other changes since its erection, being treated in different ways by different authors. Even at the present the attribution of these or those genera to this tribe is controversial, as one can see from some recent works (e.g. Lingafelter, 2011; Vitali, 2011 and others). A discussion of the taxonomy of the tribe Tillomorphini is generally beyond the scope of this paper, but some comments on its composition and morphological features are presented below in relation to a refined systematic position of the genus *Clytellus*.

## MATERIAL AND METHODS

The material this paper is based upon comes from the following institutional and private collections:

BM – Bishop Museum, Honolulu, U.S.A.  
 BMNH – Natural History Museum, London (formerly British Museum, Natural History), United Kingdom  
 EUM – Ehime University Museum, Matsuyama, Japan  
 IZAS – Institute of Zoology, Chinese

Academy of Sciences, Beijing, China  
 MCSN – Museo Civico di Storia Naturale “Giacomo Doria”, Genova, Italy  
 MNHN – Muséum national d’Histoire naturelle, Paris, France  
 MTD – Staatliches Museum für Tierkunde, Dresden, Germany  
 NHMD – Natural History Museum of Denmark, University of Copenhagen, Copenhagen  
 NHMW – Naturhistorisches Museum, Wien, Austria  
 NMP – Národní Museum, Prague, Czech Republic  
 OMNH – Osaka Museum of Natural History, Osaka, Japan  
 SDEI – Senckenberg Deutsche Entomologische Institut, Müncheberg, Germany  
 SMNH – Swedish Museum of Natural History, Stockholm, Sweden  
 ZISP – Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia  
 cAM – coll. Alexandr Miroshnikov (Krasnodar, Russia)  
 cCH – coll. Carolus Holzschuh (Villach, Austria)  
 cEV – coll. Eduard Vives (Barcelona, Spain)  
 cFV – coll. Francesco Vitali (Luxembourg)  
 cLD – coll. Luboš Dembický (Brno, Czech Republic)  
 cNO – coll. Nobuo Ohbayashi (Kamimiyada, Miura City, Japan)  
 cPV – coll. Petr Viktora (Kutná Hora, Czech Republic)  
 cSM – coll. Sergey Murzin (Moscow, Russia)

The holotypes (only in one case, paratypes) of most of the *Clytellus* species have been examined. The holotypes of all four species described by Hayashi (1977) could only be assessed through quality photographs showing the habitus and various parts of the body, the pictures having been obtained from Dr. Kiyoshi Ando (Osaka, Japan), Dr. Nobuo Ohbayashi (Kamimiyada, Miura City, Japan),

Mr. Shigehiko Shiyake (Osaka Museum of Natural History, Japan) and Dr. Eduard Vives (Museu de Ciències Naturals de Barcelona, Spain). For two of these species, the photographs of the holotypes helped to reliably identify additional conspecific material. Moreover, a photograph-based re-examination of the holotype of yet another species of Hayashi has been significantly facilitated and clarified by some personal comments of Dr. Ohbayashi. Similarly, a picture of the fourth species described by Hayashi required no additional comments to properly establish its identity. All this has allowed for a revision of the entire genus to be accomplished, the older species rediagnosed, new congeners described, and an appropriate key compiled.

Material of the other genera of Tillomorphini used here for comparative purposes is not specified in detail. Some of this material is kept in the above-mentioned museums and private collections (including the author's collection), some other specimens have been obtained for study from Dr. James E. Wappes (American Coleoptera Museum, San Antonio, U.S.A.). Representatives of some of the genera of Tillomorphini could only be examined, based on numerous photographs (including those of type specimens) available both on specialized websites of various museums and on other network resources. Literature data have extensively been used as well.

Body size measurements were rounded to two decimal places up or down, to 0.00 or 0.05 mm, respectively.

In the "Material" sections, type specimens studied from photographs alone are listed only following any other pertinent material when such was present.

## RESULTS AND DISCUSSION

### Tribe *Tillomorphini* Lacordaire, 1868

*Tillomorphides* Lacordaire, 1868: 405; Lacordaire, 1869a: 88; Blackburn, 1896: 38.

*Tillomorphinae*, Pascoe, 1869: 640; Bates, 1870:

400; Pascoe, 1871: 274; Bates, 1885: 303; Shelford, 1902: 244.

*Tillomorphini*, Aurivillius, 1912: 418; Winkler, 1929: 1182; Bradley, 1930: 230, 240; Plavilstshikov, 1931: 15 (as *Tillomorphina*); Matsushita, 1933: 308; Linsley, 1935: 87; Wu, 1937: 719; Gressitt, 1939: 46; 1940: 84; Plavilstshikov, 1940: 533, 753; Mitono, 1940: 128; Gressitt, 1942: 32; Knull, 1946: 225; McKeown, 1947: 100; Gressitt, 1951a: 128, 308; 1959: 168; Arnett, 1962: 861, 888; Linsley, 1964: 179; Chemsak, 1969: 304; Gressitt & Rondon, 1970: 43, 281; Zayas, 1975: 140; Hayashi, 1975: 185; 1977: 124; Villiers, 1980: 299; Makihara et al., 1989: 298; Hüdepohl, 1990: 53; MacRae, 1994: 235; Giesbert & Chemsak, 1997: 212; Peck & Thomas, 1998: 120; Makihara, 1999: 68; Martínez, 2000: 79, 81, 90; Adlbauer, 2000: 8; 2001: 7; Turnbow et al., 2003: 16; Galileo & Martins, 2003: 31; Monné, 2005: 542; López-Pérez, 2005: 52; Peck, 2005: 173; Martins & Galileo, 2005: 10; Monné & Hovore, 2005: 132; Heffern, 2005: 25; Weigel, 2006: 501; Wappes et al., 2006: 19; Monné et al., 2007: 138; Barriga & Cepeda, 2007: 9; Galileo & Martins, 2008: 53; Holzschuh, 2009: 349, 351; Bousquet et al., 2009: 56 (as *Tillomorphini* Pascoe, 1869); Monné et al., 2009a: 244; Monné et al., 2009b: 305; Löbl & Smetana, 2010: 206; Micheli, 2010: 136; Swift et al., 2010: 29; Vitali, 2010: 114; Lingafelter, 2011: 72; Peck, 2011: 35; Bouchard et al., 2011: 75, 483; Monné & Bezark, 2012: 172 (as *Tillomorphini* Pascoe, 1869); Monné, 2012: 52 (as *Tillomorphini* Pascoe, 1869); Peck & Perez-Gelabert, 2012: 15–17, 21; Noguera et al., 2012: 621; MacRae et al., 2012: 179; Weigel et al., 2013: 98.

*Epipedocerini* Gahan, 1906: 305; Aurivillius, 1912: 418 (syn. pro *Tillomorphini*).

For a discussion of the systematic position of *Clytellus*, one based both on published and newly studied material, the tribe is here provisionally considered as encompassing the following genera, including *Clytellus*: the New World *Arawakia* Villiers, 1981, *Bonfilsia* Villiers, 1979, *Calliclytus* Fisher, 1932, *Epipodocarpus* Bosq, 1951 (Figs 19–21), *Epropetes* Bates, 1870 (Fig. 18), *Euderces* LeConte, 1850 (Figs 13–18), *Gourbeyrella* Lane, 1959, *Lamproclytus* Fisher, 1932 (Figs 7–9), *Licracantha* Lingafelter, 2011, *Mygalobas* Chevrolat, 1862, *Pentanodes* Schaeffer, 1904 (Figs 10–12), *Tetranodus* Linell, 1896



(Fig. 17), *Tilloglomus* Martins, 1975, and *Tillomorpha* Blanchard in Gay, 1851 (Figs 1–6), the South African *Paramyrmecoclytus* Breuning, 1970 and *Capederces* Adlbauer, 2001, the North African *Pseudomyrmecion* Bedel, 1885 (Fig. 22), the mainly Central Asian (together with the adjacent parts of China) *Cleroclytus* Kraatz, 1884 (Fig. 23), the strictly Oriental *Bicon* Pascoe, 1866, *Centroclytus* Motschulsky, 1863 (Figs 28–29), *Dembickya* Miroshnikov, 2013, *Halmenida* Pic, 1922, *Khampaseuthia* Holzschuh, 2009 and *Serratobicon* Holzschuh, 2009, the predominantly Oriental (with some representatives from New Guinea) *Epipedocera* Chevrolat, 1863 (Figs 25, 26) and *Halme* Pascoe, 1869 (Figs 27, 30), and the Australian *Acrogenoides* McKeown, 1945, *Homaemota* Pascoe, 1865, *Ochyra* Pascoe, 1871 and *Tilloforma* McKeown, 1945. In addition, *Tillomorphytes* Vitali, 2011 (Fig. 24), a genus recently described from Baltic amber, seems to belong here as well.

Although such a composition of the tribe, where the assignment of some genera is doubtful, may be problematic, I do not see this as an obstacle for neglecting their morphological characteristics in order to clarify the systematic position of *Clytellus*.

Concerning the generic composition of the tribe, it seems worth to emphasize a few genera, mostly not listed above, in some of which certain problems of their systematic position remain unresolved. Thus, the genus *Paramyrmecoclytus* Breuning, 1970 was originally placed in the tribe Acanthocinini, subfamily Lamiinae (Breuning, 1970), but later it was justly transferred to the Tillomorphini (Adlbauer, 2000). I have also revised the holotype of *P. similis* Breuning, 1970, kept in MNHN, and agree with the assignment of this genus to Tillomorphini. At the same time, the genus *Myrmecoclytus* Fairmaire, 1895, from Madagascar, the Comoros and South Africa, originally compared to

*Clytellus*, was assigned to Tillomorphini by Aurivillius (1912) and Plavilstshikov (1940), but Breuning (1957) correctly transferred it to the subfamily Lamiinae and placed in the tribe Acanthocinini, where this genus still remains, according to some modern authors and certain websites (e.g. <http://lully.snv.jussieu.fr/titan/>). I have been able to restudy the holotype of the type species *M. raffrayi* Fairmaire, 1895, the holotypes of *M. mayottei* Breuning, 1957, *M. singularis* Breuning, 1957, *M. affinis* Breuning, 1976 and some others, as well as some non-types, all in the MNHN collection. Again, my examination of this material confirms that their currently accepted placement in Acanthocinini is reasonable. The Central American genus *Hormathus* Gahan, 1890 has been transferred from the Tillomorphini to the tribe Ibidiionini (now Neoibidiionini Monné, 2012) (Lingafelter & Nearn, 2007). The genus *Falsohomaemota* Hayashi, 1961, described from New Caledonia and originally included in the Tillomorphini (Hayashi, 1961), has recently been assigned to the tribe Parmenini, subfamily Lamiinae (Vives et al., 2011; Vives, 2012; Sudre et al., 2013). Yet I believe the choice of the tribe to place this genus is doubtful. The New World *Tilloclytus* Bates, 1885, was originally referred to the Tillomorphinae (Bates, 1885), later restricted to the Tillomorphini by Aurivillius (1912). Zayas (1975) continued including *Tilloclytus* in the Tillomorphini, although Linsley (1964) had transferred it to the tribe Anaglyptini. Lingafelter (2011) does not exclude that Zayas is right, but still holds the position of Linsley. Some authors (López-Pérez, 2005) err in treating the genus *Epipodocarpus* within the tribe Obriini. At the same time, the genus *Obriomorpha* Aurivillius, 1917, originally assigned to the Tillomorphini, has since been synonymized with *Iphra* Pascoe, 1869 (Gressitt, 1951b), which is referred to the Obriini.

Subtribe **Tillomorphina** Lacordaire, 1868

Type genus: *Tillomorpha* Blanchard in Gay, 1851.

This subtribe includes all above genera composing the tribe but *Clytellus*. The subtribe is in need of a detailed revision.

Subtribe **Clytellina** Miroshnikov, **subtrib. n.**

Type genus: *Clytellus* Westwood, 1853.

**Diagnosis.** The new monogeneric subtribe features the characters of the genus *Clytellus*, all discussed below. It differs clearly from the Tillomorphina s. str. by body shape, structural details of the head, thoracic segments (at least the prothorax), abdomen, claws and some other traits.

Genus ***Clytellus*** Westwood, 1853

*Clytellus* Westwood, 1853: 481. Westwood, 1854: 240; White, 1855: 291; Boheman, 1857: 48; Thomson, 1860: 379; 1864: 195; Lacordaire, 1869a: 94; Pascoe, 1869: 642; Gemminger in Gemminger, Harold, 1872: 2943; Gahan, 1906: 312; Aurivillius, 1912: 424; Matsushita, 1933: 308; Wu, 1937: 719; Gressitt, 1939: 46; Mitono, 1940: 129; Gressitt, 1951a: 310; Gressitt & Rondon, 1970: 287; Maki-hara et al., 1998: 299; Heffern, 2005: 25; Löbl & Smetana, 2010: 206.

Type species: *Clytellus methocoides* Westwood, 1853, by monotypy.

**Diagnosis.** *Clytellus* shows a number of peculiar characters and differs very well from all genera of the Tillomorphina s. str. by the cylindrical body, the strongly developed part of the prosternum subtending the procoxae from behind (including an extremely long prosternal process), the only slightly separated antennal cavities, the square or subquadrate frons, the sculpture on the sides of the basal part of the prothorax, the very long first (visible) sternite which exceeds in

length all other (visible) sternites combined, the location and structure of the claws, and the length ratio of the last two antennomeres. In addition, *Clytellus* differs from the vast majority of the genera of the nominative subtribe by certain structural features of the elytra and some other characters. None of the genera of Tillomorphina s. str. shows such a diversified complex of important diagnostic characters as the genus *Clytellus*. This is certainly evidence of a considerable isolation of the genus within the tribe Tillomorphini, providing a sound basis for the establishment of a separate new subtribe.

**Description.** Body small, cylindrical (Fig. 58) (humeral width sometimes even slightly less than body thickness), with a characteristic habitus (e.g. Figs 55, 56, 59–62), prothorax often noticeably narrower than remaining body.

Head (e.g., Figs 57, 63, 66, 70, 73, 74) short, medium-sized, frons vertical or almost so, about equal in length and width (Figs 64, 65, 150, 151, 217, 218, 267–269), flat or barely convex, often with a distinct axial suture; antennal cavities placed very close together, isthmus between them usually clearly or considerably, rarely barely, shorter than antennomere 2 and more than twice shorter than isthmus between inner margins of eyes on frons; antennal tubercles extended into a triangular, apically transversely flattened or differently shaped tooth, this always being sharply delimited, sometimes quite high; genae long laterally, at base of mandibles drawn into a more or less long tooth; eyes large, moderately convex, not emarginate, with fully reduced dorsal lobes and distinct medium-sized (not large) ocelli; mandibles short; last segment of maxillary palpi often axe-shaped, last segment of labial palpi of male sometimes more or less axe-shaped; antennae always 11-segmented, one way or another shorter than body, in male they can freely extend behind inside apical one-quarter, in female reaching the middle or apical

one-third, of elytra, sometimes only slightly differing in both sexes, slightly thickened toward apex; all antennomeres longitudinal, more or less strongly elongated, from base to apex gradually (not sharply) and at most moderately expanded, with neither a tooth nor a spine at apex; antennomere 1 always longer than 3<sup>rd</sup>, subequal either to one or each of antennomeres 4–6, or as long as each of them, but sometimes clearly shorter than antennomere 5; 2<sup>nd</sup> 1.4–1.9 times as long as wide; last antennomere longest, often clearly curved, 1.58–2.07 times as long as penultimate one.

Pronotum of characteristic shape (e.g., Figs 57, 63, 66–76), longitudinal, strongly elongated, much narrower at base than at apex, deeply constricted before base, 2.03–2.73 or 1.38–1.93 times as long as width at base and apex, respectively, sometimes maximum extended before middle; in apical one-third, about the length of antennomere 2 off margin, either with (e.g. Figs 67–69) or without (e.g., Figs 71, 72, 75, 76) a more or less sharp constriction; at the very apex often with a well-expressed narrow constriction; at the very base with a narrow, usually sharp constriction as well; convex to a varying degree, often strongly so; sculptured differently, from almost entirely smooth with separated gentle punctures to coarsely folded longitudinally (especially so on sides, e.g. Figs 59, 60), granulate or cellulate (e.g., Figs 91, 92, 103, 104, 113, 120, 136–139, 141); disk sometimes with some axial structure, e.g., a longitudinal, strongly elongated, keel-shaped elevation (Figs 150, 151), a keel-shaped small tubercle (e.g., Figs 61, 62, 263–266) or a very strong oblong-oval tubercle (Fig. 179); constriction in front of base often with more or less deep longitudinal grooves (e.g., Figs 57, 67, 70, 71, 76) or, in contrast, a very smooth and strongly shiny integument; bottom of this constriction usually with a sharp or well-expressed, deep, longitudinal, straight or downcurved groove

(e.g. Fig. 57b), sometimes less strongly developed and poorly visible either against the background of a coarse sculpture on sides in the form of rough longitudinal folds (e.g. Figs 59, 60) or entirely masked under a very dense white setation (e.g. Fig. 89).

Scutellum triangular, longitudinal, often strongly elongated, sharpened or narrow at apex, sometimes more broadly rounded, usually located in a highly inclined plane with apex upwards.

Elytra (e.g., Figs 55, 56, 59–62) 2.27–2.79 times as long as width at base; behind humeri to a varying degree either tapered or, vice versa, slightly expanded towards middle, less often more or less straight in about basal one-third, extended behind middle, sometimes either very weakly or, on the contrary, significantly so (broadest in the extended area, as a rule), narrowed towards apex; apex always rounded, with neither teeth nor spines, sutural angle sometimes sharpened, rarely clearly emarginate on suture before apex; at the very base in the middle abruptly sloping down and, tapered on sides, extended forward to base of pronotum, apex of scutellum thereby either located about level to line connecting humeral angles or scutellum extending behind it only by no more than halfway while base of pronotum clearly removed from the line; disk at base often elevated and tuberculiform on each elytron; middle part or basal one-third usually clearly depressed both on sides and dorsally, sometimes mainly dorsally; surface behind depression often convex (e.g. Figs 56, 59, 60), sometimes strongly to very strongly so (e.g. Fig. 59); sculptured differently, from almost entirely smooth (excluding depressed areas) with a homogeneous and strongly shiny surface, bearing separate punctures, to presence mostly in basal half or one-third of coarse or very coarse, usually oblong-oval punctures, often in depressed areas on sides either with (e.g., Figs 202, 212, 214, 215, 232, 234) or without longitudinal, more or

less coarse and deep grooves, only punctured this or that way; base of each elytron often with a crest (e.g., Figs 59, 60, 90, 113–116, 121, 122, 132–135, 143), sometimes with a large crest-shaped elevation (e.g. Figs 191, 192) different in size and shape, sometimes very strong and high; elytra devoid of sculptural light fasciae, same as with neither fasciae consisting of dense light setae nor those visible only through light contrasting pigments on a flat, not inflated surface; only apex of elytra can be clothed with dense light setae.

Prosternum of peculiar structure (e.g. Figs 78–81), its part subtending procoxae from behind long, subequal to diameter of procoxae; prosternal process very long, more or less narrow at least between procoxae, in apical part closely appressed to remaining prosternum, forming no narrow slit, arched from base for most of its length, at apex more or less straight and usually clearly, sometimes strongly or poorly, elevated above adjoining surface, often moderately extended, sometimes either very clearly so, but not too strongly, or vice versa, parallel-sided to the very apex, between procoxae slightly to even clearly wider, but never narrower, than mesosternal process (!) (e.g. Figs 78, 79), both processes being subequal in width; prosternum in profile either straight (e.g., Figs 59–62, 70, 73, 74) or its apical part curved (e.g., Figs 57a, 63, 66, 89, 164) to a varying degree (this being very evident in lateral view), the curved profile thereby often correlated with presence of a constriction in apical third of pronotum; sculpture of prosternum of two types: one about the same in both sexes (e.g. Figs 105, 106), but usually more distinct in male; the other type, only in male, more or less coarse and deep, sparse or abundant, often heterogeneous punctures mainly in middle part, but entirely absent from female (e.g. Figs 80, 81); mesosternal process usually parallel-sided, sometimes slightly expanded towards apex, about half

the length of prosternal process; metepisterna usually almost entirely hidden under elytra, exposed only in their apical part, with either a peculiar, often shiny denticle directed back to base of metepisterna and oblique upward or laterad (Fig. 82a) or a tooth-shaped protrusion, this latter can be barely visible in small-bodied species; apical part of metepisterna sometimes strongly masked under a very dense white setation, but usually with a more or less naked denticle; profile of abdomen from base to apex usually directed more or less obliquely upward (e.g. Figs 56, 59–62), sometimes strongly so, thereby often either most of each of 2–3 last (visible) sternites or only last (visible) one located almost completely or entirely above level of epipleura of, and hidden behind, elytra in lateral view; first (visible) sternite very long (e.g. Fig. 77a), 1.14–1.80 (most often, 1.3–1.4) times as long as all following (visible), short sternites (e.g. Fig. 77b) combined; last (visible) sternite usually broadly rounded at apex.

Legs usually moderately long, but sometimes relatively short; femora claviform; metatarsomere 1 shorter than next two combined, but noticeably to much longer than 2<sup>nd</sup>; claws (e.g. Figs 83–85) parallel or nearly so, their apices usually very close together, can be partly fused at base (Fig. 84) or only one claw present (Fig. 85).

Body coloration generally not variegate; head usually black or at least dark on dorsal side, even if partly reddish-brown or red, then elytra and thoracic segments black or dark red-brown, only sometimes more flavous, but never clearly light in coloration; antennae from black to reddish-brown, sometimes red, but not clearly light, as a rule; thoracic segments and elytra in most cases monochrome or nearly so, dark tones, can be partly reddish-brown or red; abdomen often partly brownish or reddish, sometimes venter entirely or almost completely red-brown or red; either pronotum and elytra or just elytra

often clearly or strongly shiny, elytra (sometimes pronotum as well) often with a metallic lustre of different tints; legs from almost entirely or mostly black or dark brown to mostly brownish-red or red, tarsi often more or less lighter, femora in apical part or at base often reddish-brown, sometimes red.

Setation characterized by usually sparse, but rather often abundant, erect, light setae present on elytra, yet mostly absent from pronotum, if present also there, then very few or sparse, as a rule; base of pronotum often with a fascia, sometimes quite wide, of dense, recumbent, light, usually white setae; dense, recumbent, white setae on elytra can only be observed at their apex, sometimes combined with suberect setae; setation on ventral side of body usually well-developed on thoracic segments and first (visible) sternite, thereby setae on prosternum often thicker in male and, if it has a coarse or rather rough, deep puncturation, then setation in-between can feature a peculiar pattern.

In general, the habitus and structural details of *Clytellus* species are so characteristic that all authors in their original descriptions have never erred in their generic allocations. The same certainty concerns the numerous new species described below.

**Note.** Some features used in the identification keys, diagnoses and descriptions of the species are shown in Figs 55–84.

**Comparative remarks.** In all genera of Tillomorpha s. str., the body is small to medium-sized, from clearly flat, e.g. in *Tillomorpha lineoligera* Blanchard in Gay, 1851 (the type species of the genus) (Fig. 2), the monotypic *Epipodocarpus* (Fig. 20) or *Epropetes* spp., to robust, subcylindrical, e.g. in the monobasic *Licracantha* (see Lingafelter, 2011, figs 1, 2), but the width of the humeri, albeit to a varying degree, always exceeds the maximum thickness of the body; thereby, unlike *Clytellus*, the prothorax is usually about as thick as, sometimes even slightly thicker than, the rest of the body.

The head is with an evident or strongly transverse frons (Figs 31–34). At least I am unaware of forms showing a square frons like in *Clytellus*. The antennal cavities usually are more or less considerably separated from each other, but the isthmus between them, in one way or another, always exceeds the length of antennomere 2, often less than twice so, only sometimes, e.g. in the monotypic *Pseudomyrmecion*, just slightly longer (about 1.2 times), but even in this case the frons remains strongly transverse (Fig. 34). The antennal tubercles are from poorly to very well-developed, usually oriented more or less longitudinally. The eyes are arranged in different ways, but in most genera from the New World, in all Australian genera, *Cleroclytus* and some others they are deeply emarginate, with a small, but well-developed dorsal lobe (Figs 8, 18, 35, 36, 38–40, 42). The antennae vary from very short to strongly exceeding the length of the body, sometimes very peculiar in structure, as e.g. in *Licracantha* (see Lingafelter, 2011, figs 1, 2). In many *Euderces* species, antennomere 3 has a long or very long spine at the apex (Figs 13, 16); often each of antennomeres 3–4 or 3–5 can bear an evident spine, the best developed one in antennomere 3. In the males of *Pentanodes* and *Tetranodus*, antennomeres 3–6 are strongly inflated (Figs 10, 12, 17). The antennae of *Arawakia*, *Bonfilsia*, *Lamproclytus* (Fig. 7), *Calliclytus* (at least *C. macoris* Lingafelter, 2011), by the way like in some *Tilloclytus* species, count only 10 segments. In a number of tillomorphine genera, antennomere 3 is to a varying degree longer than antennomere 1, even much longer as observed in numerous representatives of the genera *Euderces*, *Epropetes* and *Cleroclytus* (Figs 13–16, 18, 23), as well as in the monotypical *Acrogenoides*. The apical antennomeres of *Lamproclytus*, *Centroclytus*, *Bicon*, *Serratobicon*, numerous *Epipedocera*, as well as some others are shortened, expanded, their apical external

angle to a varying degree being inflated (in different cases, except for the last antennomere) (Figs 7, 25, 26, 28). However, it seems to be only *Clytellus* that shows the longest last antennomere, even though usually it only slightly exceeds the length of the penultimate antennomere.

The pronotum varies (Figs 1, 2, 4, 5, 7, 8, 10, 11, 13–20, 23–25, 27–30, 35–42) from longitudinal, through variously elongated, often strongly so, to transverse, considerably expanded in the middle, sometimes with a large, sharp, lateral tubercle, as e.g. in *Ochyra*; often before the base there is a more or less clearly developed constriction; the very base is usually narrower than the apex, but sometimes it is vice versa, as e.g. in *Acrogenoides*. However, the shape of the constriction in front of the base reminds of that of *Clytellus* only in a few tillomorphines, e.g. *Epropetes* (Fig. 18) or *Licracantha*. The pronotum in most cases is clearly less convex than in *Clytellus*, often poorly to moderately convex, only in the basal one-third it can be more or less abruptly sloped towards the very base (Figs 35–42).

The base of the scutellum in most cases is located either about level to the humeral line or slightly pushed forward towards the base of the pronotum; it is more rarely that the location of the scutellum resembles to a varying degree that of *Clytellus*.

The elytra are often more or less flat on the disk (Figs 2, 5, 8, 20), sometimes more or less clearly convex in the apical part (Fig. 29), a clear depression in the middle or basal one-third is absent, as a rule, but neither such a strong degree of convexity in the apical part nor such a sharp depression in front of it is observed beyond these or those species of *Clytellus*. The base of the elytra in most cases is devoid of an evident tubercle-shaped elevation or crest, but either or both are often present in *Clytellus*. The apex of the elytra is sometimes with sharp, more or less long spines or teeth, e.g. in *Centroclytus* (Fig.

28), *Bicon*, *Serratobicon* or *Epipedocera*. Unlike *Clytellus*, most of the tillomorphines show a highly characteristic, light, more or less narrow fascia (sometimes fasciae) usually located in the middle of the elytra and formed by an inflated surface (Figs 4, 5, 7, 8, 10, 11, 13–17, 23, 25, 27–30). Sometimes the elytra have not only similarly arranged fasciae (Figs 1, 2, 22), but also either partly fused or free longitudinal strips, as observed in *Acrogenoides* and *Arawakia*, respectively. In a number of tillomorphines the fascia or fasciae are composed of dense light setae or formed by a light pigment coloration over a plain, non-inflated surface.

The prosternum (Figs 9, 12, 21, 26, 43–48) is arranged differently, but its part subtending the procoxae from behind is more or less narrow in the vast majority of tillomorphines, thereby often failing to close the coxae sufficiently completely and forming a visible gap or a significant break; only in some genera is the prosternum more strongly developed, as e.g. in *Epropetes*, but it can only reach in length not more than half the diameter of the procoxae (Fig. 45). The prosternum in the male of numerous tillomorphines shows more or less coarse, usually abundant punctures which are absent in the female. Thereby in some species-rich genera such as *Euderces*, this external sexual character is surprisingly very stable, unlike *Clytellus*. The profile of the prosternum varies from straight to strongly curved (Figs 8, 29, 35–42). The prosternal process ranges from very narrow to much wider, about equal to half the diameter of the procoxae or even their entire diameter, as e.g. in *Epipedocera*. The mesosternal process is to a varying degree broader than the prosternal process between the procoxae, often clearly, sometimes only slightly or even barely so, up to both being subequal (I am unaware of a reverse ratio as in *Clytellus*). In some tillomorphines, the mesosternal process is not less than twice as broad as the prosternal

process between the procoxae, as observed e.g. in *Cleroclytus*, *Epipedocera* and certain other members. The metepisterna at the apex show neither a denticle nor a dentiform protrusion (Figs 49–54) present in *Clytellus*.

The profile of the abdomen is often more or less straight (Figs 1, 3, 8, 11, 20), but in some forms it is clearly or strongly, as e.g. in *Licracantha*, directed obliquely from base to apex (see Lingafelter, 2011, fig. 2). In lateral view, usually all (visible) sternites are exposed to a varying degree, not hidden behind the elytra. The first (visible) sternite is always somewhat shorter than all following (visible) sternites combined (Figs 3, 6, 9, 12, 21, 26, 29), often not or only slightly longer than the next two (visible) sternites combined.

The legs are usually more or less moderately long, the femora are claviform to a varying degree; metatarsomere 1 in most cases is shorter than to subequal to the next two metatarsomeres combined, but sometimes vice versa, from slightly to much longer than all subsequent metatarsomeres combined, as e.g. in some species of *Epropetes*, *Tillomorpha myrmicaria* Fairmaire et Germain, 1859 and probably some others. By the way, *T. myrmicaria* (Figs 4–6, 32, 36, 44) differs from *T. lineoligera* (Figs 1–3, 31, 35, 43) strongly enough by a number of features and possibly deserves a new generic-level taxon of its own, being considered here within the genus *Tillomorpha* but provisionally. The claws in the vast majority of genera, including all from the New World, Australia, as well as *Pseudomyrmecion*, *Cleroclytus* and some others are opposed; in all Oriental genera except *Dembickya*, which has opposed claws, the claws are to one degree or another diverging, usually strongly so. Only in *Centroclytus* can the location of the claws sometimes resemble that in *Clytellus*, but in the former genus they usually diverge more strongly. There are no other genera like *Clytellus* where some species show either

both claws partly fused at the base or only one claw present.

The beetles are often with a bright coloration; the head (discarding the eyes and mouthparts) are often almost entirely red tones or at least partly red; the antennae, pronotum, elytra (usually their basal part), prosternum, mesosternum and legs are often completely or partly red as well; the elytra can be highly variegated, with three, sometimes four, colours forming a pattern.

The setation is variable enough. The dorsal side of the body is clothed with more or less abundant setae often observed not only on the elytra, but also on the pronotum, including its dorsal side. In the presence of coarse (rough) punctures on the prosternum of the male, the setae between them form no pattern similar to the one observed in many *Clytellus*.

It is noteworthy that *Tillomorphites* (Fig. 24) differs clearly from *Clytellus* in almost all these characters as do the other members of the subtribe Tillomorphina. In particular, this concerns a flattened body, the structure of the head, including very widely spaced antennal cavities, the shape and length ratios of some antennomeres, the structure of the elytra and the ventral part of the body, including the width ratio of the pro- and mesosternal processes between the coxae. The above comparative morphological characteristics of these genera can be very useful in reconstructing the phylogeny both of the whole tribe Tillomorphini and the genus *Clytellus*.

## A review of species

### 1. *Clytellus elongatus*

Pic, 1931

(Figs 78, 86–92)

*Clytellus elongatus* Pic, 1931: 13 (“Tonkin, Hoa Binh”). **Type locality:** Northern Vietnam, Hoa Binh Province (according to the original description and the label of the holotype).

**Material.** Holotype ♀, by monotypy (MNHN), “Hoa Binh Tonkin”, “*Clytellus elongatus* n sp”, “type” (in fact the holotype is provided with one more label, see Fig. 87); 1 ♂ (ZISP), Vietnam, Hoa Binh Prov., Yen Thuy Distr., Da Phuc, 20°18'N, 105°35'E, 100 m, 3.–4.V.2002, S. Belokobylskij leg.

**Diagnosis.** This species differs clearly from all congeners by the wide fascia of bright light setae at the base of the pronotum which is barely interrupted at the axial line and embraces on the dorsal side the very margin of the base, almost completely hiding a narrow constriction in front; a distinct, longitudinal, median groove at the base of the pronotum between the very margin and the constriction before the base, emphasizing a narrow interrupted fragment of the fascia; a coarse sculpture of the pronotum forming clear large cells ruptured in places and dominating in the male, but only partly evident in the female (a similar cellulate sculpture is only observed in *C. methocoides*); a very coarse puncturation of the elytra, clearly weakened in the apical half of the disk, but rather coarse on the sides up to the very apex and even near it dorsally; almost entirely monochrome elytra with a strong metallic lustre uniform over the entire surface (except for a lighter apex), without apical fascia of light setae. *Clytellus elongatus* can be relatively easily diagnosed by the structural features of the pronotum alone, namely, the above fascia and groove at the base combined with its generally coarse sculpture. Besides *C. methocoides*, a coarse sculpture of the pronotum (apart from special structures in the form of a very strong tubercle, a keel-shaped tubercle, a longitudinally elongated keel-shaped elevation on the disk and grooves in the area of constriction in front of the base, as in Figs 57, 61, 62, 67, 70, 71, 76, 150, 151, 179, 263–266) occurs only in a few species, namely, *C. laosicus*, *C. canaliculatus*, *C. serratulus* and *C. dembickyi* sp. n., all of which are also characterized by a general coarse sculpture of the elytra. However, a

fascia at the base of the pronotum amongst these species is only present in *C. dembickyi* sp. n., but it is much narrower than in *C. elongatus*, widely interrupted dorsally and not reaching the very margin of the base. In addition, *C. elongatus* differs clearly from *C. dembickyi* sp. n., as well as from the other species noted above, by several other characters, including a poorly developed crest at the base of each elytron and the absence at the apex of a fascia of light setae. No evident median groove at the base of the pronotum is observed in the other species of the genus.

**Description.** Body length 4.5–4.6 mm, humeral width 1.10–1.15 mm (see Remarks below). Black; antennae of male dark brown, in female predominantly dark reddish-brown; base of femora, tarsi and, in female, also tibiae, apex of femora and, partly, venter brown and reddish-brown tones; elytra metallic dark blue-green or dark blue, shiny, brownish at apex.

Head with a flat frons; antennomere 2 ca 1.1 times as long as isthmus between antennal cavities; antennae reaching up to about apical one-third or middle of elytra in male and female, respectively; antennomere 1, 1.42–1.50, 1.10–1.14, 1.10–1.20 or 1.10–1.26 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.40–1.50 times as long as wide; last antennomere 1.66–1.78 times as long as penultimate one.

Pronotum 1.66–1.73 times as long as wide at apex, 2.03–2.04 times as long as width at base; apex 1.18–1.22 times as broad as base, the very base 1.21–1.23 times as broad as constriction in front of base; moderately convex; in female slightly more rounded on sides in the middle than in male; with a coarse alveolate/cellular sculpture very sharp in the center of disk in male, but clearly more smooth, sometimes weakly expressed in female; most of surface clearly microsculptured; the very base on dorsal side of the middle with a sharp longitudinal groove; area of constriction in front of base with longitudi-



nal wrinkles, these being more abrupt in male and better developed on one side; a longitudinal groove at bottom of this constriction masked under very dense light setae.

Elytra 2.5–2.52 times as long as width at base, in apical half 1.05–1.13 times as broad as base; each elytron at base with a clear, but not coarse, relatively low, longitudinal, yet noticeably oblique crest, partly serrate above; behind the crests first a weak depression, then slightly convex; almost from the very base with coarse to very coarse, deep oblong-oval punctures, roughest over most of elytra, to a varying degree weakened in apical one-third on disk, but still clearly coarse on sides almost up to the very apex, as well as on dorsal side of apex, especially so in male.

Prosternum with a heterogeneous sculpture, similar in both sexes (in male without coarse deep punctures), in apical part with gentle transverse folds better expressed in male, in the middle with sparse, irregular, flat (!), relatively large, but not coarse punctures mostly masked under dense setae in male and clearly visible in female; prosternal process at apex clearly wider than between procoxae; mesosternal process slightly narrower than prosternal process between procoxae, at least so in male; meso- and metasterna, and first (visible) sternite with sparse flat punctures like on prosternum; metepisterna with a poorly developed (especially so in male) denticle at apex; first (visible) sternite 1.14–1.40 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a strong fascia, partly sides of pronotum, scutellum, most of prosternum, almost entirely (in male) or partly (in female) meso- and metasterna, and first (visible) sternite, partly also following sternites (especially in male) and legs clothed with dense, recumbent, white setae with silver

tint; head, antennae, partly pronotum, venter and legs clothed with similar, but sparser setae; head, partly antennae, mostly apical part of pronotum on sides, venter and partly legs with more or less long, sparse, erect or suberect, light setae; elytra covered by sparse, predominantly robust (clearly thicker than over remaining surface), on sides short and partly suberect, light setae longest and erect on disk; setation in female especially recumbent and clearly less strongly developed than in male.

**Distribution** (Maps 1, 2 and Table). Northern Vietnam: Hoa Binh Province. Known only from one particular locality.

**Bionomics.** Adults active at least in the first half of May, obviously visit flowers.

**Remarks.** This species was omitted from the monograph on the fauna of Laos (Gressitt & Rondon, 1970). Instead, these authors quote there not only *C. laosicus*, but also *C. olesteroides*, distributed in the Andamans, and *C. methocoides*, recorded solely in Hong Kong, China.

The holotype is smaller.

## 2. *Clytellus methocoides* Westwood, 1853 (Figs 59, 77, 83, 93–106)

*Clytellus methocoides* Westwood, 1853: 481 (“prope Hong Kong, China”). Westwood, 1854: 240, pl. 12, fig. 6. **Type locality:** China, Victoria Peak, near Hong Kong (according to the original description and redescription); Gerstaecker, 1855: 192; White, 1855: 291; Pascoe, 1857: 97; Boheman, 1857: 48; Chevrolat, 1863: 339; Lacordaire, 1869a: 95; 1869b: 32, pl. 92, fig. 5; Pascoe, 1869: 642; Gemminger in Gemminger, Harold, 1872: 2943; Pascoe, 1885: 57; Aurivillius, 1912: 424; Kano, 1930: 46 (southern Taiwan, Arisan; now Alishan; ?wrong record); Matsushita, 1933: 308; Wu, 1937: 719; Gressitt, 1939: 46; Mitono, 1940: 129; Gressitt, 1951a: 310; Gressitt & Rondon, 1970: 287; Hua, 1982: 34; 1984: 26; 1987: 13; Makihara et al., 1998: 299; Hua, 2002: 202; Wang & Hua, 2009: 166; Yiu, 2009: 74; Löbl & Smetana, 2010: 206.

**Material.** China: holotype ♀, by monotypy (BMNH), “Hong Kong” (upperside) + “50–108” (underside), “*methocoides* West.” (this label has additional text, see Fig. 94), “Holotype”, + one

more label (Fig. 94); 2 ♂ (BMNH), “China [Hong Kong]”, “122, 3/4/52”, “Bowring, 63–47\*”; 1 ♂ (BMNH), “China [Hong Kong]” (upperside) + “56–45” (underside), “122, 22/3/54”; 1 ♂ (BMNH), “China, H.[ong] Kong”, “Fry Coll. 1905–100”, “ex Mus. Murray”, “28978”; 1 ♀ (BMNH), “China”; 1 ♀ [IZAS, IOZ(E)1859044], Hong Kong, Ngau Ngak Shan, 22°24'54"N, 114°14'53"E, 610 m, 21.IV.2009, V. Yiu leg.; 1 ♂ (NMP), “*Clytellus methocoides* Westw. China”, “122, 19/3/62”, “Coll. Nickerl, Mus. Pragense”; 1 ♂ (NHMW), “Boyer / 860” (a label with locality data is missing, but probably this specimen stems from China); 1 ♀ (EUM) (photograph), Hong Kong, Victoria Peak, 3.VI.1990, K. & M. Ando leg. (K. Ando Collection). Vietnam: 1 ♂ (cSM), Baitylong [= Bai Thu Long] Archipelago, Dongkho Island, 22.III.1987, V. Yanushev leg.; 1 ♀ (ZISP), Hoa Binh Prov., Mai Chau Distr., Pa Co, 20°45'N, 104°54'E, 1100–1200 m, 27.–28.IV.2002, S. Belokobylskij leg. Laos: 1 ♂ (cPV), Houa Phan Prov., Ban Saleui [= Saleuy] – Phou Pane Mt, 1450–1920 m, 10.–21.VI.2010, S. Jakl & local collectors leg.; 2 ♀ (cPV), Houa Phan Prov., Phou Pane Mt, 20°12'N, 103°59'E, 1200–1600 m, 1.–10.VI.2011, local collectors leg.; 2 ♂ (cNO) (photograph), Phou Pane Mt, Ban Saleui, Xam Neua, 28.–30.III.2005, N. Ohbayashi leg.; 2 ♂ (NMP) (photograph), Houa Phan Prov., Ban Saleuy – Phou Pane Mt, 1340–1870 m, 2.–22.VI.2011, V. Kubán & Lao leg.

**Diagnosis.** This species differs from all congeners by the peculiar structure of the crest at the base of each elytron, the most strongly convex elytra on the disk behind the crests, certain features of pronotum sculpture (resembling only *C. canaliculatus* and partly also *C. elongatus*), combined with some other characters described below. Based on the puncturation of the elytra, the shape and generally coarse sculpture of the pronotum, the absence of coarse punctures on the prosternum in the male, partly also on body coloration, *C. methocoides* can be compared to *C. laosicus*, *C. serratulus*, *C. dembickyi* sp. n. and the already mentioned *C. canaliculatus*, but differs from them in structure of the claws (not partly fused at the base), by the elytra are more extended in the apical part compared to their base, as well as in some other characters of each of the above species (see their diagnoses).

**Description.** Body length 4.40–5.85 mm, humeral width 0.95–1.30 mm (holotype: 5.55 mm and 1.25 mm, respectively) (see Remarks below). Black; elytra partly red, starting from base, thereby red coloration either can reach about apical one-third of elytra on disk and almost their apical one-fifth on sides or, vice versa, present only at the very base as dark tones, leaving almost entire surface of elytra black except for a brownish apex; sometimes elytra completely black except for a brownish apex (see Remarks below); pronotum and prosternum can partly be red (in basal part, as a rule, but sometimes also at apex), also completely or partly mesonotum, meso- and metasterna, partly sternites, usually except for first (visible) sternite, apex or base of all femora (in area of clava), as well as partly or entirely tarsi; elytra often with a bluish lustre.

Head with a slightly or barely convex frons; antennomere 2, 1.22–1.30 times as long as isthmus between antennal cavities; antennae usually slightly differing in length in male and female, freely or far reaching behind inside apical quarter of elytra, sometimes slightly failing to reach the apex of elytra in male; antennomere 1, 1.15–1.20 or 1.02–1.07 times as long as 3<sup>rd</sup> and 4<sup>th</sup>, respectively, either barely longer or shorter than antennomere 5 or 6, or subequal to each of them; antennomere 2, 1.50–1.76 times as long as wide; last antennomere 1.65–1.86 times as long as penultimate one.

Pronotum 1.62–1.73 times as long as wide at apex, 2.07–2.19 times as long as width at base; apex 1.26–1.27 times as broad as base, the very base 1.21–1.27 times as broad as constriction in front of base; extremely strongly convex; in female slightly more rounded on sides in the middle than in male; coarsely sculptured on disk due to numerous granulations and more or less short, mostly irregular folds; side surface of pronotum, mostly at base, usually with very sharp, long, longitudinal, partly sinuous folds masking to

a varying degree a longitudinal groove located there at bottom; most of pronotum clearly microsculptured.

Elytra 2.50–2.66 times as long as width at base, in apical half 1.28–1.34 times as broad as base; each elytron at base with a very strong, longitudinal, but noticeably obliquely positioned crest, its shape resembling a shark's dorsal fin, usually slightly serrate above; surface behind crests extremely strongly convex; in basal one-third with a coarse to very coarse, deep, oblong-oval puncturation strongly weakened towards the middle of elytra on disk (on its convex surface), but well-developed about until the middle of elytra on sides; base partly microsculptured.

Prosternum with a heterogeneous sculpture, similar in both sexes (in male without coarse deep punctures), in apical part with gentle transverse folds, smoother in female; prosternal process at apex clearly wider than between procoxae; mesosternal process about as wide as or barely narrower than prosternal process between procoxae; metepisterna with a small denticle at apex; first (visible) sternite 1.4–1.8 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: partly sides of pronotum, as well as pro- and mesosternum, coxae, almost entire or most of metasternum, and first (visible) sternite, often apex of elytra clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides and usually dorsally, elytra, venter and partly legs covered by more or less long, sparse, on elytra mostly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). Until recently, this species was reliably known only from Hong Kong (Gressitt, 1951; Gressitt & Rondon, 1970), since then recorded

also in Guangdong Province, China (Löbl & Smetana, 2010: “Guandong”, sic!). Above are the first reports from northern Vietnam (Hoa Binh Province) and northeastern Laos (Houa Phan Province). Without any doubt, *C. methocoides* is widely distributed in the extreme Southeast of China, at least west of Hong Kong. The old record in southern Taiwan (Kano, 1930) has not yet been confirmed (Chou, 2004), although Taiwan is mentioned by Löbl & Smetana (2010). However, this requires verification, based on pertinent material.

**Bionomics.** In China, adults are active from early April to about early June, in Vietnam from the second half of March at least to the end of April, in Laos from the end of March to the second half of June, visit flowers.

**Remarks.** Body length is given here, based on the material examined. According to published data (Gressitt, 1951; Gressitt & Rondon, 1970), the beetles are 4–6 mm long.

The strongest red coloration on the elytra is observed in specimens from northern Laos, as in Figs 59, 96, 98, 99, 104, 106; both pronotum and prosternum are red tones not only at the base (noted also in the Chinese populations), but at the apex as well. Highly unusual is the coloration of the specimens from northern Vietnam, in which the elytra are almost entirely black (with a bluish lustre), and only the very base is red while the apex brownish (Figs 97, 100, 101), or completely black except for a brownish apex. It is noteworthy that even the crests in these specimens remain entirely black, these always being red, often only with a blackened apex, in the Chinese and Laotian samples. It is somewhat surprising to see melanism in the northern Vietnamese population (as far as one can judge, based only on two specimens), although its locality lies between the typically coloured Chinese and north Laotian populations characterized by a far greater development of red coloration both on the elytra and prothorax.

### 3. *Clytellus laosicus*

Gressitt et Rondon, 1970  
(Figs 107–116)

*Clytellus laosicus* Gressitt & Rondon, 1970: 287, fig. 44, h. **Type locality:** Laos, Vientiane Province, Tha Ngone (= Tangone) (according to the original description and the label of the holotype). Hua, 1984: 26.

**Material.** Holotype ♂ (BM), “Laos, Vientiane, Tangone, 20.II.[19]64”, “J.A. Rondon Collection Bishop Mus.”, “Holotype *Clytellus laosicus* J.L. Gressitt et Rondon”, “8444” (Fig. 108); paratype ♂ (BM), same labels, but “Paratype *Clytellus laosicus* J.L. Gressitt et Rondon” (Fig. 112); paratype ♂ (BM), same labels, but taken on 2.III.[19]64; paratype ♂ (BM), “Laos, Borikhane Prov., Paksane, 17.II.[19]64”, “J.A. Rondon Collection Bishop Mus.” (Fig. 110); 2 paratypes ♂♂ (BM), same labels, but taken on 29.II.[19]64.

**Diagnosis.** This species resembles *C. methocoides*, but differs clearly by structure of the crest at the base of each elytron, the less convex elytra behind the crests, in certain features of the sculpture of the pronotum, including the absence of longitudinal folds on the sides of the base, and by some other characters. Together with *C. canaliculatus*, *C. serratulus* and *C. dembickyi* sp. n., it forms a group of species characterized by the claws partly fused at the base (not observed in the other congeners), by a generally coarse sculpture of the pronotum, a well-developed crest at the base of each elytron, a very coarse sculpture in the basal part of the elytra, the absence of a coarse deep puncturation on the prosternum in the male, and a number of other features. Among these species, *C. laosicus* seems to be especially similar to *C. dembickyi* sp. n., but differs by the coarser and much more abundant granulations on the pronotum, the absence of a fascia of dense light setae at its base, the presence of a more abundant and coarse puncturation in the basal part of the elytra, as well as in the somewhat different shapes of the pronotum and elytra. Evident differences of *C. laosicus* from both *C. canaliculatus* and *C. serratu-*

*lus* lie in structure and position of the crest on the elytra, the sculpture of the pronotum (including the absence in *C. laosicus* and *C. serratulus* of longitudinal folds on the sides at the base and the presence of much coarser granulations than in *C. serratulus*), as well as in some other structural details noted in the diagnoses of these species.

**Description.** Male (see Remarks below). Body length 3.9–4.5 mm, humeral width 0.80–0.95 mm (holotype: 4.20 mm and 0.95 mm, respectively). Head (except for black eyes), antennae, venter and legs dark reddish-brown; pronotum black; elytra brown-black or dark brown with reddish tint, lighter at apex, moderately shiny.

Head with a barely convex frons; antennomere 2, 1.61–1.75 times as long as isthmus between antennal cavities; antennae reaching about apical one-third or one-quarter of elytra; antennomere 1, 1.12–1.19, 1.11–1.24, 1.09–1.24 or 1.06–1.26 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.75–2.00 times as long as wide; last antennomere 1.90–1.95 times as long as penultimate one.

Pronotum 1.38–1.60 times as long as wide at apex, 2.04–2.44 times as long as width at base; apex 1.47–1.64 times as broad as base, the very base 1.25–1.28 times as broad as constriction in front of base; strongly convex; with numerous coarse granulations, on sides without folds, in area of constriction in front of base smooth, shiny; longitudinal groove at bottom of this constriction sharply expressed; most of surface clearly microsculptured.

Elytra 2.53–2.70 times as long as width at base, in apical half 1.15–1.24 times as broad as base; each elytron at base with a well-developed, more or less high, relatively short, longitudinal, but highly obliquely placed crest serrate above; behind the crests first a noticeable depression, then strongly convex; a small, sometimes poorly expressed, tooth-shaped ledge at angle of humeri; basal part

with a coarse to very coarse, deep, oblong-oval puncturation; base partly microsculptured.

Prosternum with an obliterated sculpture, without coarse deep punctures; prosternal process at apex about as wide as between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; denticle at apex of metepisterna poorly visible; first (visible) sternite 1.47–1.60 times as long as all following (visible) sternites combined.

Last tarsomere with two claws, these partly fused at base.

Setation mainly as follows: bottom of sides of pronotum, apex of elytra, most of both pro- and mesosterna, almost entire or most of metasternum, and first (visible) sternite, partly also coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, mainly sides of pronotum, elytra, venter and partly legs beset with more or less long, sparse, on elytra mostly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). Northern Laos: Vientiane and Bolikhamxai (= Borikhane) provinces.

**Bionomics.** Adults active from about mid-February at least to the second half of March, obviously visit flowers.

**Remarks.** I have examined the holotype and all paratypes of *C. laosicus* currently kept in the BM and BMNH collections (see Material above). Among them, 5 specimens, including the holotype, are males while 3 are females, including the “allotype” (Figs 126–131, 133, 135, 138, 139) which actually belongs to a different species, *C. serratulus* (see details under Remarks to that species). This female “allotype” thereby derives from the type locality of *C. laosicus* (Tha Ngone = “Tangone”, Vientiane Prov.) while the other two females from the locality noted for some

of the male paratypes (Paksane, Borikhane Prov.). At least some of the remaining paratypes of *C. laosicus* (according to the original description, there must be another 9 paratypes) are kept in the collection of the California Academy of Sciences, San Francisco, U.S.A. Moreover, a picture of a paratype is available at <http://plant.cdfa.ca.gov/byciddb/>, this specimen both in habitus and coloration agreeing quite well with the BM males I revised. The female of *C. laosicus* is still unknown to me while the description given here concerns only the above males. The description of the female in Gressitt & Rondon (1970) is misleading, because it must have been based, at least in part, on the “allotype” (i.e., the female of *C. serratulus*, Figs 128, 129, 135). In addition, the female shown on the photograph in the original description (Gressitt & Rondon, 1970, p. 290, fig. 44, h) is also the one I have studied. It shows an entirely black pronotum and almost completely black elytra and, as noted above, belongs to *C. serratulus* as well (Figs 126, 127, 138). I have properly remounted this female, as well as the other type specimens of *C. laosicus*, including the holotype, in order to take high-quality photographs. That female was received from the BM collection just as it had looked in the original description.

#### 4. *Clytellus canaliculatus* Holzschuh, 1993 (Figs 60, 117–122)

*Clytellus canaliculatus* Holzschuh, 1993: 53, Abb. 53. **Type locality:** Northern Thailand, “Thanon Thong Chai”, Lansang N. P., 16°48'N 98°57'E, 500 m (according to the original description and the label of the holotype).

**Material.** Holotype ♂ (cCH), “Thailand 91, «Thanon Thong Chai», D. Král & V. Kubáň”, “Thai, Lansang n. p., 16°48'N 98°57'E, 500 m, 18.–24.IV.1991, Vít Kubáň leg.”, “Holotypus *Clytellus canaliculatus* n. sp. det. C. Holzschuh 1993” (Fig. 119); 1 ♂ (NHMD), “Siam, Prae, 1931–33, Poul Fogh”, “Coll. Rosenberg”.

**Diagnosis.** This species resembles *C. methocoides* and *C. laosicus*, but differs clearly from both by structure of the crest at the base of each elytron, from *C. methocoides* by the clearly less convex elytra on the disk (like *C. laosicus*) behind the crests, the more homogeneous, mostly granulate sculpture of the disk of the pronotum, the less sharp longitudinal folds at the base on the sides of the pronotum, and the claws partly fused at the base, whereas from *C. laosicus* by the folds on the sides of the pronotum, the elytra being less expanded in the apical part compared to their base, possibly also by its body coloration (see Remarks to *C. laosicus* above). *Clytellus canaliculatus* is also similar to *C. serratulus* and *C. dembickyi* sp. n., but differs clearly from both by the pronotum sculpture, including the presence of longitudinal folds on the sides of the base, from the former species also by a more variable shape and size of the crest on the elytra, whereas from the latter species also by the absence of a fascia of dense light setae at the base of the pronotum, by certain structural features of the elytra, in particular, the shape of the crest, the more abundant coarse puncturation, by its coloration, and the more strongly developed apical fascia of light setae being less narrowly interrupted at the suture.

**Description.** Male. Body length 3.9–4.4 mm, humeral width 0.95–1.15 mm (see Remarks below). Head with dorsal side and eyes black, remaining parts brown-black; pronotum mostly black or brown-black at base and partly red at apex (pronotum sculpture somewhat leveling a clear border between red and black or brown-black and being able to create a partly motley mixed background); bases of elytra and epipleura red, apical parts black, in general shiny; venter predominantly red and brown-red; first (visible) sternite partly black, following sternites brown tones; legs brown, clava of femora darker or, conversely, lighter.

Head with a barely convex or flat frons;

antennomere 2, 1.36–1.44 times as long as isthmus between antennal cavities; antennae reaching behind middle or even inside apical quarter of elytra; antennomere 1, 1.12–1.15, 1.10–1.15, 1.08–1.15 or 1.14–1.22 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.66–1.71 times as long as wide; last antennomere 1.95–2.00 times as long as penultimate one.

Pronotum 1.65–1.79 times as long as wide at apex, 2.35–2.46 times as long as width at base; apex 1.37–1.43 times as broad as base, the very base 1.25–1.26 times as broad as constriction in front of base; strongly convex; with abundant coarse granulations, sides at base with more or less sharp, long, longitudinal, partly sinuous folds considerably masking a longitudinal groove located at bottom; much more obliterated, but still more or less clear, short, longitudinal folds extending onto dorsal side of constriction before base; most of pronotum clearly microsculptured.

Elytra 2.27–2.45 times as long as width at base, in apical half 1.05–1.15 times as broad as base; each elytron at base with a strong or somewhat less strongly developed longitudinal, but noticeably oblique crest serrate above (see Remarks); behind the crests a noticeable depression followed by a relatively strongly convex surface; basal part with a coarse to very coarse, deep, oblong-oval puncturation; base partly microsculptured.

Prosternum with an obliterated sculpture devoid of coarse deep punctures, apical part mostly transversely rugose; prosternal process at apex slightly narrower than between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; metepisterna with a small denticle at apex; first (visible) sternite 1.31–1.42 times as long as all following (visible) sternites combined.

Last tarsomere with two claws, these partly fused at base.

Setation mainly as follows: apex of elytra, partly pro- and mesosterna, most of metastern-

num, and first (visible) sternite covered by more or less dense, recumbent, white or partly yellowish setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum, elytra, venter and partly legs with more or less long, sparse, on elytra mostly more robust, erect or suberect, light setae (these on elytra can be yellowish).

Female unknown.

**Distribution** (Maps 1, 2 and Table). Northern Thailand: Tak and Phrae provinces.

**Bionomics.** Adults active at least in the second half of April, obviously visit flowers.

**Remarks.** The significant differences in size and shape of the crest at the basis of the elytra in both examined males is noteworthy (Figs 121, 122). In the other species similar to *C. canaliculatus* that show a structured crest, this difference is evidently less considerable. In addition, the body of the holotype is clothed with white setae, versus a partly clearly yellowish setation in the other male.

The holotype is smaller.

### 5. *Clytellus serratulus* Holzschuh, 1991 (Figs 123–139)

*Clytellus serratulus* Holzschuh, 1991: 60, Abb. 40. **Type locality:** Northern Thailand, Chiang Mai, Hang Dong (according to the original description and the label of the holotype).

**Material.** Holotype ♂ (cCH), “N Thailand, Chiang Mai, Hang Dong, 9.VI.1989, native collector”, “Holotypus *Clytellus serratulus* n. sp. det. C. Holzschuh 1991” (Fig. 124); 1 ♀ (cPV), NE Thailand, Nan Prov., Ban Wan, 3.V.2004, P. Viktora leg.; 1 ♀ (BM), “Laos, Vientiane, Tangone, 2.III.[19]64”, “J.A. Rondon Collection Bishop Mus.”, “Allotype *Clytellus laosicus* J.L. Gressitt et Rondon [misidentification!]”, “♀”, “*Clytellus serratulus* Holz. C. Holzschuh det. 1998” (Fig. 129); 1 ♀ (BM), “Laos, Borikhane Prov., Paksane, 23.II.[19]64”, “J.A. Rondon Collection Bishop Mus.”, “Paratype *Clytellus laosicus* J.L. Gressitt et Rondon [misidentification!]” (Fig. 127), “*Clytellus serratulus* Holzschuh 1991, ♀ A. Miroshnikov det. 2013”; 1 ♀ (BMNH), “Laos, Borikhane Prov., Paksane, 29.II.[19]64”, “J.A. Rondon Collection Bishop Mus.”, “Paratype”, “*Clytellus laosicus*

J.L. Gressitt et Rondon [misidentification!]” (Fig. 131), “*Clytellus serratulus* Holzschuh 1991, ♀ A. Miroshnikov det. 2013”.

**Diagnosis.** This species is clearly similar to *C. laosicus* and *C. canaliculatus*, but differs from both by the more obliterate sculpture of the pronotum, from the former species also in structure and location of the crest at the base of the each elytron, the slightly less strongly expanded apical parts of the elytra, whereas from the latter species by the absence of longitudinal folds on the sides at the base of the pronotum, the less variable shape and size of the crest on the elytra (in *C. canaliculatus*, the crest structure is strongly variable, see the above description of this species). *Clytellus serratulus* can also be compared to *C. dembickyi* sp. n., but differs clearly by the absence of a fascia of dense light setae at the base of the pronotum, the structure of the crest, and the more abundant coarse puncturation of the elytra.

**Description.** Body length 3.9–4.6 mm, humeral width 0.9–1.1 mm. From almost entirely black with red-brown antennae and, partly, legs to mostly dark reddish-brown or reddish-brown (see Remarks below).

Head with a barely convex or flat frons; antennomere 2, 1.30–1.62 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical quarter of elytra in male, reaching or almost reaching the middle to apical one-third of elytra in female; antennomere 1, 1.11–1.17, 1.12–1.20, 1.05–1.16 or 1.08–1.20 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.73–1.86 times as long as wide; last antennomere 1.83–2.07 times as long as penultimate one.

Pronotum 1.71–1.78 times as long as wide at apex, 2.39–2.73 times as long as width at base; apex 1.36–1.56 times as broad as base, the very base 1.26–1.37 times as broad as constriction in front of base; strongly convex; with clear, but not coarse, partly strongly obliterate, abundant granulations, on sides devoid of rugosity; constriction area in front

of base smooth, shiny; longitudinal groove at bottom of this constriction sharply expressed; mostly clearly microsculptured.

Elytra 2.36–2.62 times as long as width at base, in apical half usually 1.02–1.11 times as broad as base, or these parts of elytra subequally wide; each elytron at base with a well-developed, longitudinal, but noticeably oblique crest serrate above, more sharply expressed in male; behind the crests an evident depression followed by a moderately convex surface; basal part with a coarse to very coarse, deep, oblong-oval puncturation; base partly microsculptured.

Prosternum without coarse sculpture, similar in both sexes (even in male devoid of coarse deep punctures); prosternal process at apex slightly wider than between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; denticle at apex of metepisterna poorly visible; first (visible) sternite 1.25–1.47 times as long as all following (visible) sternites combined.

Last tarsomere with two claws, these partly fused at base.

Setation mainly as follows: apex of elytra, partly pro- and mesosternum (or most of mesosternum), also almost completely or partly metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs covered by similar, but sparser setae; head, partly antennae, mostly apex of pronotum, elytra, venter and, partly, legs with more or less long, sparse, on elytra mostly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). Northern Thailand: Chiang Mai and Nan provinces; northern Laos: Vientiane and Bolikhamxai (= Borikhane) provinces.

**Bionomics.** In Thailand, adults are active from early May at least to the first half of June, in Laos collected in the second half of February and in early March, obviously visit flowers.

**Remarks.** The holotype male and the non-type female from Thailand are characterized by a dominating black coloration, except for the red-brown antennae (completely in the male and, with the exception of antennomere 1, in the female) and this or that part of the legs, only the apex of the elytra being flavous (Figs 123, 125). Two of the Laotian females (Figs 128, 130), which are paratypes of *C. laosicus*, are coloured differently, to some degree being dissimilar even between themselves. In one of them, only the eyes and antennal tubercles remain clearly black, whereas in the other the head dorsally in part (including the antennal tubercles), the eyes, most of the pronotum and the apical parts of the elytra, except for the very apex are black. Both these females have reddish-brown antennae, red bases of the pronotum and elytra, and an almost entirely red-brown venter. In one female, most of the pronotum and the apical parts of the elytra, except for the very apex, are black-brown while its legs are generally lighter than in the other which has, in particular, black-brown clava of the femora. However, one more female from Laos (Fig. 126), also a paratype of *C. laosicus*, is coloured about as well as the male and female from Thailand. Therefore, generally this species can be stated to show considerable variability in body coloration, at least so in its Laotian populations.

**6. *Clytellus dembickyi* Miroshnikov, sp. n.**  
(Figs 140, 142, 143)

**Material.** Holotype ♀ (cLD), S Vietnam, Gia Lai Prov., 40 km NW An Khe, Buon Luoi, 14°06'N, 108°18'E, 620–750 m, 28.III.–12.IV.1995, P. Pacholátko & L. Dembický leg.

**Diagnosis.** By the habitus, the shape and location of the crest at the base of each elytron, certain features of sculpture of the pronotum, in body coloration and some other characters, this new species seems to be especially similar to *C. laosicus*, but differs



clearly by the presence of a well-developed fascia of white setae at the base of the pronotum, the more strongly obliterated granulations on the pronotum, the much more spacious pronotum free from such granulations and completely smooth at its base, the more abundant, albeit sparse, subrecumbent, white setae on the pronotum, the less abundant coarse puncturation in the basal part of the elytra, a somewhat different shape of the elytra, their apical fascia of white setae being more widely interrupted in the area of the suture. By the presence of a fascia of white setae at the base of the pronotum, the shape of the crest and the less numerous coarse punctures on the elytra, *C. dembickyi* sp. n. differs well also from two other similar species, *C. serratulus* and *C. canaliculatus*, from the latter also in the absence of longitudinal folds on the sides of the pronotum base.

**Description.** Female. Body length 4.15 mm, humeral width 0.95 mm. Black; antennae, base of femora and, partly, tarsi dark reddish-brown; apex of elytra and last tarsomeres reddish; dorsum in general moderately shiny.

Head with a barely convex or flat frons; antennomere 2, 1.5 times as long as isthmus between antennal cavities; antennae reaching the middle of elytra; antennomere 1, 1.11 times as long as subequal antennomeres 3–6; antennomere 2, 1.71 times as long as wide; last antennomere 1.80 times as long as penultimate one.

Pronotum 1.69 times as long as wide at apex, 2.23 times as long as width at base; apex 1.32 times as broad as base, the very base 1.22 times as broad as constriction in front of base; strongly convex; with clear, partly obliterated, abundant granulations turning barely visible on disk behind the middle, but on sides well-developed, but not rugose below the constriction; area of constriction in front of base smooth, shiny; longitudinal groove at bottom of this constriction sharply expressed; with a clearly cellular microscul-

pture only on disk in apical part and, partly, on sides.

Elytra 2.70 times as long as width at base, in apical half 1.21 times as broad as base; each elytron at base with a well-developed, high, relatively short, longitudinal, but strongly oblique crest serrate above; an evident depression behind the crests, followed by a relatively strongly convex surface; basal part with a coarse to very coarse, deep, oblong-oval puncturation; base partly microsculptured.

Prosternum without coarse sculpture; prosternal process at apex about as wide as between procoxae; mesosternal process noticeably narrower than prosternal process between procoxae; denticle at apex of metepisterna poorly-visible; first (visible) sternite 1.2 times as long as all following (visible) sternites combined.

Last tarsomere with two claws, these partly fused at base.

Setation mainly as follows: pronotum at base in the form of a well-developed, but dorsally widely interrupted fascia, as well as apex of elytra, this or that part of pro- and mesosternum, metasternum, first (visible) sternite and coxae clothed with more or less dense, white, recumbent setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, as well as pronotum on sides at apex, elytra, venter and partly legs covered by more or less long, sparse, on elytra mostly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). Southern Vietnam: Gia Lai Province. Known from a single locality.

**Bionomics.** The holotype was collected between March 28 and April 12; adults obviously visit flowers.

**Etymology.** The new species honours of Mr. Luboš Dembický (Brno, Czech Republic), a good collector of Oriental Cerambycidae who, together with Petr Pacholátka (Brno, Czech Republic), took the holotype.

**7. *Clytellus olesteroides* Pascoe, 1885**  
(Figs 141, 144, 148, 151, 152)

*Clytellus olesteroides* Pascoe, 1885: 56. **Type locality:** Andaman Islands (according to the original description and the label of the holotype). Gahan, 1906: 313; Aurivillius, 1912: 424; Gressitt & Rondon, 1970: 287; Hua, 1984: 26.

**Material.** Holotype ♂, by monotypy (BMNH), "Andaman", "*Clytellus olesteroides* Pasc. type", "*Clytellus olesteroides* Pasc. Andaman Is." (upper-side) + "Pascoe Coll. 93-60" (underside), "Type" (Fig. 152); 1 ♂ (BMNH), "Andaman Islands", "Atkinson Coll. 92-3"; 1 ♀ (BMNH), "Andaman Islands", "Capt. Wimberley", "Fry Coll. 1905-100", "47246"; 1 ♂ (BMNH), "Nicobars (Røepstorff)".

**Diagnosis.** This species differs from all congeners by certain structural features of the pronotum (the presence of a longitudinal, gentle, but sufficiently clear, keel-shaped elevation on the disk, of abundant white setae covering in a wide band both the apex and base behind the constriction and thus well contrasting with an almost dull black background surface, as well as the absence of a sharp constriction in the apical one-third) and elytra (the presence of coarse to very coarse punctures in the basal half, these partly located against the background of a microsculpture fascia in the basal one-third, as well as the presence on each elytron of a clear crest and, on both elytra, of an apical fascia of dense light setae), and the presence of abundant coarse punctures on the prosternum of the male. *Clytellus olesteroides* can be compared to *C. gressitti* sp. n., from which it differs clearly by the less sharp keel-shaped elevation and much more abundant white setation on the pronotum, the latter's smooth surface in the area of constriction in front of the base, in the more abundant coarse puncturation of the elytra in the area of the depression, the more strongly developed apical fascia of setae on the elytra, and the coloration of the legs. By the sculpture of the prosternum of

the male and of the elytra, it also reminds of *C. shibatai*, but differs clearly by a number of characters, including the structure and coloration of the pronotum, the much less strongly developed tubercle at the base of each elytron, the presence on each of the above crest, of a continuous microsculpture fascia in the basal one-third and of an apical fascia of dense light setae on both elytra, as well as in the coloration of the legs.

**Description.** Body length 5.75–6.50 mm, humeral width 1.45–1.65 mm (see Remarks below). Black; antennae and, partly, legs sometimes dark reddish-brown; elytra mostly shiny, with a clear, metallic, greenish-cupreous lustre, predominantly so in area of depression.

Head with a barely convex or flat frons; antennomere 2, 1.36–1.52 times as long as isthmus between antennal cavities; antennae freely reaching behind inside or almost reaching apical one-quarter of elytra in male and female, respectively; antennomere 1, 1.34–1.45 times as long as 3<sup>rd</sup>, barely longer or shorter than antennomere 4 or 6, or subequal to each of them, 0.85–0.90 times as long as 5<sup>th</sup>; antennomere 2, 1.62–1.90 times as long as wide; last antennomere 1.58–1.65 times as long as penultimate one.

Pronotum 1.84–1.93 times as long as wide at apex, 2.26–2.44 times as long as width at base; apex 1.23–1.28 times as broad as base, the very base 1.33–1.36 times as broad as constriction in front of base; strongly convex; without sharp, but still with a well-marked keel-shaped elevation along axial line between apex and front margin of constriction in front of base; longitudinal groove at bottom of this constriction sharply expressed; apical one-third with a barely visible constriction; microsculpture creating a velvety background.

Elytra 2.41–2.44 times as long as width at base, in apical half 1.04–1.08 times as broad as base; each elytron at base with a tuberculiform elevation supporting a low,

but nonetheless quite clear longitudinal crest serrated above; a clear depression before middle, moderately convex behind; basal part with coarse to very coarse, deep, oblong-oval punctures, thereby some of them located in area of a wide, velvety, dull, microsculpture fascia covering entire width of elytra.

Prosternum in male, mostly its apical half, with abundant, coarse, deep punctures, in-between a very clear cellular microsculpture arranged around punctures in several, more or less clear rows of cells; surface in female entirely smooth; profile of prosternum in apical part clearly curved; prosternal process at apex slightly narrower than between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; metepisterna with a small, hardly traceable denticle at apex; first (visible) sternite 1.40–1.55 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: frons (usually in male), pronotum at base and its apex in the form of more or less well-developed fasciae, scutellum, apex of elytra, partly prosternum (male with a peculiar pattern, Fig. 144), usually most of mesosternum, almost entire metasternum and first (visible) sternite, partly also coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, mainly sides of pronotum at apex, elytra, venter and, partly, legs covered by more or less long sparse, on elytra mostly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). India: Andaman and Nicobar islands. Above is the first record in the Nicobar Islands.

**Bionomics.** Unknown.

**Remarks.** The holotype is the largest.

### 8. *Clytellus gressitti* Miroshnikov, sp. n.

(Figs 145–147, 149, 150)

**Material.** Holotype ♂ (cLD), W Malaysia, Pahang, Banjaran Benom Mts, 10–15 km SSE Kampong Ulu Dong, 17.–23.IV.1997, D. Hauck leg.

**Diagnosis.** This new species seems to be especially similar to *C. olesteroides*, but differs clearly by the more distinct longitudinal keel-shaped elevation on the pronotum, the presence of not too sharp, but still well-marked longitudinal grooves in the area of constriction in front of the base on the sides of the pronotum, by the sparser coarse punctures on the elytra in the depression area and, as a result, by the sparser erect setae they support, in the much less abundant, white, recumbent setae in the apical part of the pronotum entirely missing (maybe abraded!) at its base, the clearly narrower fascia of white setae at the apex of the elytra, the less coarse punctures on the prosternum, and red clava of the femora. Based on to some degree similar features of the sculpture of the elytra's basal part, of the pronotum in the area of constriction in front of the base, of the male prosternum and, partly, body coloration, *C. gressitti* sp. n. resembles *C. shibatai*, but differs clearly by the smaller body, the sculpture of the pronotal disk, the pronotum showing a barely visible constriction in the apical one-third, also supporting gentle white setae and a mainly dull surface, the weak tubercles at the base of each elytron, the presence there of a low, but sufficiently clear longitudinal crest, of a continuous microsculpture fascia, and a well-expressed fascia of dense light setae at the apex of the elytra.

**Description.** Male. Body length 4.9 mm, humeral width 1.25 mm. Black; clava of femora, apex of tibiae and, partly, tarsi (at least pro- and mesotarsi), brownish-red; elytra mostly shiny, with a clear, metallic, green-cupreous lustre, predominantly so in area of depression.

Head with a flat frons; antennomere 2, 1.3

times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical one-quarter of elytra; antennomere 1, 1.45, 1.11 or 1.07 times as long as 3<sup>rd</sup>, 4<sup>th</sup> and 6<sup>th</sup>, respectively, barely shorter than 5<sup>th</sup>; antennomere 2, 1.66 times as long as wide; last antennomere 1.64 times as long as penultimate one.

Pronotum 1.62 times as long as wide at apex, 2.11 times as long as width at base; apex 1.31 times as broad as base, the very base 1.24 times as broad as constriction in front of base; strongly convex; dorsally with a rather sharp (especially in the middle) keel-shaped elevation along axial line between apex and front margin of constriction in front of base; longitudinal groove at bottom of this constriction sharply expressed; microsculpture creating a velvety background.

Elytra 2.42 times as long as width at base, in apical half 1.08 times as broad as base; each elytron elevated tuberculiform at base, also showing a low, but quite clear longitudinal crest, the latter partly serrate above; an evident depression before middle, a relatively strongly convex surface behind; basal part covered by coarse to very coarse, deep, oblong-oval punctures, thereby some of them located in area of a wide, well-expressed, velvety, dull fascia of microsculpture covering entire width of elytra.

Prosternum, mostly its apical half, with abundant, coarse (yet not too coarse), deep punctures, in-between a very clear cellular microsculpture with several more or less clear rows of cells around punctures; surface entirely smooth only in female; profile of prosternum in apical part clearly curved; prosternal process at apex about as wide as between procoxae; mesosternal process noticeably narrower than prosternal process between procoxae; metepisterna with a fairly well-marked denticle at apex; first (visible) sternite 1.2 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: pronotum at apex mostly on sides, apex of elytra in the form of a relatively narrow fascia, partly venter and coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, as well as pronotum on sides at apex, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mostly more robust and yellowish, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Pahang. Known from a single locality.

**Bionomics.** The holotype was collected between 17 and 23 April; adults obviously visit flowers.

**Etymology.** The new species is named in the memory of Dr. Judson Linsley Gressitt, on the eve of his 100<sup>th</sup> birthday.

### 9. *Clytellus shibatai* Hayashi, 1977 (Figs 55–58, 67, 82, 153–159)

*Clytellus shibatai* Hayashi, 1977: 125. **Type locality:** Western Malaysia, Maxwell Hill (now Bukit Larut) (according to the original description and the label of the holotype). Mizuno & Shiyake, 2004: 33.

**Material.** Western Malaysia: 1 ♂ (cLD), Kelantan, Banjaran Titi Wangsa Mts, Ladang Pandrak env., 1500–1800 m, 9.–11.IV.1997, P. Čechovský leg.; 1 ♀ (cFV), Pahang, Cameron Highlands, Tanah Rata, 1500 m, 13.–20.IV.1999, A. Ballerio leg. (Coll. F. Vitali, Luxembourg); 2 ♂ (cAM), same locality, 4°28'N, 101°23'E, 1800 m, 15.II.2000, P. Pacholátko leg.; 1 ♂ (cAM), same locality, 1600 m, 11.–27.II.2000, J. Horák leg.; 1 ♂ (cLD), Perak, 40 km SE Ipoh, Banjaran Titi Wangsa, Ringlet, 900 m, 29.III.–15.IV.2004, P. Čechovský leg.; 1 ♂ (cSM), same label; holotype ♂ (see Remarks) (OMNH) (photographs), "Malaysia, Maxwell's Hill, 22.V.1975, Y. Kiyoyama", "*Clytellus shibatai* Hayashi det. M. Hayashi, 1977", "Holotype" (Fig. 154).

**Diagnosis.** This species differs from all congeners by the combination of charac-

ters which includes a body size large for the genus, its specific coloration, certain structural details of the pronotum (the presence of a sharp constriction in the apical one-third and of longitudinal grooves in the area of constriction in front of the base, the absence both of a coarse sculpture on the remaining surface and of a fascia of light setae at the base) and elytra (the presence of a very strong tubercle at the base of each elytron, of very coarse punctures in the basal half, partly located against the background of a wide, in some places interrupted fascia of microsculpture in the basal one-third, the absence of an evident apical fascia of dense, recumbent, light setae), the presence of abundant coarse punctures on the prosternum in the male (see Remarks below), and of a strongly developed denticle at the apex of the metepisterna. *Clytellus shibatai* can be compared to *C. vivesi* sp. n. and *C. gressitti* sp. n., but differs clearly from the former species by the absence of a fascia of light setae at the base of the pronotum, the more shiny elytra (as well as the pronotum), and a much greater development of microsculpture surface fragments at their base, whereas from the latter species by the larger body, certain structural details of the pronotum (including a shiny surface and deeper grooves in the constriction in front of the base), the less strongly developed fascia of microsculpture in the basal one-third of the elytra, and the strongly protruding denticle at the apex of the metepisterna. In addition, in comparison with both these species, *C. shibatai* shows a much better developed tubercle at the base of each elytron, as well as a missing longitudinal crest present in *C. gressitti* sp. n.

**Description.** Body length 5.9–7.0 mm, humeral width 1.55–1.90 mm (see Remarks below). Black; clava of femora red, sometimes also bases of femora reddish-brown tones; dorsum almost entirely shiny; elytra with a clear or bright, metallic, greenish-cupreous, sometimes cupreous-green lustre,

this being more intense mainly in area of depression.

Head with a flat frons; antennomere 2, 1.27–1.33 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical one-quarter or one-third of elytra in male and female, respectively; antennomere 1, 1.44–1.48 or 1.03–1.08 times as long as 3<sup>rd</sup> and 4<sup>th</sup>, respectively, subequal to antennomere 5 or 6, or barely longer than 6<sup>th</sup>; antennomere 2, 1.58–1.93 times as long as wide; last antennomere 1.60–1.76 times as long as penultimate one.

Pronotum 1.80–1.90 times as long as wide at apex, 2.19–2.38 times as long as width at base; apex 1.16–1.30 times as broad as base, the very base 1.27–1.33 times as broad as constriction in front of base; apical one-third with a sharp constriction; strongly convex; partly with a more or less distinct microsculpture; area of constriction in front of base, mostly on sides, with sharp longitudinal grooves, sometimes clearly visible, but obliterate and shorter on dorsal side; longitudinal groove at bottom of this constriction sharply expressed; remaining surface smooth, only with individual punctures usually turning coarser at apex on sides.

Elytra 2.37–2.53 times as long as width at base (in female more elongated), in apical half 1.08–1.10 times as broad as base; each elytron at base very strongly elevated tuberculiform; with a sharp depression before middle, relatively strongly convex behind; basal part with coarse to very coarse, deep, mainly oblong-oval punctures, thereby most of the most coarse punctures located in area of contrasting, velvety, dull fascia of microsculpture, the latter covering most of the tubercles, clearly interrupted at suture and extended along lateral margins to humeral angles.

Prosternum in male (see Remarks below), mostly its apical half, with abundant, coarse, deep punctures, in-between a very clear cellular microsculpture arranged in several

more or less clear rows of cells around punctures; sculpture in female obliterated; profile of prosternum in apical part usually sharply curved; prosternal process at apex slightly or noticeably wider than between procoxae; mesosternal process about as wide as prosternal process between procoxae; metepisterna with a very well-developed, sharpened denticle at apex; first (visible) sternite 1.33–1.40 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: partly prosternum (in male with a peculiar pattern, Figs 57c, 156) and mesosternum, almost completely or most of metasternum, and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides, mainly at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae, these being denser, but not too dense, at apex of elytra.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Perak, Kelantan and Pahang.

**Bionomics.** Adults active from the first half of February at least to mid-April, visit flowers.

**Remarks.** This species was based on the holotype claimed to be a female (Hayashi, 1977). However, the original description noted the presence in the holotype of a very coarse puncturation on the prosternum, a character observed, as shown above, only in the male. Based on this evidence, as well as on the photographs of the holotype at my disposal, I consider it to actually be a male.

According to the original description, the holotype is 5.5 mm long, the humeri are 1.5 mm wide.

**10. *Clytellus vivesi* Miroshnikov, sp. n.**  
(Figs 160, 163, 164)

**Material.** Holotype ♀ (cEV), “Brunei, Kuala Belalong FSC [Field Studies Centre], 4.34°N, 115.7°E, Dipterocarp forest, BM(NH), 1991–173”, “Ground Malaise 1A, 260 m alt., 22.VI.[19]91, N. Mawdsley [leg.] NM232”, “*Clytellus kiyoyamai* Hay.[ashi] E. Vives det. 2005 [misidentification!]”.

**Diagnosis.** The new species seems to be especially similar to *C. shibatai*, but differs clearly by the presence of a fascia of white setae at the base of the pronotum and the much more modest tubercle at the base of each elytron, by the absence at the apex of the elytra of denser, erect, light setae, as well as by the much weaker development in the basal one-third of the elytra of velvety dull fragments of surface microsculpture, the clearer and more uniform longitudinal grooves on the dorsal side in the area of constriction in front of the base of the pronotum, the less shiny pronotum and elytra, the less strongly expressed metallic lustre on the elytra, and the different shape of the denticle at the apex of the metepisterna. By the structure of the basal part of the pronotum, partly also the sculpture of the elytra, body coloration and some other features, *C. vivesi* sp. n. resembles *C. viridipennis* and *C. tatiana* sp. n., but differs clearly from both these species by the sharp constriction in the apical one-third of the pronotum, from the former also in the absence of a fascia of dense light setae at the apex of the elytra, generally a less shiny dorsum, and a dimmer metallic lustre of the elytra (like in *C. tatiana* sp. n.), whereas from the latter species in the shorter grooves on the dorsal side in the area of constriction in front of the pronotum base, the noticeably coarser punctures in the basal part of the elytra, an almost complete absence of even small punctures behind the middle of the elytra, and the elytra being slightly wider in the apical part relative to their base.

**Description.** Female. Body length 5.75

mm, humeral width 1.45 mm. Black; antennae and legs dark reddish-brown; apices of prosternum and sternites red-brown; elytra reddish at apex; pronotum and elytra mostly shiny, thereby mostly basal part of elytra with a weak, metallic, greenish-cupreous lustre, the latter being better seen in area of depression.

Head with a flat frons; antennomere 2, 1.06 times as long as isthmus between antennal cavities; antennae reaching apical one-third of elytra; antennomere 1, 1.40, 1.11 or 1.09 times as long as 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup>, respectively, subequal to 6<sup>th</sup>; antennomere 2, 1.55 times as long as wide; last antennomere 1.60 times as long as penultimate one.

Pronotum 1.74 times as long as wide at apex, 2.20 times as long as width at base; apex 1.27 times as broad as base, the very base 1.30 times as broad as constriction in front of base; apical one-third with a sharp constriction; strongly convex; partly more or less clearly microsculptured; area of constriction in front of base with sharp longitudinal grooves growing shorter on dorsal side; longitudinal groove at bottom of this constriction sharply expressed; remaining surface smooth, only with individual punctures.

Elytra 2.48 times as long as width at base, in apical half 1.11 times as broad as base; each elytron moderately elevated tuberculiform at base, with an evident depression before middle, pretty strongly convex behind; base with coarse to very coarse, deep, oblong-oval punctures; area of tubercles partly microsculptured and forming a velvety dull surface contrasting with elytra generally strongly dominated by a smooth and shiny background surface.

Prosternum with an obliterated sculpture; its profile in apical part usually clearly curved; prosternal process at apex slightly wider than between procoxae; mesosternal process about as wide as prosternal process between procoxae; metepisterna at apex with

a large denticle of peculiar shape; first (visible) sternite 1.53 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, partly venter and coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides and mostly at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 4 and Table). Brunei. Known from a single locality.

**Bionomics.** The holotype was collected in the second half of June; adults obviously visit flowers.

**Remarks.** When/if the male of this species is found, the presence of a coarse deep puncturation on its prosternum could be expected.

**Etymology.** The new species honours my colleague, Dr. Eduard Vives (Museu de Ciències Naturals de Barcelona, Spain), who provided his valuable material for the present study.

### 11. *Clytellus viridipennis* Hayashi, 1977 (Figs 161, 162, 165–170, 176, 177)

*Clytellus viridipennis* Hayashi, 1977: 127. **Type locality:** Western Malaysia, Gap (according to the original description and the label of the holotype). Mizuno & Shiyake, 2004: 33, pl. 11, fig. 300.

**Material.** Holotype ♂ (OMNH) (photographs), “Malaysia, Gap, 5.IV.1975, Y. Kiyoyama”, “*Clytellus viridipennis* Hayashi ♂ det. M. Hayashi, 1977”, “Holotype” (Fig. 162); paratype, ♂ (UEM) (photographs), “Malaysia, Gap, 3.IV.1975, Y. Kiyoyama”, “*Clytellus viridipennis* Hayashi ♂ det. M. Hayashi, 1977”, “Paratype”, “K. Ando Collection” (Fig. 167); 1 ♀ (UEM) (photographs), “Malaysia, Gap, 2.IV.1975, Y. Kiyoyama”, “K. Ando Collection” (Fig. 170).

**Diagnosis.** This species differs from all congeners by the combination of characters which includes certain structural features of the pronotum (the absence of a constriction in the apical one-third and of a coarse sculpture almost all over the surface, the presence of longitudinal grooves in the area of constriction in front of the base and of a very well-developed fascia of light setae at the base) and elytra (the presence of coarse to very coarse punctures in the basal half, of a clear microsculpture in the basal one-third in the middle part of the disk, and of an apical fascia of dense light setae), and the absence of coarse deep punctures from the prosternum in the male. *Clytellus viridipennis* can be compared to *C. monilis* and *C. tatianae* sp. n., but differs clearly from both by certain features of the sculpture of the elytra, the presence at their apex of a fascia of dense light setae, the absence of a very strong tubercle from the disk of the pronotum as observed in *C. monilis*, as well as by a sharp metallic lustre of the elytra in comparison with *C. tatianae* sp. n. By some important details of body structure and coloration, *C. viridipennis* also reminds of *C. vivesi* sp. n., but differs by the absence of a constriction in the apical one-third of the pronotum, the presence at the apex of the elytra of a fascia of dense light setae, a generally more shiny dorsum and a sharper metallic lustre on the elytra.

**Description.** Body length 4.30–5.75 mm, humeral width 1.1–1.5 mm (see Remarks below). Black; antennae, venter and legs dark reddish-brown to reddish-brown, clava of femora lighter, red tones; pronotum and elytra shiny, the latter with an evident, metallic, greenish-cupreous lustre.

Head with a flat frons; antennomere 2, 1.34–1.36 times as long as isthmus between antennal cavities; antennae reaching apical one-third of elytra both in male and female; antennomere 1, 1.40–1.42, 1.05–1.13 or 1.08–1.23 times as long as 3<sup>rd</sup>, 4<sup>th</sup> and 6<sup>th</sup>,

respectively, subequal to or slightly longer than antennomere 5; antennomere 2, 1.50–1.52 times as long as wide; last antennomere 1.76–1.78 times as long as penultimate one.

Pronotum 1.72–1.85 times as long as wide at apex, 2.21–2.27 times as long as width at base; apex 1.23–1.29 times as broad as base, the very base 1.22–1.30 times as broad as constriction in front of base; strongly convex; area of constriction in front of base with sharp longitudinal grooves; remaining surface smooth; longitudinal groove at bottom of this constriction sharply expressed.

Elytra 2.35–2.38 times as long as width at base, widest there; an evident depression behind basal one-third; basal part with coarse to very coarse, deep, oblong-oval punctures; basal one-third partly with microsculpture between punctures located in inner half of each elytron (Figs 176, 177).

Prosternum sculpture not too coarse, similar in both sexes (i.e., in male without coarse deep punctures); profile of prosternum in apical part without evident curve; prosternal process at apex clearly wider than between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; metepisterna with a well-visible denticle at apex; first (visible) sternite 1.29–1.38 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly pro- and mesosterna, almost completely or mostly metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, antennae partly, pronotum at apex, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.



**Distribution** (Maps 1, 3 and Table). Western Malaysia: Selangor and Pahang.

**Bionomics.** Adults active at least in April, obviously visit flowers.

**Remarks.** This description is prepared upon a study of a series of high-quality photographs of the holotype, a paratype and one non-type specimen of *C. viridipennis* (see Material above) received through the courtesy of Dr. Nobuo Ohbayashi (Kamimiyada, Miura City, Japan) and Mr. Shigehiko Shiyake (Osaka Museum of Natural History, Japan). At the same time, some personal comments of Dr. Ohbayashi and the original description of this species have also been taken into account.

Besides these photographs, I have also obtained from Dr. Ohbayashi a few pictures he took of a *Clytellus* specimen kept at the Ehime University Museum, Matsuyama, Japan, with the following labels: “Malaysia, Gap, 27.03.1974, Y. Kiyoyama”, “K. Ando Collection” (Figs 171–173, 175). Earlier, Dr. Eduard Vives (Barcelona, Spain) sent me a picture of a *Clytellus* male (Fig. 174) extremely similar to the previous one and labeled as “Malaysia, Gap, 23.03.1974, Y. Kiyoyama” that he had taken on July 10, 2007 in the Osaka Museum of Natural History (E. Vives, personal communication). The original description of *C. viridipennis* referred to a few paratypes with the same label as above. However, the holotype and other paratypes of this species also stem from Gap, but the dates, including the year of collecting, are different, namely, 3, 4, 5 and 6 April, 1975 (Hayashi, 1977). Both these specimens are very similar to *C. viridipennis*, but differ from the holotype and two other specimens of this species, based on their pictures alone, at least by the structure of the elytra, namely, their shape, the field of microsculpture in the basal one-third which is developed across their entire width (Fig. 175; for comparison see Figs 176, 177) (like in some other *Clytellus* species, e.g. *C. olesteroides* or *C.*

*gressitti* sp. n.), and the absence of an apical fascia of dense light setae. Having discussed the problem with Dr. Ohbayashi, we agreed that the two specimens of *Clytellus* collected at Gap on 23 and 27 March 1974, are likely to belong to a species different from *C. viridipennis*. Therefore, I am inclined to refer these specimens (requiring a detailed study, but, like all paratypes of *C. viridipennis*, collected in 1974) to a still undescribed species.

## 12. *Clytellus monilis* Holzschuh, 2011 (Figs 76, 178–180, 182)

*Clytellus monilis* Holzschuh, 2011: 326, Abb. 69.

**Type locality:** Eastern Malaysia, Borneo, Sabah, Trus Madi Mt (according to the original description and the label of the holotype).

**Material.** Holotype ♀ (cCH), “E Malaysia, Borneo, Sabah Pr., Mt. Trus Madi, III.2004, loc. leg.”, “Holotypus *Clytellus monilis* n. sp. det. C. Holzschuh 2011” (Fig. 180).

**Diagnosis.** This species resembles *C. viridipennis*, but differs clearly by the presence of a very large, peculiar tubercle on the disk of the pronotum, the absence at the apex of the elytra of a fascia of dense light setae, the somewhat better developed grooves in the area of constriction in front of the pronotum base, certain features of elytral sculpture, including a peculiar allocation of punctures, partly also the coloration of the setae and some other characters. *Clytellus monilis* can also be compared to *C. vivesi* sp. n. and *C. tatianae* sp. n., but it differs clearly from both by a brighter metallic lustre over most of the surface of the elytra, a stronger expression of red tones on the clava of the femora and, in comparison with *C. vivesi* sp. n., also by other structural details of the pronotum, in particular, the absence of a sharp constriction in its apical one-third, the longer and deeper grooves in the area of constriction in front of the base (especially on the dorsal side), resembling those in *C. tatianae* sp. n.

**Description.** Female. Body length 6.9 mm, humeral width 1.65 mm. Black; base of femora, all tibiae and tarsi dark reddish-brown, clava of femora red; margin of sternites brown; venter almost entirely and strongly shiny; elytra with a strong, metallic, greenish-cupreous lustre.

Head with a barely convex frons; vertex with sharp, transverse, irregular folds and a very clear microsculpture developed over remaining dorsal surface as well; antennomere 2, 1.41 times as long as isthmus between antennal cavities; antennae extended clearly behind middle of elytra; antennomere 1, 1.15, 1.06 or 1.13 times as long as 3<sup>rd</sup>, 4<sup>th</sup> and 6<sup>th</sup>, respectively, almost equal to 5<sup>th</sup>; antennomere 2, 1.51 times as long as wide; last antennomere 1.85 times as long as penultimate one.

Pronotum 1.63 times as long as wide at apex, 2.14 times as long as width at base; apex 1.32 times as broad as base, the very base 1.26 times as broad as constriction in front of base; very strongly convex, with a strong oblong-oval tubercle covered by a very clear microsculpture, this partly irregularly scattered around base of the tubercle, dorsally with rough, partly unclear punctures; area of constriction in front of base with very coarse, longitudinal, long grooves almost equally developed on both sides and dorsally; longitudinal groove at bottom of this constriction sharply expressed, very deep in middle part; remaining surface smooth, only with a sparse, small, partly unclear puncturation; besides this, area of tubercle clearly microsculptured, mainly so at the very apex and at base, partly covering there the area of longitudinal grooves.

Elytra 2.35 times as long as width at base, in apical half 1.06 times as broad as base; a sharp depression before middle, surface moderately convex behind; each elytron at base with a crest-shaped, longitudinal, but noticeably oblique tubercle covered by coarse, mostly confluent punctures and a clear microscul-

pture, the latter creating a dull background; basal part with a heterogeneous, coarse, mostly oblong-oval, irregularly distributed, in places denser puncturation; the latter in apical part clearly less coarse or quite fine, generally forming on each elytron four more or less clear longitudinal rows, of which two inner consisting of coarser punctures.

Prosternum with an obliterated sculpture; its profile slightly curved in apical part; metepisterna completely hidden under elytra, including denticle at their apex; first (visible) sternite 1.32 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: antennomere 1 partly, base of pronotum in the form of a very well-developed fascia, partly also scutellum and prosternum, most of meso- and metasterna, almost entire first (visible) sternite, partly coxae, apical part of both lateral and inner sides of metafemora in the form of a wide longitudinal strip of more or less dense, recumbent, white and, partly, yellowish (mainly on fascia of pronotum) setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust and yellowish, erect or suberect, light setae.

Male unknown.

**Distribution** (Maps 1, 4 and Table). Eastern Malaysia: Sabah. Known from a single locality.

**Bionomics.** The holotype was collected in March; adults obviously visit flowers.

### 13. *Clytellus tatianae* Miroshnikov, **sp. n.** (Figs 70, 71, 181, 183, 184)

**Material.** Holotype ♀ (cLD), W Malaysia, Johor, 15 km NW Kota Tinggi, Muntahak Mt, 200 m, 7.–13.III.2002, P. Čechovský leg.

**Diagnosis.** By the habitus and the structural details of the pronotum (the absence of a constriction in the apical one-third, the presence of grooves in the area of constriction in front of the base and of a fascia of light setae at the base), this new species resembles *C. viridipennis* and *C. monilis*, but differs clearly from both by a number of features, primarily, the sculpture of the elytra which is characterized both by the presence of only coarse, but more or less homogeneous punctures in the basal part and the absence from there of any other clear-cut structures, as well as by the less shiny pronotum and elytra, the weaker metallic lustre of the elytra, and the absence of a tubercle on the disk of the pronotum, as observed in *C. monilis*, or the absence from the apex of the elytra of a fascia of dense light setae so typical of *C. viridipennis*. *Clytellus tatianae* sp. n. can also be compared to *C. vivesi* sp. n., as both share some features such as a well-developed fascia of light setae at the base of the pronotum, sharp longitudinal grooves in the area of constriction in front of the base of the pronotum, to a varying degree coarse puncturation in the basal part of the elytra which are devoid of a fascia of light setae at their apex, a generally moderately shining dorsum and a not too bright metallic lustre of the elytra, as well as the coloration of the antennae and legs. However, *C. tatianae* sp. n. differs clearly from that species by the absence of a sharp constriction in the apical one-third of the pronotum, the longer grooves in the area of constriction in front of its base (at least so on the dorsal side), the less coarse puncturation in the basal part of the elytra, the absence from there of clear fragments of surface microsculpture, the presence in the apical half of more or less regular, longitudinal rows of small punctures (by the way, resembling those of *C. monilis*), as well as the elytra wider in the apical part relative to their base, a little curved profile of the apical part of the prosternum, and a clear-

ly less readily visible denticle at the apex of the metepisterna.

**Description.** Female. Body length 5.2 mm, humeral width 1.4 mm. Black; antennae and legs dark reddish-brown, apex of elytra and femora, the very margin of sternites except last (visible) one, and, partly, tarsi reddish; pronotum and elytra moderately shiny, elytra with a clear (but not too strong), metallic, greenish-cupreous lustre.

Head with a barely convex frons; antennomere 2, 1.39 times as long as isthmus between antennal cavities; antennae slightly not reaching apical one-third of elytra; antennomere 1, 1.38, 1.18, 1.14 or 1.16 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.63 times as long as wide; last antennomere 1.83 times as long as penultimate one.

Pronotum 1.59 times as long as wide at apex, 2.27 times as long as width at base; apex 1.42 times as broad as base, the very base 1.24 times as broad as constriction in front of base; strongly convex; disk with a longitudinal, oval, dull spot of microsculpture, the spot and surface next to it with clear sparse punctures; area of constriction in front of base with coarse longitudinal grooves very sharp both on sides and dorsally; longitudinal groove at bottom of this constriction sharply expressed; remaining surface almost smooth, only with individual, mostly unclear punctures.

Elytra 2.48 times as long as width at base, in apical half 1.21 times as broad as base; no evident tubercle at base; a strong depression before middle, a moderately convex surface behind; surface behind scutellum clearly, but not deeply rugose longitudinally; basal part with relatively coarse, mostly oblong-oval, heterogeneous punctures strongly weakened on disk in apical part and forming there on each elytron four more or less clear, longitudinal, long rows.

Prosternum with an obliterated sculpture; its profile almost straight, without evident curve in apical part; prosternal process at

apex about as wide as between procoxae; mesosternal process considerably narrower than prosternal process between procoxae; metepisterna at apex with a well-visible, but not coarse denticle; first (visible) sternite 1.44 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, partly both pro- and mesosternum, most of metasternum, almost entire first (visible) sternite, partly coxae, apical part of both lateral and inner sides of metafemora and, to a lesser extent, mesofemora in the form of a longitudinal wide strip of more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Johor. Known from a single locality.

**Bionomics.** The holotype was collected between 7 and 13 March; adults obviously visit flowers.

**Etymology.** The new species honours my wife Tatiana, who has edited the photographs in this paper.

#### 14. *Clytellus kiyoyamai* Hayashi, 1977 (Figs 185, 188, 189, 191)

*Clytellus kiyoyamai* Hayashi, 1977: 126. **Type locality:** Western Malaysia, Maxwell Hill (now Bukit Larut) (according to the original description and the label of the holotype). Mizuno & Shiyake, 2004: 33.

? *Clytellus kiyoyamai*: Makihara, 1999: 69, pl. 17, fig. 188 (Eastern Kalimantan; see below); Heffern, 2005: 25.

**Material.** Holotype ♂ (OMNH) (photographs), "Malaysia, Maxwell's Hill, 18.VI.1975, Y. Kiyoya-

ma", "*Clytellus kiyoyamai* Hayashi ♂ det. M. Hayashi, 1977", "Holotype" (Fig. 188).

**Diagnosis.** This species differs from all congeners by certain features of sculpture at the base of the elytra, in particular, the peculiar structure of a large crest-shaped tubercle, as well as a combination of some other characters. By the habitus and various structural details, *C. kiyoyamai* resembles *C. westwoodii*, *C. malayanus*, *C. belokobylskiji* sp. n., *C. lobanovi* sp. n. or *C. fulgidus*, but, in addition to the structure of the base of the elytra, it differs clearly from all of them but the latter species at least by the absence of a sharp constriction in the apical third of the pronotum, from *C. fulgidus*, as well as from the other listed species except *C. belokobylskiji* sp. n., by the absence of coarse punctures from the male prosternum. This latter distinguishing character could not be applied to *C. belokobylskiji* sp. n. only because it is known so far only from a single female (see below).

**Description.** Male. Body length 4.75 mm, humeral width 1.15 mm. Black; antennae and legs dark reddish-brown with more reddish clava of femora; pronotum and elytra shiny, the latter with a metallic greenish-cupreous lustre.

Head with a flat frons; antennomere 2 clearly longer than isthmus between antennal cavities; antennae reaching apical one-quarter of elytra; antennomere 1, 1.25 or 1.24 times as long as 3<sup>rd</sup> and 6<sup>th</sup>, respectively, 1.18 times as long as antennomere 4 or 5; antennomere 2, 1.60 times as long as wide; last antennomere 1.85 times as long as penultimate one.

Pronotum 1.73 times as long as wide at apex, 2.33 times as long as width at base; apex 1.34 times as broad as base, the very base 1.31 times as broad as constriction in front of base; strongly convex; with a barely visible constriction in apical one-third; mostly smooth, only with individual unclear punctures; area of constriction in front of base with rather fine longitudinal grooves on

sides; longitudinal groove at bottom of this constriction sharply expressed; partly clearly microsculptured.

Elytra 2.60 times as long as width at base, in apical half 1.06 times as broad as base; each elytron at base with a large, longitudinal, crest-shaped tubercle, the latter microsculptured dorsally and creating a well-expressed scabrous (but not serrate) and dull surface; a sharp depression behind the tubercle, further behind clearly convex; basal part on disk with a heterogeneous, mainly oblong-oval puncturation, the most coarse one in area of depression, in front of it and along suture; sides of depression area with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum with an obiterated sculpture devoid of coarse deep punctures; profile of prosternum very gradually and almost regularly curved; metepisterna at apex with a well visible denticle; first (visible) sternite 1.27 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly both pro- and mesosternum, almost entire metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

Female unknown (see also Remarks to the following species).

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Perak. Known from a single locality.

The record of *C. kiyoyamai* in eastern

Borneo (Makihara, 1999) seems to actually concern another, apparently yet undescribed species.

**Bionomics.** The holotype was collected in the second half of June; adults obviously visit flowers.

**Remarks.** This description is based on a study of a series of high-quality photographs of the holotype received through the courtesy of Dr. Nobuo Ohbayashi (Kamimiyada, Miura City, Japan) and Dr. Kiyoshi Ando (Osaka, Japan). The original description of this species (Hayashi, 1977) has also been taken into account.

#### 15. *Clytellus kareli* Holzschuh, 2003 (Figs 186, 187, 190, 192)

*Clytellus kareli* Holzschuh, 2003: 233, Abb. 67.

**Type locality:** Thailand, Ranong Province, Ban Na env., 9°34'N, 98°42'E (according to the original description and the label of the holotype).

**Material.** Holotype ♀ (cCH), "Thailand, Ranong Prov., Ban Na env., 9°34'N, 98°42'E", 22.–26.III.1996, K. Majer leg., "Holotypus *Clytellus kareli* n. sp. det. C. Holzschuh 2003" (Fig. 187).

**Diagnosis.** This species is extremely similar to *C. kiyoyamai* (see Remarks below).

**Description.** Female. Body length 5.5 mm, humeral width 1.3 mm. Black; antennae and legs dark brown with red clava of femora; pronotum and elytra shiny, the latter with a metallic greenish-cupreous lustre.

Head with a flat frons; antennomere 2, 1.2 times as long as isthmus between antennal cavities; antennae reaching apical one-third of elytra; antennomere 1, 1.17, 1.12, 1.07 or 1.14 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.7 times as long as wide; last antennomere 1.63 times as long as penultimate one.

Pronotum 1.70 times as long as wide at apex, 2.32 times as long as width at base; apex 1.36 times as broad as base, the very base 1.25 times as broad as constriction in front of base; strongly convex; with a barely visible

constriction in apical third; disk with a longitudinal dull spot of microsculpture in apical part; mostly smooth, only with individual unclear punctures; area of constriction in front of base with rather fine longitudinal grooves on sides; longitudinal groove at bottom of this constriction sharply expressed; partly clearly microsculptured apart from the spot on disk.

Elytra 2.50 times as long as width at base, in apical half 1.05 times as broad as base; each elytron at base with a large, longitudinal, crest-shaped tubercle covered dorsally with microsculpture and creating a sharply expressed, rough (but not serrate) and dull surface; a clear depression behind the tubercles, surface further behind clearly convex; basal part of disk with a heterogeneous, predominantly oblong-oval punctation, the most coarse one in area of depression, in front of it and along suture; sides of depression area with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum with an obliterated sculpture; its profile without evident curves in apical part; metepisterna at apex with a well visible denticle; first (visible) sternite noticeably longer than all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly both pro- and mesosternum, almost entire metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

Male unknown (see also Remarks below).

**Distribution** (Maps 1, 2 and Table). Southern Thailand: Ranong Province. Known from a single locality.

**Bionomics.** The holotype was collected between 22 and 26 March; adults obviously visit flowers.

**Remarks.** When comparing the holotype of *C. kareli* with colour pictures of various structural details in the holotype of *C. kiyoyamai*, as well as its habitus in several aspects (see Remarks to *C. kiyoyamai*), I have failed to find any significant morphological differences between these species. Their indisputable similarity, besides a whole number of other important features, is emphasized by virtually the same sculpture of the basal part of the elytra. Such a sculpture is only typical of these two species, being unknown, as noted above, in any other congener. The diagnostic characters of *C. kareli* and *C. kiyoyamai* as listed in the key below are only conditional and most likely variable. However, considering that at the moment these species are only represented by one specimen each, the more so of different sexes, as well as their type (and so far the only) localities lie rather far from each other, I refrain here from unambiguously recognizing *C. kareli* as a synonym of *C. kiyoyamai*.

#### 16. *Clytellus westwoodii* Pascoe, 1857 (Figs 63, 68, 193–205)

*Clytellus westwoodii* Pascoe, 1857: 97 (“Borneo”).

**Type locality:** Eastern Malaysia, Sarawak (according to the label of the holotype). Gerstaecker, 1859: 325; Chevrolat, 1863: 339; Pascoe, 1869: 643 (“Singapore”; see below); 1885: 56; Heffern, 2005: 25.

*Clytellus westwoodii* (incorrect subsequent spelling): Lacordaire, 1869a: 95; Gemminger in Gemminger, Harold, 1872: 2943; Shelford, 1902: 244, 251; Aurivillius, 1912: 424; Makihara, 1999: 69, pl. 17, fig. 187 (Eastern, Kalimantan).

*Clytellus westwoodii* (sic!) f. *metallescens* Hayashi, 1975: 185 (unavailable name) (Borneo, Malaysia, Sabah, Kinabalu Mt).

**Material.** Holotype ♀, by monotypy (BMNH), “Sar.[awak] 1463”, “*Clytellus westwoodii* Pasc.

Type", "Type", "Pascoe Coll. 93–60" (Fig. 194); 1 ♀ (BMNH), "W Sarawak, Quop, 30.III.[19]14, G.E. Bryant [leg.]", "G. Bryant Coll. 1919–147"; 1 ♂, 1 ♀ (cLD), Indonesia, Kalimantan Selatan, 40 km E Kandangan, Loksado, 2°30'S, 115°20'E, 7.–22.IX.1997, S. Jakl leg.; 1 ♀ (SMNH) (photographs), "[Sarawak] Kuching, 3.III.1903", "NHRS–JLKB, 000020324", "5544 E92"; 1 ♀ (SMNH) (photographs), "Borneo", "Mjöberg", "NHRS–JLKB, 000020323", "5545 E92"; 1 ♀ (cAM), Indonesia, Sumatra, Riau Prov., Bukit Tigapuluh N. P., 0°50'S, 102°26'E, 18.–25.I.2000, D. Hauck leg.; 1 ♀ (cPV), W Malaysia, Pahang, 70 km SW Kuala Rompin, Endau Rompin NP, 600 m, G. Beremban (Kg. Tebu Hitam), 13.IV.–3.V.2009, P. Čechovský leg.; 1 ♀ (NHMD), "Philippines, Dalawan Bay, 10.X.1961, Noona Dan Exp. 61–62", "Caught in Malaise-traps", "*Clytellus westwoodi* Pasc. Hüdepohl det. 1985".

**Diagnosis.** This species is characterized by a body size on the average being large for the genus, by an almost completely smooth pronotum with a fascia of white setae at its base and a sharp constriction in the apical one-third, as a rule, the mostly smooth elytra with a sculpture coarse only in the area of the depression and with rather sparse, small punctures in the basal part of the disk, the absence from there of tubercles or crests, the presence of an apical fascia of light setae on the elytra, and a few rough (but not coarse) punctures on the prosternum in the male (see Remarks below). By a combination of these characters, *C. westwoodii* differs clearly from most of the congeners and can primarily be compared to *C. malayanus* stat. n., yet being distinguished through the clearer, always present puncturation on the disk at the base of the elytra, the presence of only individual rough punctures and a different pattern of setation on the prosternum in the male, and on the average a larger body. Some similarity of *C. westwoodii* is observed to a number of other species, in particular, *C. belokobylskiji* sp. n., *C. lobanovi* sp. n., *C. fulgidus* and *C. kasatkini* sp. n. However, at least the former two species show a clearly different sculpture on the disk of the elytra while the pronotum in the latter two species

is devoid of a sharp constriction in the apical one-third (see other differences in the diagnoses of these species).

**Description.** Body length 5.50–6.55 mm (according to Hayashi, 1975 & 1977, up to 8.0 mm), humeral width 1.40–1.65 mm (see Remarks below). Black; elytra at apex lighter; clava of femora from dark reddish-brown to red; antennae sometimes dark reddish-brown, tarsi often lighter one way or another; dorsum almost entirely shiny; elytra sometimes with an evident metallic lustre of greenish-cupreous and blue-violet (and possibly other) tones.

Head with a barely convex frons; antennomere 2, 1.26–1.54 times as long as isthmus between antennal cavities; antennae reaching behind inside apical one-quarter or one-third of elytra in male and female, respectively, or slightly touching it in female alone; antennomere 1, 1.32–1.42, 1.17–1.23, 1.07–1.19 or 1.18–1.28 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.6–1.75 times as long as wide; last antennomere 1.70–1.86 times as long as penultimate one.

Pronotum 1.72–1.86 times as long as wide at apex, 2.13–2.50 times as long as width at base; apex 1.24–1.37 times as broad as base, the very base 1.19–1.24 times as broad as constriction in front of base; apical one-third with a sharp or evident constriction; strongly convex; smooth, only with individual unclear punctures more often visible on sides near apex; longitudinal groove at bottom of the constriction in front of base sharply or well-expressed.

Elytra 2.49–2.60 times as long as width at base; they can be widest in apical half, but then not more than 1.06 times as wide as base; a sharp depression before middle, surface visibly (but not too much) convex behind; almost smooth, only disk at base with very sparse punctures usually clearer and more closely spaced along suture; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal

grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum of male in apical half approximately in the middle between side margin and axial line with three rather rough, deep, but not sharply expressed punctures forming a small triangle (see Remarks below), remaining surface as in female, with a pretty smooth sculpture; profile of prosternum in apical part usually clearly curved (Figs 63, 204), more rarely slightly curved (Fig. 205) or relatively straight; prosternal process at apex about as wide as between procoxae; mesosternal process about as wide as or slightly narrower than prosternal process between procoxae; metepisterna at apex with a well-visible denticle; first (visible) sternite 1.40–1.57 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly prosternum, most of or almost entire mesosternum, usually almost entire metasternum, most of or almost entire first (visible) sternite and, partly, coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, mostly sides of pronotum, sometimes also disk, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 4 and Table). Among the congeners, this species has the most extensive distribution which covers the central Sumatra and most of Borneo in Indonesia, eastern Malaysia, the extreme Southwest of the Philippines, the southern parts of western Malaysia, and Singapore. Above are the first records in Sumatra, western Malaysia and the Philippines. The report by Pascoe (1869) of only Singapore as the distribution

area of *C. westwoodii*, without any comments whatever, seems to be strange, likely a mistake, since in the original description of the species he himself mentioned Borneo while the label of the holotype reads “Sar. [awak]” (see above). However, considering the reliable records of *C. westwoodii* in the South of western Malaysia and in the central part of Sumatra, its occurrence in Singapore is beyond any doubt.

**Bionomics.** In Borneo, adults are active at least in March in the northern part (eastern Malaysia) and in September in the southern part (South Kalimantan, Indonesia), in western Malaysia, Philippines and central Sumatra in April (or May), October or January, respectively; visit flowers.

**Remarks.** I know of only one male collected together with one female in southern Borneo (see Material above) to be identified as *C. westwoodii*. Therefore, the differences of this species from the other forms in certain structural features of the male prosternum so far are based of the single specimen only.

The holotype is the largest among the studied specimens.

### 17. *Clytellus malayanus*

Hayashi, 1977, **stat. n.**

(Figs 66, 69, 80, 81, 206–212)

*Clytellus westwoodii* (“westwoodi”, sic, incorrect subsequent spelling) *malayanus* Hayashi, 1977: 124. **Type locality:** Western Malaysia, Tanah Rata (according to the original description and the label of the holotype). Holzschuh, 1991: 61; Mizuno & Shiyake, 2004: 32.

?*Clytellus westwoodii malayanus*: Makihara, 1999: 69, pl. 17, fig. 189 (*westwoodi malayana*, sic!) (Eastern, Kalimantan; see below).

**Material.** 1 ♂ (cLD), W Malaysia, Pahang, Cameron Highlands, 30 km E Ipon, Tanah Rata, 1500 m, 20.II.–3.III.1998, P. Čechovský leg.; 1 ♀ (cAM), same label; 1 ♀ (cLD), same locality, 4°28'N, 101°23'E, 1800 m, 15.II.2000, P. Pacholátko leg.”; 1 ♂ (cPV), Pahang, 70 km SW Kuala Rompin, Endau Rompin N. P., 600 m, G. Beremban (Kg. Tebu Hitam), 13.IV.–3.V.2009, P. Čechovský leg.; holotype ♀ (see



Remarks) (OMNH) (photographs), "Malaysia, Tanah Rata, 21.I.1976, Y. Kiyoyama", "*Clytellus westwoodi malayanus* Hayashi det. M. Hayashi, 1977", "Holotype" (Fig. 207).

**Diagnosis.** This species seems to be especially similar to *C. westwoodii*, but differs by the absence of puncturation, at least so in the basal one-third of the elytra (or the presence there of only a few gentle punctures, the clearest ones along the suture on each side), by an abundant, generally much coarser puncturation and a peculiar pattern of setation of light setae on the male prosternum, on the average also a smaller body. *Clytellus malayanus* stat. n. can also be compared to *C. belokobylskiji* sp. n., *C. lobanovi* sp. n., *C. fulgidus* or *C. kasatkini* sp. n., but differs clearly from the former two species by the absence of a well-expressed tuberculiform elevation at the base of each elytron and by a smooth or almost smooth sculpture in the basal one-third of the elytra, from the latter two species by a sharp constriction in the apical one-third of the pronotum, a clearly less strongly developed or almost undeveloped fascia of light setae on the dorsal side of the pronotum base, by numerous coarse punctures on the prosternum of the male (at least compared to *C. fulgidus*), and the usually brown-red clava of the femora.

**Description.** Body length 4.85–5.50 mm, humeral width 1.2–1.3 mm. Black; elytra lighter at apex, clava of femora usually red; tarsi partly reddish-brown; dorsum almost entirely shiny; elytra sometimes with a metallic greenish-cupreous or bluish lustre.

Head with a flat or barely convex frons; antennomere 2, 1.30–1.55 times as long as isthmus between antennal cavities; antennae reaching behind inside apical one-quarter of elytra in male, but only reaching or slightly not reaching it in female; antennomere 1, 1.19–1.26, 1.11–1.21, 1.07–1.11 or 1.18–1.19 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.44–1.62 times as long as wide; last antennomere

1.70–1.88 times as long as penultimate one.

Pronotum 1.71–1.82 times as long as wide at apex, 2.21–2.37 times as long as width at base; apex 1.28–1.30 times as broad as base, the very base 1.16–1.26 times as broad as constriction in front of base; apical one-third with a sharp or evident constriction; strongly convex; smooth, only with individual unclear punctures; longitudinal groove at bottom of the constriction in front of base well-expressed.

Elytra 2.58–2.78 times as long as width at base, in apical half 1.04–1.08 times as broad as base; a sharp depression before middle, visibly (but not too much) convex behind; usually smooth, sometimes at base along suture with individual, more or less clear punctures; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum of male over most of its apical half with abundant, coarse, deep punctures, in-between a gentle, in places clearer, cellular microsculpture arranged around punctures into several more or less clear rows of cells; female with only a smooth sculpture; profile of prosternum in apical part clearly curved; prosternal process at apex about as wide as between procoxae; mesosternal process about as wide as or clearly narrower than prosternal process between procoxae; metepisterna at apex with a well-visible denticle; first (visible) sternite 1.28–1.45 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly prosternum (forming a peculiar pattern in male, Fig. 80), most of or almost entire mesosternum, usually almost complete metasternum, most of or almost entire first (visible) sternite and, partly, coxae clothed with more or less dense, recumbent, white setae; head, anten-

nae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, mainly sides of pronotum at apex, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Pahang.

In my opinion, the record of this species in eastern Borneo (Makihara, 1999) requires confirmation and possibly concerns another species.

**Bionomics.** Adults active from the second half of January at least to the end of April or early May, obviously visit flowers.

**Remarks.** It was Dr. Hiroshi Makihara (Forestry and Forest Products Research Institute, Tsukuba, Japan), who kindly drew my attention to this taxon as warranting the status of a full species (a personal communication of February 7, 2012). The results of my further studies have only confirmed his opinion.

This species was described from a single specimen claimed to be male (Hayashi, 1977). However, based on several photographs of the holotype (e.g. Fig. 206), as well as the original description, I believe the holotype is actually a female. One of the pictures clearly shows a part of the ovipositor while the description mentions nothing like a coarse puncturation on the prosternum which is only present, as shown above, in the male. By the way, this highly obvious character was well documented by Hayashi (1977) for another species, *C. shibatai*, he described simultaneously. However, this author likewise erred there with respect to the sex of the holotype (see above).

**18. *Clytellus belokobylskiji* Miroshnikov, sp. n.**  
(Figs 213, 214, 217, 222)

**Material.** Holotype ♀ (ZISP), Vietnam, Hoa Binh Prov., Mai Chau Distr., Hang Kia, 20°44'N, 104°53'E, 1300 m, 25.–26.IV.2002, S. Belokobylskij leg.

**Diagnosis.** The new species resembles *C. westwoodii* and *C. malayanus* stat. n., but differs from both by the well-expressed tuberculiform elevation at the base of each elytron, the very clear, in places rough to coarse (in area of depression on disk) puncturation in the basal part of the elytra, the much less strongly developed fascia of white setae at the base of the pronotum visible only on the sides. *Clytellus belokobylskiji* sp. n. can also be compared to *C. lobanovi* sp. n., but differs clearly by a generally less coarse puncturation at the base of the elytra, a clearly longer tooth at the base of the mandibles, as well as in the coloration of the antennae and legs.

**Description.** Female. Body length 5.45 mm, humeral width 1.35 mm. Black; antennae and legs partly dark reddish-brown; elytra lighter at the very apex; clava of femora red; dorsum almost entirely shiny; elytra with an evident, metallic, mostly greenish-blue lustre with cupreous tint in area of depression.

Head with a flat frons; antennomere 2, 1.25 times as long as isthmus between antennal cavities; antennae reaching apical one-third of elytra; antennomere 1, 1.24 or 1.19 times as long as 3<sup>rd</sup> and 4<sup>th</sup>, respectively, 1.15 times as long as antennomere 5 or 6; antennomere 2, 1.55 times as long as wide; last antennomere 1.76 times as long as penultimate one.

Pronotum 1.58 times as long as wide at apex, 2.14 times as long as width at base; apex 1.36 times as broad as base, the very base 1.22 times as broad as constriction in front of base; apical one-third with a sharp constriction; strongly convex; smooth, only with individual unclear punctures and, partly, a more or less distinct microsculpture; longitudinal groove at bottom of the constriction in front of base well-expressed.

Elytra 2.61 times as long as width at base, in apical half 1.09 times as broad as base; each elytron with a strong tuberculiform elevation at base; a sharp depression before middle, surface moderately convex behind;

basal part with a heterogeneous puncturation visibly coarser on disk before middle, but clearly weakened and few in area of tubercle and over adjacent surface; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum with an obliterated sculpture; its profile in apical part clearly curved; prosternal process at apex about as wide as between procoxae; mesosternal process clearly narrower than prosternal process between procoxae; metepisterna at apex with a well-visible denticle; first (visible) sternite 1.38 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a fascia (strip) on sides, apex of elytra, partly prosternum, most of both meso- and metasterna, first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, as well as pronotum, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). Northern Vietnam: Hoa Binh Province. Known from a single locality.

**Bionomics.** The holotype was collected in the end of April; adults obviously visit flowers.

**Remarks.** When/if the male of this species is found, in my opinion its prosternum can be expected to support a coarse and deep puncturation.

**Etymology.** The new species honours my friend and colleague, Dr. Sergey A. Belokobylskij (Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia), who collected it, as well as some other very valuable specimens of *Clytellus*.

**19. *Clytellus lobanovi* Miroshnikov, sp. n.**  
(Figs 64, 215, 216, 218–221)

**Material.** Holotype ♂ (cLD), Vietnam, Vinh Phu Prov., 70 km NW Hanoi, Tam Dao, 21°27'N, 105°39'E, 900–1200 m, 2.–9.VI.1999, P. Spáčil leg.

**Diagnosis.** The new species is very similar to *C. belokobylskiji* sp. n., but differs clearly by a partly distinctly coarser and more abundant puncturation at the base of the elytra, a visibly less strongly developed tooth at the base of the mandibles, as well as the entirely black antennae and legs. *Clytellus lobanovi* sp. n. reminds also of *C. westwoodii* and *C. malayanus* stat. n., but differs from both by a well-expressed tuberculiform elevation at the base of each elytron (like in *C. belokobylskiji* sp. n.), a coarse puncturation at least in the basal one-third of the elytra, and a less strongly developed fascia of white setae at the base of the pronotum, from *C. westwoodii* also by an abundant and generally much coarser puncturation, as well as in the pattern of prosternum setation of the male.

**Description.** Male. Body length 5.45 mm, humeral width 1.4 mm. Black; last tarsomeres slightly lighter; dorsum almost entirely shiny; elytra with an evident, metallic, predominantly greenish-blue lustre with cupreous tint in area of depression.

Head with a flat frons; antennomere 2, 1.31 times as long as isthmus between antennal cavities; antennae almost reaching the middle of apical one-quarter of elytra; antennomere 1, 1.30 or 1.17 times as long as 3<sup>rd</sup> and 4<sup>th</sup>, respectively, 1.09 times as long as antennomere 5 or 6; antennomere 2, 1.70 times as long as wide; last antennomere 1.66 times as long as penultimate one.

Pronotum 1.67 times as long as wide at apex, 2.03 times as long as width at base; apex 1.21 times as broad as base, the very base 1.13 times as broad as constriction in front of base; apical third with a sharp constriction; strongly convex; smooth, only with individual unclear punctures and, part-

ly, a more or less clear microsculpture; longitudinal groove at bottom of the constriction in front of base well-expressed.

Elytra 2.40 times as long as width at base, in apical half 1.04 times as broad as base; each elytron with a strong tuberculiform elevation at base; a sharp depression before middle, surface moderately convex behind; basal part with a heterogeneous puncturation noticeably coarser on disk before middle, but also sufficiently coarse, only partly clearly obliterated and sparser in area of tubercle and over adjacent surface; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum over most of its apical half with abundant, coarse, deep punctures, in-between with a very clear cellular microsculpture located around punctures and arranged into several more or less clear rows of cells; profile of prosternum in its apical part clearly curved; prosternal process at apex about as wide as between procoxae; mesosternal process clearly narrower than prosternal process between procoxae; metepisterna at apex with a well-visible denticle; first (visible) sternite 1.46 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a fascia (strip) on sides, apex of elytra, partly prosternum forming a peculiar pattern (Fig. 216), most of mesosternum, almost completely metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, as well as pronotum, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 2 and Table). Northern Vietnam: Vinh Phu Province. Known from a single locality.

**Bionomics.** The holotype was collected between 2 and 9 June; adults obviously visit flowers.

**Etymology.** The new species honours my friend and colleague, Dr. Andrey L. Lobanov (Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia), who over the many years supports my entomological research.

## 20. *Clytellus fulgidus* Holzschuh, 1991 (Figs 228, 229, 232)

*Clytellus fulgidus* Holzschuh, 1991: 61, Abb. 41.

**Type locality:** Thailand, Ranong (according to the original description and the label of the holotype).

**Material.** Holotype ♂ (cCH), "S Thailand, Ranong, I.-III.1989, native collector", "Holotypus *Clytellus fulgidus* n. sp. det. C. Holzschuh 1991" (Fig. 229).

**Diagnosis.** By the habitus, this species resembles *C. westwoodii* and *C. malayanus* stat. n., but is distinguished through the absence of a sharp constriction in the apical one-third of the pronotum, by a straight profile of the prosternum, a different structure of the apex of the elytra, and a more strongly developed fascia of white setae on the dorsal side of the pronotum base. In addition, it differs from *C. malayanus* stat. n. by the presence of very clear punctures on the disk in the basal part of the elytra, the far fewer rather rough punctures on and a peculiar setation pattern of the male prosternum, on average also being obviously smaller than *C. westwoodii*. *Clytellus fulgidus* can also be compared to *C. kubani* sp. n. and *C. kasatkini* sp. n., but differs from both by the less elongated elytra, from the former in the shorter longitudinal grooves on the sides in the depression area, and only individual rather rough punctures on the male prosternum, from the latter species by certain struc-

tural features of the apex of the elytra and the not too abundant, long, erect setae of the pronotum.

**Description.** Male. Body length 5.1 mm, humeral width 1.2 mm. Black; antennae and most of legs dark reddish-brown; dorsum almost entirely strongly shiny; elytra with a bright, metallic, green-blue lustre with faint cupreous tint.

Head with a flat frons; antennomere 2, 1.25 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical one-quarter of elytra; antennomere 1, 1.32 times as long as 3<sup>rd</sup>, 1.06 times as long as 4<sup>th</sup> or 6<sup>th</sup>, subequal to antennomere 5; antennomere 2, 1.50 times as long as wide; last antennomere 1.79 times as long as penultimate one.

Pronotum 1.73 times as long as wide at apex, 2.32 times as long as width at base; apex 1.35 times as broad as base, the very base 1.21 times as broad as constriction in front of base; moderately convex; apical one-third with a barely traceable constriction; greatest width reached at the very apex; smooth, only with individual, in places clear, small punctures; longitudinal groove at bottom of the constriction in front of base partly hidden by dense light setae.

Elytra 2.50 times as long as width at base, in apical half 1.02 times as broad as base; a sharp depression before middle, surface behind relatively weakly convex; base both with pretty clear, small and individual larger punctures in the middle; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures; apical sutural angle sharpened, visibly emarginate at apex on each side of suture.

Prosternum with individual, rough, deep punctures on sides; its profile straight; metepisterna at apex with a weakly visible denticle; first (visible) sternite clearly longer than all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a fascia, apex of elytra, partly prosternum, most of mesosternum, almost completely both metasternum and first (visible) sternite, as well as partly legs clothed with a more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, mostly apical part of pronotum, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

Female yet unknown.

**Distribution** (Maps 1, 2 and Table). Southern Thailand: Ranong Province. Known from a single locality.

**Bionomics.** The holotype was collected between January and March without more precise data; adults obviously visit flowers.

## 21. *Clytellus barclayi* Miroshnikov, sp. n. (Figs 74, 75, 223–227)

**Material.** Holotype ♂ (BMNH), “W Sarawak, Quop, 30.III.[19]14, G.E. Bryant [leg.]”, “G. Bryant Coll. 1919 – 147”, “Data unreliable. See Brit. Mus. 1949–314”, “*Clytellus westwoodi* Pasc. det. E. Vives 2008 [misidentification!]”.

**Diagnosis.** The new species differs from all congeners by the combination of characters which primarily includes the relatively small size and the coloration of the body, some structural features of the pronotum (the absence both of a constriction in the apical one-third and of a coarse sculpture almost over the entire surface, the presence both of longitudinal grooves in the area of constriction in front of the base and of a strongly developed a fascia of light setae at the base) and elytra (the absence of large tubercles and crests from the base, the presence of a peculiar location of most of the moderate-

ly coarse and sparse punctures in the basal half, and of an apical fascia of light setae), the absence of coarse deep punctures from the prosternum (considering the single specimen being a male) and the latter's uncurved profile. By the habitus, *C. barclayi* sp. n. can be compared to *C. fulgidus*, but differs clearly by the sculpture of the prosternum and pronotum in the area of constriction in front of the base, in some features of elytral puncturation, body coloration etc.

**Description.** Male. Body length 4.05 mm, humeral width 1.0 mm. Black; antennae, legs and, partly, venter dark reddish-brown; elytra black-brown, partly with reddish tint; dorsum almost entirely shiny; elytra with a very slight metallic lustre.

Head with a barely convex frons; antennomere 2, 1.44 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical one-quarter of elytra; antennomere 1, 1.39 or 1.16 times as long as 3<sup>rd</sup> and 4<sup>th</sup>, respectively, 1.14 times as long as antennomere 5 or 6; antennomere 2, 1.63 times as long as wide; last antennomere 1.84 times as long as penultimate one.

Pronotum 1.70 times as long as wide at apex, 2.30 times as long as width at base; apex 1.37 times as broad as base, the very base 1.33 times as broad as constriction in front of base; strongly convex; area of constriction in front of base with longitudinal, clear, but not coarse grooves on sides and much more strongly obliterated, very gentle (barely relief) ones on dorsal side; longitudinal groove at bottom of the constriction in front of base well-expressed; remaining surface smooth, with only individual unclear punctures.

Elytra 2.43 times as long as width at base, in apical half 1.03 times as broad as base; a sharp depression before middle, surface behind relatively weakly convex; basal part with a heterogeneous, predominantly rather rough puncturation arranged in a peculiar way, when punctures on disk of each elytron

(apart from punctures along suture and other individual punctures) forming a long longitudinal row displaced towards the margin of elytra, and a obliquely-transverse row in area of depression, both rows generally creating a w-shaped pattern; area of depression on sides with a short longitudinal groove covering two coarse punctures, with a weak impression below.

Prosternum with an obliterated sculpture; its profile straight; prosternal process at apex slightly narrower than between procoxae; mesosternal process noticeably narrower than prosternal process between procoxae; metepisterna at apex with a poorly-visible denticle; first (visible) sternite 1.35 times as long as all subsequent (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly both pro- and mesosternum, almost entire metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, venter and legs clothed with similar, but sparser setae; head, partly antennae, sides of pronotum at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 4 and Table). Eastern Malaysia: Sarawak. Known from a single locality only.

**Bionomics.** The holotype was collected in the end of March; adults obviously visit flowers.

**Etymology.** The new species honours my colleague, Dr. Maxwell V.L. Barclay, the curator of the collection of Coleoptera at the Natural History Museum, London, United Kingdom, who provided a very valuable material for study, including the holotype of this species.

## 22. *Clytellus kubani* Miroshnikov, sp. n.

(Figs 230, 231, 233–235)

**Material.** Holotype ♂ (cLD), W Malaysia, Pahang, Benom Mts, 15 km E Kampong Dong, 3°53'N, 102°01'E, 300–1000 m, 24.03.–15.IV.1998, L. Dembický & P. Pacholátko leg.; paratype ♂ (NMP), "Singapore, [19]29 Dr. Baum".

**Diagnosis.** The new species is similar to *C. fulgidus*, but differs by the visibly more elongated elytra, the longer longitudinal grooves in the area of depression of the elytra on the sides, a greater number of coarse punctures on and by certain features of setation of the prosternum, as well as by the somewhat weaker metallic lustre of the elytra. *Clytellus kubani* sp. n. can also be compared to *C. kasatkini* sp. n., but is distinguished by the presence of clear punctures on the disk all over the basal part of the elytra, the latter's sharpened apices, a slightly different shape of the apical part of the pronotum, its only a few long erect setae and some other characters.

**Description.** Male. Body length 4.1–4.6 mm, humeral width 0.95–1.05 mm. Black; antennae, partly venter and legs dark reddish-brown; elytra lighter at apex; clava of femora brown-red or red; dorsum almost entirely shiny; elytra with a visible, metallic, greenish-blue lustre with cupreous tint.

Head with a flat frons; antennomere 2, 1.40–1.44 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical quarter of elytra; antennomere 1, 1.29–1.36, 1.13–1.25, 1.1–1.15 or 1.17–1.25 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.63–1.69 times as long as wide; last antennomere 1.70–1.98 times as long as penultimate one.

Pronotum 1.71–1.74 times as long as wide at apex, 2.32–2.40 times as long as width at base; apex 1.42–1.43 times as broad as base, the very base 1.25–1.27 times as broad as constriction in front of base; moderately convex; apical one-third with a barely visible constriction; greatest width reaching the very

apex; smooth, only with individual, in places clear, small punctures; longitudinal groove at bottom of the constriction in front of base partly hidden by dense light setae.

Elytra 2.68–2.79 times as long as width at base, in apical half 1.01–1.02 times as broad as base; a sharp depression before middle, surface behind relatively weakly convex; basal one-third with individual, more or less clear, small punctures and individual larger ones in the middle; area of depression on sides with two coarse, deep, longitudinal grooves, one above the other, the lower one always very long while the upper groove somewhat variable in length; sutural apical angle more or less sharpened, suture on each side visibly emarginate at apex.

Prosternum with 5–10 coarse, heterogeneous, deep punctures on each side, microsculpture clear, located in a peculiar way around punctures; profile of prosternum straight; prosternal process at apex noticeably narrower than between procoxae; mesosternal process clearly narrower than prosternal process between procoxae; metepisterna at apex with a weakly visible denticle; first (visible) sternite 1.29–1.31 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, prosternum in the form of a peculiar pattern (Fig. 233), partly mesosternum, almost completely both metasternum and first (visible) sternite, as well as partly coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum at apex, elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Pahang; Singapore.

**Bionomics.** The holotype was collected between March 24 and April 15; adults obviously visit flowers.

**Etymology.** The new species honours my friend and colleague, Dr. Vítězslav Kubáň (Národní Museum Prague, Czech Republic), who rendered me his great help in getting access to a very valuable material.

**23. *Clytellus kasatkini* Miroshnikov, sp. n.**  
(Figs 248, 250, 252)

**Material.** Holotype ♀ (cLD), Indonesia, S Sumatra, Lampung Prov., Bukit Barisan Selatan National Park, 5 km SW Liwa, 5°04'S, 104°04'E, 600 m, 7.–17.II.2000, D. Hauck leg.

**Diagnosis.** The new species resembles *C. fulgidus* and *C. kubani* sp. n., but differs from both by the shape of the sutural angle of the elytra, the almost complete absence of a clear puncturation in the basal one-third of the elytra, in some structural features of the pronotum, in particular, a slightly different shape of the apical part, a relatively more strongly developed fascia of white setae at the base, at least so on its dorsal side, and by abundant, erect, long setae, mostly such on the sides. In addition, it differs from *C. fulgidus* by visibly more elongated elytra (like in *C. kubani* sp. n.). *Clytellus kasatkini* sp. n. can also be compared to *C. westwoodii* and *C. malayanus* stat. n., but is clearly distinguished from both by at least an almost unnoticeable constriction in the apical one-third of the pronotum, a straight profile of the prosternum, and a better developed fascia of white setae on the dorsal side at the base of the pronotum.

**Description.** Female. Body length 5.0 mm, humeral width 1.15 mm. Black; antennae and legs dark reddish-brown; elytra reddish at apex; dorsum almost entirely shiny; elytra with an evident, metallic, greenish-cupreous lustre.

Head with a barely convex frons; antennomere 2, 1.36 times as long as isthmus

between antennal cavities; antennae slightly not reaching apical one-third of elytra; antennomere 1, 1.37 or 1.11 times as long as 3<sup>rd</sup> and 5<sup>th</sup>, respectively, 1.20 times as long as antennomere 4 or 6; antennomere 2, 1.66 times as long as wide; last antennomere 1.85 times as long as penultimate one.

Pronotum 1.80 times as long as wide at apex, 2.45 times as long as width at base; apex 1.36 times as broad as base, the very base 1.22 times as broad as constriction in front of base; moderately convex; apical third with a barely visible constriction; greatest width reached well before apex, even before apical one-quarter, whence faintly, but still visibly narrowed towards apex; smooth, only with individual, in places clear, small punctures; longitudinal groove at bottom of the constriction in front of base well-expressed.

Elytra 2.78 times as long as width at base, in apical half 1.09 times as broad as base; a sharp depression before middle, surface behind relatively weakly convex; with very sparse punctures on disk in area of depression and in front of it; depression area on sides with two coarse longitudinal grooves, one above the other, thereby the lower much narrower and shorter.

Prosternum with a smooth sculpture; its profile straight; prosternal process at apex about as wide as between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; metepisterna at apex with a hardly traceable denticle; first (visible) sternite 1.3 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: base of pronotum in the form of a well-developed fascia, apex of elytra, partly venter and coxae clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum, elytra, venter and, partly,



legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 4 and Table). Indonesia: Sumatra, Lampung Province. Known from a single locality.

**Bionomics.** The holotype was collected between 7 and 17 February; adults obviously visit flowers.

**Remarks.** When/if the male of this species is found, in my opinion, its prosternum can be expected to support a coarse (or rough) and deep puncturation.

**Etymology.** The new species honours my friend and colleague, Dr. Denis G. Kasatkin (Rostov-on-Don, Russia), who has rendered his great help in obtaining a valuable material for study.

**24. *Clytellus selebensis* Gestro, 1877**  
(Figs 236, 237, 240, 241, 243, 245, 247, 251)

*Clytellus selebensis* Gestro, 1877: 653. **Type locality:** Indonesia, Sulawesi (= Celebes) Island, Kendari (= Kandari) (according to the original description and the label of the holotype). Aurivillius, 1912: 424.

**Material.** Holotype ♂, by monotypy (MCSN), "Celebes, Kandari, III.[18]74, O. Beccari", "*Clytellus selebensis* Gestro typus", "Typus", "Holotypus *Clytellus selebensis* Gestro, 1877", "Museo Civico di Genova" (Fig. 237); 1 ♂ (BMNH), "Indonesia, Sulawesi Utara, Dumoga-Bone N. P., II.1985", "Lowland forest 300–400 m", "Malaise trap up tree", "R. Ent. Soc. Lond. Project Wallace B.M. 1985–10", "125.2", "*Clytellus* sp. R.J.W. Aldridge det. 1986", "*Clytellus benguetanus* E. Vives det. 2008 [misidentification!]"; 1 ♂ (BMNH), "Indonesia, Sulawesi Utara, Dumoga-Bone N. P., IV.1985" (upperside) + "24.IV.–1.V." (underside), "Plot A, ca 200 m, Lowland forest", "Malaise trap up tree", "R. Ent. Soc. Lond. Project Wallace B.M. 1985–10", "*Clytellus* ?? *benguetanus* E. Vives det. [? 2008] [misidentification!]".

**Diagnosis.** This species, as well as the very similar *C. benguetanus* (see below), differ from all congeners by the combination of characters which includes the presence of an evident or strong metallic lustre both on the elytra and pronotum, the absence

from there, excluding only the depression area on the elytra, of a coarse sculpture, by certain structural features of the pronotum (the absence of a constriction from the apical one-third and the presence of a very wide fascia of light setae at the base, at least on its sides), the presence of abundant, coarse, deep punctures, and the typical pattern of dense light setae on the prosternum in the male. At least an evident metallic lustre of the elytra is typical of many species of the genus, but the pronotum can thereby be only simply shiny, without any metallic tint. Sometimes a strong metallic lustre of the elytra, partly being reflected this or that way on the surface of the pronotum as well, creates only the illusion of a metallic lustre, as observed e.g. in *C. shibatai*. But this latter species differs strongly from *C. selebensis* in many characters. By its habitus and a number of other details of structure, *C. selebensis* resembles *C. westwoodii* and *C. malayanus* stat. n., yet, besides the features of dorsal coloration, it is clearly distinguished from them by the absence of a sharp constriction in the apical one-third of the pronotum, a clearly stronger fascia of white setae at its base and, in comparison with *C. westwoodii*, by certain features of the sculpture and setation of the prosternum in the male.

**Description.** Body length 4.95–5.40 mm, humeral width 1.2–1.3 mm (see Remarks below). Black; tarsi partly reddish; antennae and legs partly sometimes dark reddish-brown; pronotum and elytra strongly shiny, with a metallic, usually blue, green or blue-green lustre, sometimes with cupreous tint; metallic lustre variably bright, but in any case always evident.

Head with a barely convex frons; antennomere 2, 1.28–1.35 times as long as isthmus between antennal cavities; antennae reaching or freely reaching behind inside apical one-quarter of elytra in male, only slightly shorter in female (see Remarks below); antennomere 1, 1.05–1.08, 1.04 or 1.08–1.09 times

as long as 3<sup>rd</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively, equal or almost equal to antennomere 4; antennomere 2, 1.60–1.66 times as long as wide; last antennomere 1.80–1.82 times as long as penultimate one.

Pronotum 1.84–1.88 times as long as wide at apex, 2.37–2.46 times as long as width at base; apex 1.29–1.31 times as broad as base, the very base 1.20–1.21 times as broad as constriction in front of base; strongly convex; smooth, only with sparse, small, partly unclear punctures; longitudinal groove at bottom of the constriction in front of base partly hidden by dense light setae.

Elytra 2.54–2.63 times as long as width at base; they can be broadest in apical half, but then not more than 1.02 times as wide as base; a sharp depression before middle, surface behind noticeably, but not too strongly convex; basal part with a heterogeneous puncturation, very coarse in area of depression, visibly less coarse along suture while small, sparse, partly unclear punctures covering remaining surface of base; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum of male with apical part bearing abundant, coarse, deep punctures, in-between a very clear cellular microsculpture located around punctures and arranged into several more or less clear rows of cells; sculpture in female obviously smooth; profile of prosternum straight; prosternal process at apex about as wide as between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; metepisterna at apex with a well-visible denticle; first (visible) sternite 1.33–1.37 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: partly head, base of pronotum in the form of a very well-developed fascia, apex of elytra, partly both prosternum (in male in the form of

a peculiar pattern, Fig. 243) and mesosternum, almost complete metasternum and first (visible) sternite, as well as partly legs clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 4 and Table). Indonesia: Sulawesi.

**Bionomics.** Adults active at least from February to the end of April or early May, visit flowers.

**Remarks.** I am only familiar with the male of this species. However, considering its extreme similarity to *C. benguetanus* (in which both sexes are available), the above description also considers some female characters of *C. selebensis* extrapolated from the *C. benguetanus* one to follow.

The holotype is the largest among the studied specimens.

## 25. *Clytellus benguetanus* Schultz, 1920 (Figs 238, 239, 242, 244, 246, 249)

*Clytellus benguetanus* Schultz, 1920: 195. **Type locality:** Philippines, Luzon Island, Benguet, Baguio (according to the original description and the label of the holotype). Vives, 2009: 7 (Mindanao, Bukidnon).

**Material.** Holotype ♂, by monotypy (MTD), “Luzon, P. I. Benguet, Baguio”, “*Clytellus benguetanus* Schultz det. W. Schultz Type”, “Coll. W. Schultz Ankauf 1942”, “Staatl. Museum für Tierkunde, Dresden” (Fig. 239); 1 ♂ (MTD), “Baguio, Benguet, Baker”, “1923 6”, “*Clytellus selebensis* Gestro det. K.M. Heller 1916”, “Staatl. Museum für Tierkunde, Dresden”; 1 ♀ (cEV), “C4193 Impasug-ong, Bukindon, I.V.[20]04”, “*Clytellus benguetanus* Sch. E. Vives det. 2008”; 1 ♀ (SDEI), “[Philippines], Benguet, [?] Janson”, “coll. W. Horn, DEI Eberswalde”, “DEI Müncheberg, Col – 04159”; 1 ♀ (SMNH) (photographs), “Philippinen, Luzon, Balabalan” (upperside) + “I.1917, G. Boettcher” (underside), “NHRS-JLKB, 000020322”, “5543 E92”.

**Diagnosis.** This species is very similar to *C. selebensis* (see Remarks just above and below), but differs by a less strongly developed fascia of white setae at the base of the pronotum, such that its dorsal side is only covered much more weakly or not covered at all, as a rule, also in the clearly narrower fragments of light setae forming a peculiar pattern on the prosternum of the male.

**Description.** Body length 5.35–5.80 mm, humeral width 1.3–1.4 mm (see Remarks below). Black; tarsi partly reddish; antennae and legs partly sometimes dark reddish-brown; pronotum and elytra strongly shiny, with a metallic, usually blue, green or blue-green lustre, sometimes with cupreous tint; lustre of varying brightness, but in any case always evident.

Head with a barely convex frons; antennomere 2, 1.25–1.27 times as long as isthmus between antennal cavities; antennae freely reaching behind inside or slightly not reaching apical one-quarter of elytra in male and female, respectively; antennomere 1, 1.15–1.25, 1.05–1.2 or 1.05–1.25 times as long as 3<sup>rd</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively, 1.15 times as long as or subequal to antennomere 4; antennomere 2, 1.55–1.58 times as long as wide; last antennomere 1.80–1.90 times as long as penultimate one.

Pronotum 1.87–1.92 times as long as wide at apex, 2.40–2.47 times as long as width at base; apex 1.27–1.32 times as broad as base, the very base 1.22–1.36 times as broad as constriction in front of base; strongly convex; smooth, only with sparse, small, partly unclear punctures; longitudinal groove at bottom of the constriction in front of base partly hidden by dense light setae.

Elytra 2.60–2.66 times as long as width at base, in apical half 1.05–1.07 times as broad as base; a sharp depression before middle, surface behind visibly, but not too strongly convex; basal part with a heterogeneous puncturation, very coarse in area of depression, noticeably less coarse along suture, but

small, sparse, partly unclear punctures over remaining surface of base; area of depression on sides with a coarse heterogeneous sculpture in the form of longitudinal grooves and coalescing or poorly separated, rough, oblong-oval punctures.

Prosternum of male in apical part with abundant, coarse, deep punctures, in-between a very clear cellular microsculpture located around punctures and forming several more or less clear rows of cells; sculpture in female obviously obliterated; profile of prosternum straight; prosternal process at apex about as wide as between procoxae; mesosternal process slightly narrower than prosternal process between procoxae; metepisterna at apex with a well-visible denticle; first (visible) sternite 1.40–1.46 times as long as all following (visible) sternites combined.

Last tarsomere with two claws not fused at base.

Setation mainly as follows: head partly, base of pronotum in the form of a very well-developed fascia (strip) usually not or only poorly developed on dorsal side, apex of elytra, partly both prosternum (in male in the form of a peculiar pattern, Fig. 244) and mesosternum, almost complete metasternum and first (visible) sternite, as well as partly legs clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 4 and Table). Philippines.

**Bionomics.** Adults active at least from January to early May, visit flowers.

**Remarks.** The differences of this species from *C. selebensis*, as shown above, concern only the degree of development of setation on the male prosternum and on the pronotum. Perhaps *C. benguetanus* represents

only a form of *C. selebensis*, occupying the northern part of the latter's distribution area. However, to confirm or refute this suggestion, additional material of both taxa is necessary from various localities.

The holotype is the largest among the studied specimens.

## 26. *Clytellus mononychus*

Holzschuh, 2003

(Figs 61, 79, 253–259, 264, 266–268, 271, 272)

*Clytellus mononychus* Holzschuh, 2003: 232, Abb. 66. **Type locality:** Western Malaysia, Pahang, Banjaran Benom Mts., 10–15 km SSE Kampong Ulu Dong (according to the original description).

**Material.** Paratype ♂ (NMP), “W Malaysia, Pahang, Banjaran Benom Mts., 15 km E Kampong Ulu Dong, 3,53N, 102,01E, 300–1000 m, 24.III.–15.IV.1998, Dembický & Pacholátko leg.”, “Paratypus *Clytellus mononychus* n. sp. det. C. Holzschuh 2003”, “ex coll. S. Kadlec, National Museum Prague, Czech Republic”; paratype ♂ (cAM), “W Malaysia, Pahang, Cameron Highlands, Tanah Rata, 1600 m, 11.–27.II.2000, J. Horák leg.”, “Paratypus *Clytellus mononychus* n. sp. det. C. Holzschuh 2003” (Fig. 254); paratype ♀ (cCH), same labels (Fig. 256); 2 ♂ (cPV), W Malaysia, Cameron Highlands, Tanah Rata, Gunung Jasar Mt, 26.IV.–15.V.2006, P. Viktora leg.

**Diagnosis.** This and two other very similar species described below, *C. makarovi* sp. n. and *C. perhentianus* sp. n., are characterized by the presence of only one claw and a peculiar tubercle on the disk of the pronotum. By these features, the trio is distinguished from all other congeners. Compared to *C. makarovi* sp. n., *C. mononychus* has a noticeably different shape both of the depression on the elytra and of the convexity of the pronotum. From *C. perhentianus* sp. n., it differs in structure of the antennal tubercles, by more convex eyes, and a usually slightly deviating form of the apical part of the pronotum. In addition, *C. mononychus* shows a brighter setation of the body than observed in the other two species compared.

**Description.** Body length 3.3–5.1 mm, humeral width 0.85–1.25 mm. Black; antennae, tarsi, apex of elytra, usually partly or completely tubercle on pronotum, sometimes also most of epipleura red-brown tones; dorsum almost entirely shiny; elytra usually with a metallic bluish or bluish-cupreous lustre.

Head with a flat frons; antennomere 2, 1.14–1.20 times as long as isthmus between antennal cavities; antennae freely reaching the apical one-quarter or clearly extending only behind middle of elytra in male and female, respectively; antennomere 1, 1.14–1.24, 1.08–1.25, 1.08–1.18 or 1.05–1.13 times as long as 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>, respectively; antennomere 2, 1.50–1.85 times as long as wide; last antennomere 1.70–1.94 times as long as penultimate one.

Pronotum 1.55–1.61 times as long as wide at apex, 2.05–2.27 times as long as width at base; apex 1.33–1.43 times as broad as base, the very base 1.25–1.33 times as broad as constriction in front of base; more or less moderately convex; disk with a longitudinal keel-shaped tubercle usually well-developed and acute at apex, sometimes strongly obliterated; area of constriction in front of base with evident, but not too coarse, longitudinal grooves or longitudinally elongated rough punctures on sides; longitudinal groove at bottom of this constriction well-expressed; remaining surface smooth, only with individual, partly clear, small punctures; partly with microsculpture especially well visible in area of tubercle.

Elytra 2.67–2.76 times as long as width at base, in apical half 1.06–1.18 times as broad as base; a sharp depression before middle, thereby surface of each elytron, starting almost from suture, abruptly sloping down towards lateral margin (Figs 271, 272); behind depression usually barely convex; each elytron at base with a weak, but well-expressed, longitudinal, narrow elevation dorsally covered by microscul-

pture and creating a scabrous surface; generally, basal one-third with a heterogeneous, predominantly rude puncturation; in area of depression on sides with a coarse sculpture in the form of longitudinal grooves and/or coalescing or connivent, rough, oblong-oval punctures.

Prosternum with an obliterated sculpture; its profile straight; prosternal process at apex about as wide as between procoxae; mesosternal process considerably narrower than prosternal process between procoxae; metepisterna at apex with a poorly noticeable denticle; first (visible) sternite 1.35–1.38 times as long as all subsequent (visible) sternites combined.

Last tarsomere with one claw.

Setation mainly as follows: head partly, base of pronotum in the form of a well-developed fascia, scutellum usually, apex of elytra, partly prosternum, most of mesosternum, almost complete metasternum and first (visible) sternite, as well as legs clothed with more or less dense, recumbent, white setae with silver tint; head, antennae, partly pronotum, as well as venter and legs covered by similar, but sparser setae; head, partly antennae, pronotum on sides at apex, elytra, venter and, partly, legs with more or less long, sparse, mainly more robust on elytra, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia (Pahang), including islands at least off the southeastern coast.

**Bionomics.** Adults active from the second half of January to the first half of May, visit flowers.

**27. *Clytellus makarovi* Miroshnikov, sp. n.**  
(Figs 62, 260, 261, 263, 273)

**Material.** Holotype ♂ (cLD), W Malaysia, Perak, 25 km NE Ipoh, Banjaran Titi Wangsa Mts, Korbu Mt, 1200 m, 6.–12.V.2001, P. Čechovský leg.

**Diagnosis.** The new species is very similar to *C. mononychus*, but differs clearly in

structure of the elytra in the depression area, by the more abrupt apical part of the pronotum, a narrower fascia of light setae at the base of the pronotum, a less bright coloration of the recumbent setation of the body. *Clytellus makarovi* sp. n. differs from *C. perhenthianus* sp. n. also in structure of the elytra in the area of depression and by some other features listed below in the diagnosis of the latter species.

**Description.** Male. Body length 4.0 mm, humeral width 1.0 mm. Black; antennae, base of tubercle on pronotum, apex of elytra and epipleura, legs and, partly, venter reddish-brown tones; clava of femora and tibiae infuscate; dorsum almost entirely shiny; elytra without evident metallic lustre.

Head with a barely convex frons; antennomere 2, 1.44 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical one-quarter of elytra; antennomere 1, 1.20 or 1.14 times as long as 3<sup>rd</sup> and 4<sup>th</sup>, respectively, 1.09 times as long as antennomere 5 or 6; antennomere 2, 1.63 times as long as wide; last antennomere 1.79 times as long as penultimate one.

Pronotum 1.59 times as long as wide at apex, 2.30 times as long as width at base; apex 1.45 times as broad as base, the very base 1.25 times as broad as constriction in front of base; strongly convex, thereby the level of inclination approximately from the middle of pronotum to apex about the same sharp as to base; with a keel-shaped longitudinal tubercle in the middle of disk; area of constriction in front of base with evident, but not too coarse, short, longitudinal grooves; longitudinal groove at bottom of this constriction well-expressed; remaining surface smooth, only with individual, partly clear, small punctures; partly with microsculpture especially well visible in area of tubercle.

Elytra 2.57 times as long as width at base, in apical half 1.04 times as broad as base; a sharp depression before middle, thereby surface of each elytron relatively plain over about half

of its width on inner side, subhorizontal, only slightly elevated near suture, but remaining part abruptly sloping down towards outer margin (Fig. 273); surface behind depression slightly convex; each elytron at base with a weak, but well-expressed, longitudinal, narrow elevation dorsally covered by microsculpture creating a scabrous texture; basal one-third generally with a heterogeneous, predominantly rough puncturation; area of depression on sides with a coarse sculpture in the form of longitudinal grooves which cover coalescing, coarse, oblong-oval punctures and, at bottom, show a slight impression and individual punctures.

Prosternum with an obliterated sculpture; its profile almost straight; prosternal process at apex about as wide as between procoxae; mesosternal process noticeably narrower than prosternal process between procoxae; metepisterna at apex with a poorly-visible denticle; first (visible) sternite 1.27 times as long as all following (visible) sternites combined.

Last tarsomere with one claw.

Setation mainly as follows: head partly, base of pronotum in the form of a fascia, apex of elytra, partly prosternum, most of mesosternum, almost complete metasternum and first (visible) sternite, as well as legs clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, as well as venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Perak. Known from a single locality.

**Bionomics.** The holotype was collected between 6 and 12 May; adults obviously visit flowers.

**Etymology.** The new species honours my friend and colleague, Dr. Kirill V. Makarov

(Moscow Pedagogical State University, Russia), a master of microphotography who rendered his invaluable help in taking the bulk of the pictures presented in this paper.

**28. *Clytellus perhentianus* Miroshnikov, sp. n.**  
(Figs 65, 262, 265, 269, 270)

**Material.** Holotype ♂ (NHMW), W Malaysia, Terengganu, Pulau Perhentian Besar, 19.VII.1993, H. Forster leg.

**Diagnosis.** The new species is very similar to *C. mononychus* and *C. makarovi* sp. n., but differs from them by less convex eyes and the antennal tubercles clearly more strongly elongated upward. In addition, it is distinguished from *C. mononychus* by a better parallel-sided apical part of the pronotum, a less bright (same as in *C. makarovi* sp.n.) setation of the body, from *C. makarovi* sp. n. by structure of the elytra in the area of the depression being about the same as in *C. mononychus*.

**Description.** Body length 4.95 mm, humeral width 1.2 mm. Black; antennae, base of tubercle on pronotum, apex of elytra, epipleura, almost all (visible) sternites and legs reddish-brown; most of venter dark reddish-brown; dorsum almost entirely shiny; elytra with a metallic cupreous lustre.

Head with a barely convex frons; antennomere 2, 1.36 times as long as isthmus between antennal cavities; antennae freely reaching behind inside apical one-quarter of elytra; antennomere 1, 1.20 or 1.07 times as long as 3<sup>rd</sup> and 6<sup>th</sup>, respectively, 1.15 times as long as antennomere 4 or 5; antennomere 2, 1.58 times as long as wide; last antennomere 1.85 times as long as penultimate one.

Pronotum 1.67 times as long as wide at apex, 2.33 times as long as width at base; apex 1.39 times as broad as base, the very base 1.25 times as broad as constriction in front of base; relatively strongly convex; disk with a longitudinal keel-shaped tubercle broadly rounded at apex; area of constrict-

tion in front of base with longitudinally elongated, rough punctures on sides; longitudinal groove at bottom of this constriction well-expressed; remaining surface smooth, with only individual, partly clear, small punctures; partly with microsculpture especially well-expressed in area of tubercle.

Elytra 2.70 times as long as width at base, in apical half 1.09 times as broad as base; a sharp depression before middle, thereby surface of each elytron, starting almost from suture, abruptly sloping down towards lateral margin (Fig. 270); surface behind depression barely convex; each elytron at base with a weak, but well-expressed, longitudinal, narrow elevation dorsally covered by microsculpture creating a scabrous texture; basal one-third generally with a heterogeneous, predominantly rough puncturation; area of depression on sides with a coarse sculpture in the form of longitudinal grooves which cover coalescing, coarse, oblong-oval punctures and, at bottom, show a slight impression and individual punctures.

Prosternum with an obliterated sculpture; its profile straight; prosternal process at apex slightly narrower than between procoxae; mesosternal process clearly narrower than prosternal process between procoxae; metepisterna with a poorly-visible denticle at apex; first (visible) sternite 1.41 times as long as all following (visible) sternites combined.

Last tarsomere with one claw.

Setation mainly as follows: head partly, base of pronotum in the form of a fascia, apex of elytra, partly prosternum, most of mesosternum, almost complete metasternum and first (visible) sternite, as well as legs clothed with more or less dense, recumbent, white setae; head, antennae, partly pronotum, venter and legs clothed with similar, but sparser setae; head, partly antennae, pronotum on sides at apex, as well as elytra, venter and, partly, legs covered by more or less long, sparse, on elytra mainly more robust, erect or suberect, light setae.

**Distribution** (Maps 1, 3 and Table). Western Malaysia: Terengganu, Perhentian Island. Known from a single locality only.

**Bionomics.** The holotype was collected in the second half of July; adults obviously visit flowers.

**Remarks.** The taxonomic status of this new species is not yet entirely clear. That it is only a form of *C. mononychus* cannot be excluded. However, this can be verified only upon an examination of additional material of *C. perhentianus* sp. n. Yet the diagnostic characters of this new taxon mentioned above, as well as its remote provenance seem to rather be evidence of a full-species status of *C. perhentianus* sp. n. In addition, the presence in the group of one-clawed *Clytellus* of yet another species, *C. makarovi* sp. n., which differs very well from *C. mononychus*, seems to be promising enough for possibly some more undescribed immediate allies to be found.

**Etymology.** The name of the new species is derived from Perhentian Island off the northeastern coast of western Malaysia, the *terra typica*.

#### Key to species of *Clytellus*

1. Last tarsomere with one claw (Fig. 85); pronotum smooth and shiny almost all over, disk with a longitudinal keel-shaped tubercle (Figs 61, 62, 263–266); elytra at base with neither an evident tuberculiform elevation nor a crest (Figs 61, 62, 266); prosternum of male as in female, without coarse deep puncturation (Figs 79, 261) ..... 2
- Last tarsomere with two claws which can only be partly fused at base (Figs 83, 84); pronotum either smooth almost all over, often shiny or mostly with a coarse sculpture, disk can bear a very strong tubercle or longitudinal, long, keel-shaped elevation, as in Figs 150, 151, 179, area of constriction in front of base often with

- evident longitudinal grooves, as e.g. in Figs 57a, 70, 71, 76; elytra at base with a highly varied sculpture, each elytron can be with a large tuberculiform elevation or well-developed crest, as well as bearing a very coarse puncturation, as e.g. in Figs 55, 56, 59, 60; prosternum of male as in female, sculpture either obliterated or with a coarse, rather rough and deep puncturation (e.g., Figs 80, 144, 149, 156, 216) ..... 4
2. Each elytron in area of depression abruptly sloping down almost from suture towards lateral margin (Figs 270–272); setation upon head, at base of pronotum and on venter either bright white with silver tint or mainly greyish-white without silver tint ..... 3
    - Each elytron in area of depression about half of its width on inner side with a relatively plain surface, subhorizontal, only slightly elevated near suture while only remaining part abruptly sloping down towards lateral margin (Fig. 273); setation upon head, at base of pronotum and on venter mainly greyish-white without silver tint ..... *C. makarovi* sp. n.
  3. Antennal tubercles slenderer and more strongly elongated upwards, surface lateral to tubercle steeper; eyes less convex, lower margin of eye (in front view) more remote from base of mandibles (Fig. 269); setation upon head, at base of pronotum (in the form of a narrow fascia) and on venter greyish-white without silver tint ..... *C. perhentianus* sp. n.
    - Antennal tubercles less strongly elongated upwards, facies more robust, surface lateral to tubercle usually slightly flatter; eyes more convex, lower margin of eye (in front view) closer to base of mandibles (Figs 267, 268); setation upon head, at base of pronotum (in the form of a wider fascia) and on venter bright white with silver tint ..... *C. mononychus* Holzschuh
  4. Most or a considerable part of pronotum bearing a coarse sculpture (in the form of grains, wrinkles, folds or a cellular surface), as e.g. in Figs 59, 60, 89, 91, 92, 113, 120, 135–139, 142; each elytron at base with an evident crest of different size and shape (e.g., Figs 59, 60, 90, 114–116, 121, 122, 132–135, 143), if it is weakly developed, as in Fig. 90, then base of pronotum with a very strong fascia of dense light setae (Figs 89, 91, 92); at least basal one-third of elytra with a coarse or very coarse puncturation, devoid of a fascia formed by microsculpture; claws of normal structure or partly fused at base (Fig. 84); prosternum in male as in female, without coarse deep puncturation, as e.g. in Figs 105, 106 ..... 5
    - Pronotum almost entirely or mostly smooth, only disk can be with a very strong tubercle or longitudinal, long, keel-shaped elevation, as in Figs 150, 151, 179, area of constriction in front of base often with evident longitudinal grooves, as e.g. in Figs 57a, 70, 71, 76; basal part of elytra with a highly varied sculpture, from smooth with a delicate and sparse puncturation, sometimes even almost without the latter, to very coarse with well-developed contrasting fragments of microsculpture; in this or that form, each elytron at base can have a very peculiar tuberculiform elevation, as in Figs 191, 192, if with a crest, then weakly developed, located on the background of a wide fascia of microsculpture (Fig. 146); claws of normal structure, not fused at base; prosternum in male either with more or less coarse, at least individual punctures (e.g., Figs 80, 144, 149, 156, 201, 216) or, as in female, with an obliterated sculpture ..... 10
  5. Each elytron at base with a crest of different size and shape, but not as in Figs 59, 98–102; elytra behind crests less convex



- (e.g., Figs 60, 113, 134, 135, 143); claws partly fused at base (Fig. 84) or normal in structure..... 6
- Each elytron at base with a very strong crest in the form of a shark's dorsal fin, as in Figs 59, 98–102; elytra behind crests very strongly convex (Figs 59); claws of normal structure, not fused at base (Fig. 83) ..... *C. methocoides* Westwood
6. Base of pronotum either without fascia of dense light setae or, if with a fascia, then it is evidently narrower and widely interrupted on dorsal side, as in Fig. 140, without longitudinal groove at the very margin; elytra with a well-developed crest and, if with a metallic lustre, then noticeably weaker, without evident coarse puncturation at apex, but with a fascia of light setae there (e.g., Figs 107, 117, 123, 140); claws partly fused at base, as in Fig. 84 ..... 7
- Base of pronotum with a very strong, axially barely interrupted fascia of dense light setae, as in Figs 91, 92 (thereby scutellum clothed with the same dense setae as fascia), where, at the very base, with a well-expressed longitudinal groove; elytra with a poorly developed crest at base, an clearly metallic greenish-blue lustre and an obviously coarse puncturation at apex, but without fascia of light setae there (Figs 86, 88); claws of normal structure, not fused at base ..... *C. elongatus* Pic
7. Base of pronotum without fascia of light setae; coarse puncturation of elytra more abundant (e.g., Figs 107, 114–117, 120, 121, 136–139); elytra almost entirely black, either only apex partly clearly lighter or both basal part and apex brown-red ..... 8
- Base of pronotum with a fascia of light setae (Figs 140, 142); coarse puncturation of elytra less abundant (Figs 140, 143); elytra almost entirely black, only apex partly clearly lighter ..... *C. dembickyi* sp. n.
8. Base of pronotum on sides without long longitudinal folds (Figs 113, 135); elytra almost entirely black or brownish-black, either only apex clearly lighter or both basal part and apex brown-red ..... 9
- Base of pronotum on sides with long longitudinal folds (Fig. 60); elytra black or brownish-black, both basal part and apex brown-red (Figs 60, 117, 118) ..... *C. canaliculatus* Holzschuh
9. Pronotum clearly more coarsely granulated, grains being well-developed or at least evident at its very base as well (Figs 107, 109, 111, 113); crest at base of each elytron more oblique and at least slightly shorter and higher, as in Figs 113–116 ..... *C. laosicus* Gressitt et Rondon
- Pronotum clearly less coarsely granulated, granulations being either absent at all or poorly visible at its very base (Figs 135–139); crest at base of each elytron less oblique and at least slightly more strongly elongated and lower, as in Figs 132–135 ..... *C. serratulus* Holzschuh
10. Pronotum on disk without large tubercle, at most with a long keel-shaped elevation, as in Figs 150, 151, area of constriction in front of base smooth or with longitudinal grooves, base either without or with a fascia of dense light setae; elytra varied sculptured, but can only be partly similar to those shown in Figs 178, 182; body from small to large ..... 11
- Pronotum on disk with a very strong, microsculptured tubercle, area of constriction in front of base with deep longitudinal grooves, base with a well-developed fascia of dense light setae poorly interrupted at midline (Figs 76, 179, 182); elytra with a peculiar sculpture, as in Figs 178, 182; body large (length about 7.0 mm) ..... *C. monilis* Holzschuh
11. Pronotum predominantly or partly almost

- dull, disk with a more or less clear, longitudinal, keel-shaped elevation (Figs 150, 151); at least apical part clothed with abundant, contrasting, white setae present at least partly on dorsal side (Figs 147, 148); base of elytra with a coarse puncturation partly located against the background of a broad, continuous, contrasting fascia formed by microsculpture, thereby apex of elytra with a fascia of dense, recumbent, light setae (Figs 141, 145–148); prosternum in male with a coarse deep puncturation (Figs 144, 149) ..... 12
- Pronotum almost entirely or mostly clearly to strongly shiny, with neither a longitudinal keel-shaped elevation on disk nor abundant white setae in apical part, at least so on its dorsal side; a varied sculpture at base of elytra, coarse punctures can be present, including background of a more or less strongly developed surface formed by microsculpture, thereby apex of elytra without or with a fascia of dense, recumbent, light setae; prosternum in male as in female, either with an obliterated sculpture (e.g. Fig. 224) or a coarse deep puncturation ..... 13
12. Pronotum on disk with a well-expressed, longitudinal, keel-shaped elevation, beset with numerous white setae predominating on sides of apical part (Figs 147, 150); prosternum in male with a less coarse puncturation and sparser (maybe partly abraded) light setae (Fig. 149); at least clava of femora brownish-red; body length 4.9 mm ..... *C. gressitti* sp. n.
- Pronotum on disk with a less strongly expressed, longitudinal, keel-shaped, but in any case quite noticeable elevation, with numerous white setae both in apical part (where present almost all over disk surface) and at base (Figs 148, 151); prosternum in male with a coarser puncturation and denser light setae (Fig. 144); body length 5.75–6.5 mm ..... *C. olesteroides* Pascoe
13. Pronotum with a very well-developed or at least clearly expressed constriction in apical one-third (e.g. Figs 67–69); profile of prosternum's apical part usually clearly curved (e.g. Figs 57c, 63, 66), rarely almost straight, prosternum in male either with an abundant coarse puncturation (e.g. Figs 80, 216) or at least with individual coarse punctures (Fig. 201) ..... 14
- Pronotum in apical one-third without constriction (e.g. Figs 71, 72), at most with a barely visible constriction (e.g. Fig. 75); profile of prosternum in apical part usually straight (e.g. Figs 70, 73, 74), can only be barely curved, prosternum in male as in female, either with an obliterate sculpture (e.g. Fig. 224) or with a coarse deep puncturation ..... 19
14. Pronotum in area of constriction in front of base with longitudinal grooves (e.g., Figs 67, 71, 163, 164) well-developed at least on sides (Fig. 57a); base of elytra with a coarse puncturation, this either partly being located against background of a wide and contrasting fascia interrupted medially at suture and formed by microsculpture (e.g., Figs 55, 56, 158, 159) or partly surrounded by small, but clear fragments of microsculpture (Fig. 163); apex of elytra clothed only with sparse or more abundant (but not too dense), erect or suberect, light setae, without clearly expressed fascia of dense, recumbent, light setae (Figs 55, 153, 155, 160) ..... 15
- Pronotum in area of constriction in front of base without longitudinal grooves, smooth like almost all remaining surface (e.g. Figs 68, 69); if base of elytra also with a coarse puncturation, then this much smaller, without evidently expressed fragments of microsculpture

- (e.g., Figs 214, 215, 220, 189–192); elytra with a well-developed apical fascia of dense, recumbent, light setae (e.g., Figs 185, 186, 193, 195–198, 202, 206, 208, 209, 212) ..... 16
15. Pronotum at base with a wide fascia of dense light setae, in area of constriction in front of base with deep longitudinal grooves both on sides and dorsally (Figs 163, 164); each elytron at base with a clearly less strongly developed tuberculiform elevation, without well-developed area of microsculpture (Fig. 164) ..... *C. vivesi* sp. n.
- Pronotum at base without fascia of light setae, in area of constriction in front of base with deep longitudinal grooves, predominantly on sides, as well as on dorsal side sometimes with short grooves partly fused at midline (Figs 55, 57, 155, 158, 159); each elytron at base with a clearly more strongly tuberculiform elevation (Fig. 56) and a well-developed fascia formed by microsculpture (Figs 55, 56, 155, 158, 159) ..... *C. shibatai* Hayashi
16. Each elytron at base with a well-expressed tuberculiform elevation and a clear coarse puncturation, at least so along suture (Figs 214, 215); fascia of light setae at base of pronotum developed only on sides (Figs 221, 222) ..... 17
- Each elytron at base with neither a well-expressed tuberculiform elevation (Figs 202, 212) nor a coarse puncturation, at most with small clear punctures, predominantly so along suture (Figs 199, 200, 202, 210, 211); fascia of light setae at base of pronotum usually (if not abraded) covering partly dorsal side as well (e.g., Figs 199, 200, 210, 211) ..... 18
17. Puncturation at base of elytra clearly less sparse and mostly less coarse (Figs 213, 214); tooth at base of mandibles much better developed (Fig. 217); at least clava of femora and, partly, tarsi brownish-red, antennae dark reddish-brown (Fig. 213) ..... *C. belokobylskiji* sp. n.
- Puncturation at base of elytra more abundant and mostly clearly coarser (Figs 215, 219, 220); tooth at base of mandibles visibly less strongly developed (Fig. 218); antennae and legs almost entirely black (Fig. 219) ..... *C. lobanovi* sp. n.
18. Base of elytra on each side at least along suture with a row of a few clear punctures and usually also with very sparse, at most individual, delicate punctures dispersed over disk surface (Figs 199, 200, 202); prosternum in male only with individual, rather rough punctures (Fig. 201); on the average, body larger (length 5.5–8 mm) ..... *C. westwoodii* Pascoe
- Puncturation at base of elytra barely visible, it can be clearer on each side mainly along suture, but even then very delicate (Figs 210–212); prosternum in male with an abundant coarser puncturation (Fig. 80); on the average, body smaller (length 4.85–5.5 mm) ..... *C. malayanus* Hayashi, stat. n.
19. Pronotum in area of constriction in front of base with deep longitudinal grooves both on sides and dorsally (Figs 70, 71, 161, 165, 168); body length not less than 4.3 mm; elytra at base with a very coarse to coarse puncturation (Figs 176, 177, 181, 183) which can partly be located against background of fragments of microsculpture (Figs 176, 177); elytra without fascia of dense white setae at apex, either only with sparse, erect, light setae like over remaining surface (Figs 181, 184) or with a fascia (Figs 161, 165, 168) ..... 20
- Pronotum in area of constriction in front of base without deep longitudinal grooves (e.g., Figs 72, 240–242, 248), at least so on dorsal side, if at least very gentle short grooves present on dorsal side, as in Fig. 75, then body size small

- (length 4.05 mm); elytra at base variously sculptured, but with neither a very coarse puncturation nor evident fragments of microsculpture; elytra at apex with a fascia of dense light setae (e.g., Figs 226, 228, 230, 245, 246, 252) ..... 21
20. Elytra at base with a less coarse puncturation, without evident fragments of microsculpture (Figs 181, 183, 184), apex without fascia of dense light setae (Figs 181, 184); dorsum generally with a moderate shine, elytra with a less sharp metallic lustre (Fig. 184) ..... *C. tatiana* sp. n.
- Elytra at base with a very coarse puncturation, this in basal one-third partly located against the background of microsculpture in the middle of disk (Figs 176, 177), at apex with a fascia of dense light setae (Figs 161, 165, 168); dorsum generally more shiny, elytra with a bright metallic lustre (e.g. Fig. 161) ..... *C. viridipennis* Hayashi
21. Each elytron at base without evident crest-shaped elevation, disk smooth, punctured to this or that extent, but not coarsely so (e.g., Figs 223, 227, 232, 234, 235, 240–242, 248, 251); prosternum in male either with a more or less coarse and deep puncturation, at least with individual deep punctures (Figs 233, 243, 244) or, like in female, without coarse puncturation ..... 22
- Each elytron at base with a large, longitudinal, crest-shaped elevation (but not a crest proper) scabrous dorsally due to microsculpture and small roughness (Figs 189–192); prosternum in male as in female, without coarse deep puncturation ..... 27
22. Pronotum in area of constriction in front of base with neither any grooves nor folds, smooth like almost all remaining surface (e.g., Figs 72, 73, 229, 240–242); puncturation of elytra not forming a pattern even similar to one in Figs 225, 227; prosternum in male more or less coarsely and deeply punctured (Figs 233, 243, 244), at least with individual punctures; sutural angle of elytra can be acute (Figs 228, 230, 231) ..... 23
- Pronotum in area of constriction in front of base on sides with evident longitudinal grooves, dorsal side also with very delicate, short, longitudinal grooves (Figs 74, 75); some elytral puncturation at disk base and in area of depression generally forming a peculiar pattern, as in Figs 225, 227; prosternum in male without coarse deep puncturation (Fig. 224); sutural angle of elytra narrowly rounded (Figs 226, 227) ..... *C. barclayi* sp. n.
23. Pronotum at base with a clearly wider fascia of dense light setae (e.g., Figs 236, 240–242, 245, 247, 249), at least so on sides; both elytra and pronotum with a clear and strong metallic lustre usually of green and blue tones (Figs 236, 238, 245, 246); prosternum in male with a more abundant and coarse puncturation, and a much better developed field it occupies (Figs 243, 244) ..... 24
- Pronotum at base with a clearly narrower fascia of dense light setae (e.g., Figs 228, 230, 235, 248, 250); only elytra can be with a more or less evident metallic shine while pronotum with normal shine (Figs 228, 230, 252); prosternum in male with clearly less abundant or only individual coarse punctures, and a much smaller field they occupy (Fig. 233) ..... 25
24. Fascia of dense light setae at base of pronotum better developed, covering dorsal side visibly more strongly, sometimes only narrowly interrupted or considerably rarefied at midline (Figs 236, 240, 241); prosternum in male with wider fragments of light setae framing fields with a coarse deep puncturation

- and thus forming a peculiar pattern, as in Fig. 243 ..... *C. celebensis* Gestro
- Fascia of dense light setae at base of pronotum less strongly developed, visibly more weakly covering to not covering dorsal side (Figs 238, 242, 246); prosternum in male with narrower fragments of light setae framing fields with a coarse deep puncturation and thus forming a peculiar pattern, as in Fig. 244 ..... *C. benguetanus* Schultze
  - 25. Elytra clearly more strongly elongated, 2.68–2.79 times as long as width at base, less shiny (Figs 230, 234, 252); their sutural angle more or less acute (Fig. 231) or rounded (Fig. 252) while puncturation in basal one-third can be difficult to see, almost untraceable (Fig. 248) ..... 26
    - Elytra clearly shorter, only 2.5 times as long as width at base, more shiny (Figs 228, 232); their sutural angle more or less acute while puncturation in basal one-third clearly visible ..... *C. fulgidus* Holzschuh  - 26. Sutural angle of elytra more or less acute (Figs 230, 231); basal one-third of elytra on disk with a very sparse, but pretty clear and small puncturation (Figs 234, 235); pronotum clothed with individual, erect, light setae at apex ..... *C. kubani* sp. n.
    - Sutural angle of elytra rounded (Fig. 252); almost entire basal one-third of elytra on disk without clear puncturation (Fig. 248); pronotum, predominantly on sides, clothed with sparse, but abundant, erect, light setae (Fig. 248) ..... *C. kasatkini* sp. n.  - 27. Elytra barely more strongly elongated, 2.6 times as long as width at base (Fig. 185); humeri almost straight (Fig. 188); body length 4.75 mm (see also Remarks to this species) ..... *C. kiyoyamai* Hayashi
    - Elytra barely shorter, 2.5 times as long

as width at base (Fig. 186); humeri less straight (Fig. 190); body length 5.5 mm (see also Remarks to this species) ..... *C. kareli* Holzschuh

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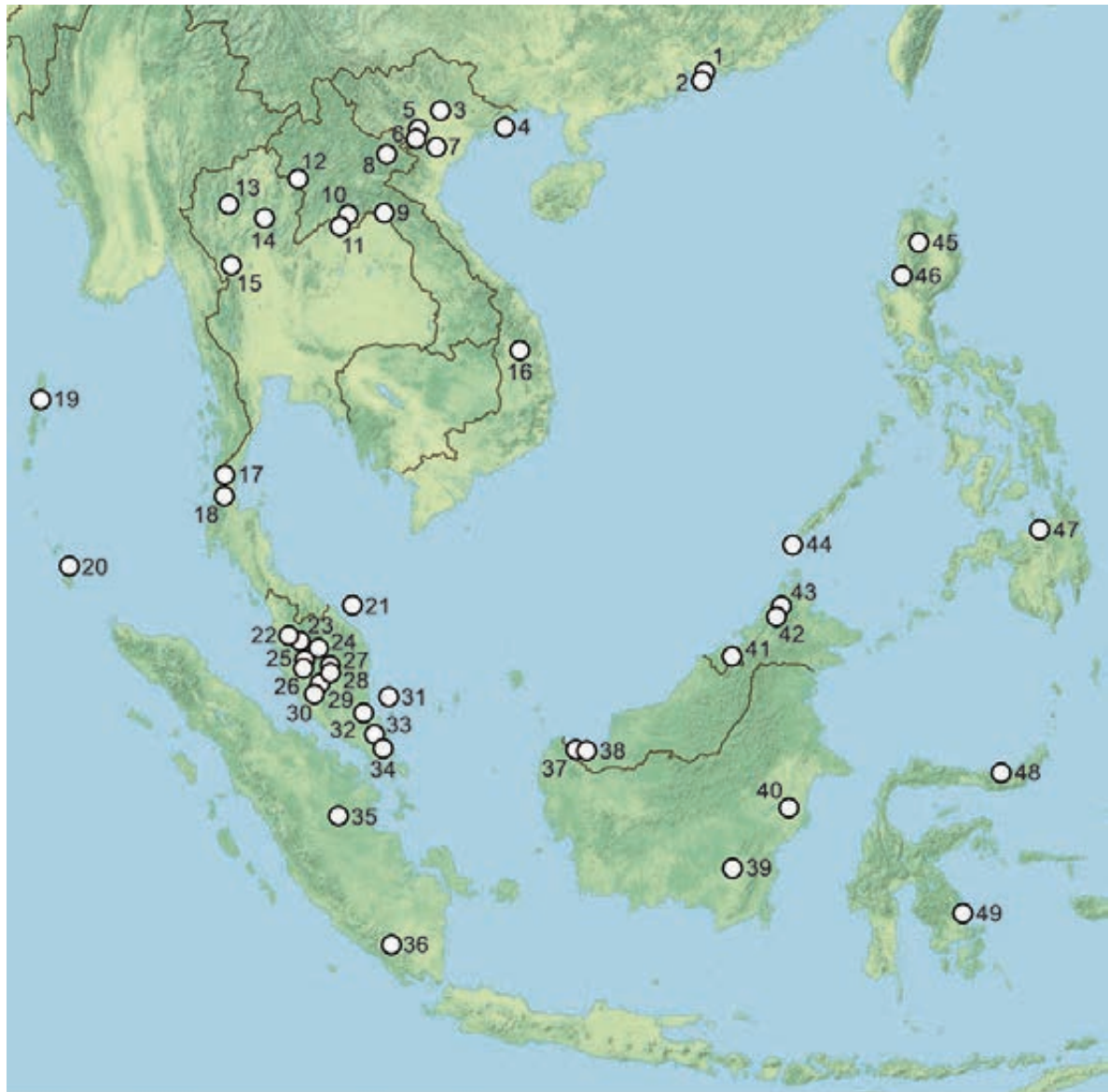
## РЕЗЮМЕ

Предлагается обзор видов ориентального рода *Clytellus* Westwood, 1853. Описаны как новые *C. dembickyi* sp. n. (южный Вьетнам), *C. gressitti* sp. n. (западная Малайзия), *C. vivesi* sp. n. (Бруней), *C. tatiana* sp. n. (западная Малайзия), *C. belokobylskiji* sp. n., *C. lobanovi* sp. n. (оба северный Вьетнам), *C. barclayi* sp. n. (восточная Малайзия), *C. kubani* sp. n. (западная Малайзия и Сингапур), *C. kasatkini* sp. n. (Индонезия, Суматра), *C. makarovi* sp. n. и *C. perhentianus* sp. n. (оба западная Малайзия). *Clytellus malayanus* Hayashi, 1977, stat. n., описанный в качестве подвида *C. westwoodii* Pascoe, 1857, рассматривается как самостоятельный вид. Предполагается, что *C. kareli* Holzschuh, 2003 является синонимом *C. kiyoyamai* Hayashi, 1977. Для всех 28 видов рода, включая новые, даны подробные диагнозы. Для ранее известных видов приведены детальные описания, а для некоторых из них значительно расширен ареал и указаны разнообразные новые сведения. У ряда видов выявлены прежде не известные самец или самка, характеризующиеся разными наружными половыми признаками. Предложена таблица для определения всех видов, как и даны карты их распространения. Рассмотрено систематическое положение рода и установлена новая монотипическая подтриба *Clytellina* subtribus n. Даны диагноз и описание рода. Детально обсуждаются его отличия от многочисленных родов номинативной подтрибы *Tillomorpha*. Указана подробная библиография. Представлено большое количество цветных иллюстраций.

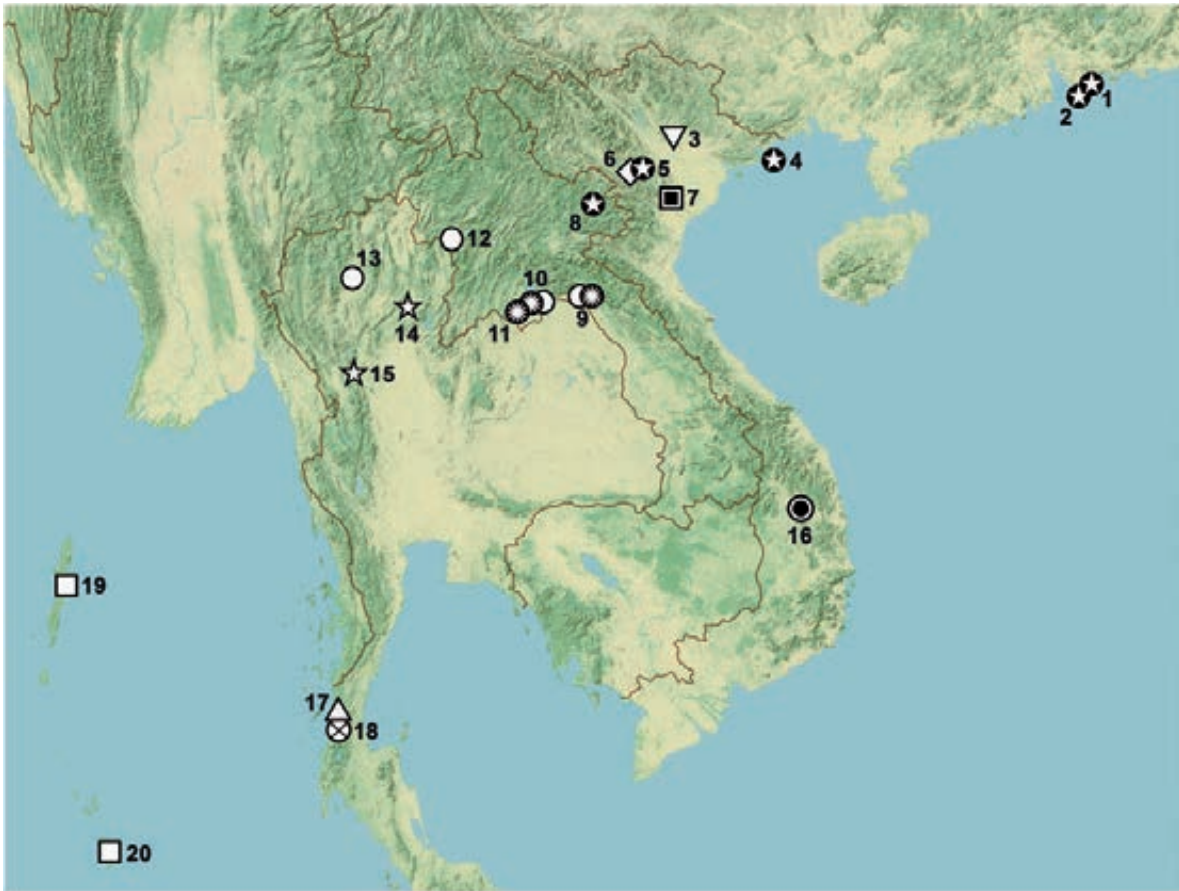
**Table.** Localities and the corresponding *Clytellus* species.

No	Locality	Species	No	Locality	Species
1	C: Hong Kong, Ngau Ngak Shan, 22°24'54"N, 114°14'53"E	<i>C. methocoides</i>	25	MW: Pahang, Tanah Rata, 4°28'N, 101°23'E,	<i>C. shibatai</i> <i>C. mononychus</i> <i>C. malayanus</i>
2	C: Hong Kong, Victoria Peak, 22°16'32"N, 114°08'39"E	<i>C. methocoides</i>	26	MW: Perak, Banjaran Titi Wangsa Mts, Ringlet, 4°23'44"N, 101°23'21"E	<i>C. shibatai</i>
3	V: Vinh Phu Prov., 70 km NW of Hanoi, Tam Dao, 21°27'N, 105°39'E	<i>C. lobanovi</i> sp. n.	27	MW: Pahang, Banjaran Benom Mts, 10–15 km SSE Kampong Ulu Dong, 3°55'13"N, 102°01'08"E	<i>C. mononychus</i> <i>C. gressitti</i> sp. n.
4	V: Bai Thu Long Archipelago, Dongkho Island, 20°59' N, 107°46'E	<i>C. methocoides</i>	28	MW: Pahang, Benom Mts, 15 km E Kampong Dong, 3°53'19"N, 2°01'17"E	<i>C. mononychus</i> <i>C. kubani</i> sp. n.
5	V: Hoa Binh Prov., Mai Chau Distr., Pa Co, 20°45'N, 104°54'E	<i>C. methocoides</i>	29	MW: Pahang, Gap, 3°41'29"N, 101°44'58"E	<i>C. viridipennis</i>
6	V: Hoa Binh Prov., Mai Chau Distr., Hang Kia, 20°44'N, 104°53'E	<i>C. belokobylskiji</i> sp. n.	30	MW: Selangor, Kuala Kubu, 3°34'N, 101°39'E	<i>C. viridipennis</i>
7	V: Hoa Binh Prov., Yen Thuy Distr., Da Phuc, 20°18'N, 105°35'E	<i>C. elongatus</i>	31	MW: Pahang, Pulau Tioman, road Kampong Tekek – Kampong Juara, 2°48'N, 104°11'E	<i>C. mononychus</i>
8	L: Houa Phan Prov., Ban Saluei, Phou Pane Mt, 20°12'N, 103°59'E	<i>C. methocoides</i>	32	MW: Pahang, Endau Rompin N.P., Gunung Beremban, 2°34'47"N, 103°17'38"E	<i>C. malayanus</i> <i>C. westwoodii</i>
9	L: Borikhane Prov., Paksane, 18°20'51"N, 103°56'20"E	<i>C. laosicus</i> <i>C. serratulus</i>	33	MW: Johor, 15 km NW of Kota Tinggi, Muntahak Mt, 1°49'07"N, 103°52'27"E	<i>C. tatiatae</i> sp. n.
10	L: Vientiane Prov., Tha Ngone, 18°07'45"N, 102°37'33"E	<i>C. laosicus</i> <i>C. serratulus</i>	34	S: 1°21'N, 103°49'E	<i>C. kubani</i> sp. n. <i>C. westwoodii</i>
11	L: Vientiane Prov., Nong Thevada, 17°58'45"N, 102°30'28"E	<i>C. laosicus</i>	35	IS: Riau Prov., Bukit Tigapuluh N.P., 0°50'S, 102°26'E	<i>C. westwoodii</i>
12	T: Nan Prov., Ban Wan, 19°33'N, 101°10'E	<i>C. serratulus</i>	36	IS: Prov., Bukit Barisan Selatan N.P., 5 km SW Liwa, 5°06'17"S, 104°05'27"E	<i>C. kasatkini</i> sp.n.
13	T: Chiang Mai Prov., Hang Dong, 18°41'13"N, 98°55'06"E	<i>C. serratulus</i>	37	ME: Sarawak, Kuching, 1°25'N, 110°20'E	<i>C. westwoodii</i>
14	T: Phrae Prov., 18°09'N, 100°08'E	<i>C. canaliculatus</i>	38	ME: Sarawak, Kuap (= Quop), 1°25'01"N, 110°22'01"E	<i>C. westwoodii</i> <i>C. barclayi</i> sp. n.
15	T: Tak Prov., Lansang N.P., 16°48'N, 98°57'E	<i>C. canaliculatus</i>	39	IB: Kalimantan Selatan, 40 km E Kandangan, Loksado, 2°30'S, 115°12'E	<i>C. westwoodii</i>
16	V: Gia Lai Prov., Buon Luoi, 14°06'N, 108°18'E	<i>C. dembickyi</i> sp. n.	40	IB: Kalimantan Timur, Bukit Soeharto, 0°30'36"S, 117°0'36"E	<i>C. westwoodii</i>
17	T: Ranong, 9°58'N, 98°38'E	<i>C. fulgidus</i>	41	B: Temburong, Kuala Belalong Field Studies Centre, 4°26'59"N, 115°10'21"E	<i>C. vivisi</i> sp. n.
18	T: Ranong Prov., Ban Na env., 9°34'N, 98°43'E	<i>C. kareli</i>	42	ME: Sabah, Trus Madi Mt, 5°33'N, 116°31'E	<i>C. monilis</i>
19	I: Andaman Islands, 12°30'N, 92°52'E	<i>C. olesteroides</i>	43	ME: Sabah, Kinabalu Mt, Poring, 6°02'N, 116°43'E	<i>C. westwoodii</i>
20	I: Nicorbar Islands, 7°01'N, 93°44'E	<i>C. olesteroides</i>	44	P: Balabac, Dalawan Bay, 7°53'39"N, 117°04'30"E	<i>C. westwoodii</i>
21	MW: Terengganu, Pulau Perhentian Besar, 5°54'06"N, 102°44'56"E	<i>C. perhentianus</i> sp. n.	45	P: Luzon, Balbalan, 17°26'29"N, 121°12'7"E	<i>C. benguetanus</i>
22	MW: Perak, Bukit Larut (= Maxwell Hill), 4°51'43"N, 100°47'59"E	<i>C. kiyoyamai</i> <i>C. shibatai</i>	46	P: Benguet, Baguio, 16°25'N, 120°36'E	<i>C. benguetanus</i>
23	MW: Perak, Banjaran Titi Wangsa Mts, Korbu Mt, 4°40'39"N, 101°16'55"E	<i>C. makarovi</i> sp. n.	47	P: Bukidnon, Impasug-ong, 8°25'N, 125°07'E	<i>C. benguetanus</i>
24	MW: Kelantan, Banjaran Titi Wangsa Mts, Ladang Pandrak env., 4°37'07"N, 101°31'16"E	<i>C. shibatai</i>	48	ISW: Dumoga-Bone N.P., 0°33'20"N, 123°50'24"E	<i>C. selebensis</i>
			49	ISW: Kendari, 3°58'12"S, 122°35'60"E	<i>C. selebensis</i>

**Note.** Abbreviations of countries and regions: C – China; V – Vietnam; L – Laos; T – Thailand; I – India; MW – western Malaysia; ME – eastern Malaysia; S – Singapore; IS – Sumatra, Indonesia; IB – Borneo, Indonesia; ISW – Sulawesi, Indonesia; B – Brunei; P – Philippines (NB: coordinates of localities 14, 19, 20 and 34 are approximate).

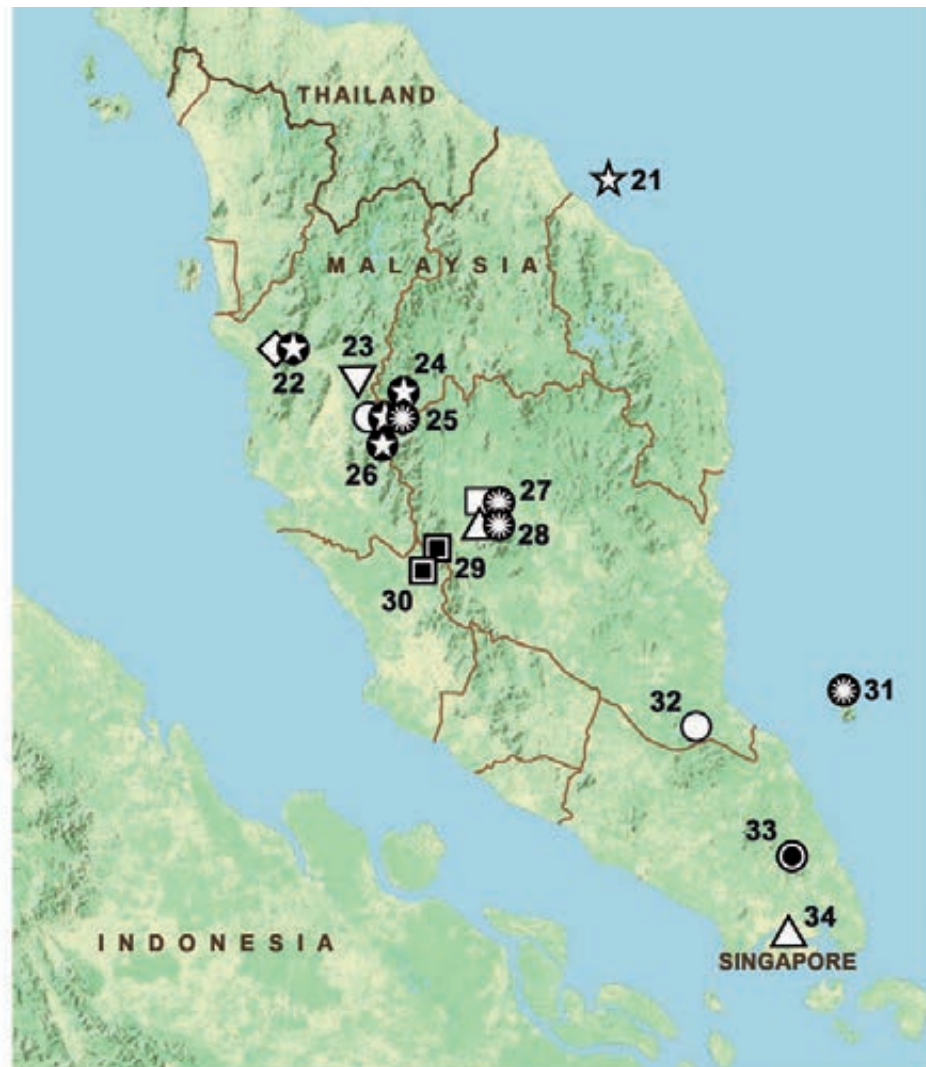


**Map 1.** Geographical distribution of the genus *Clytellus* Westwood and related species (NB: the locality numbers correspond to the numbers and names of localities in Table).



**Map 2.** Geographical distribution of the genus *Clytellus* Westwood and related species in South of China, Indochina (except western Malaysia), Andaman and Nikobar Islands.

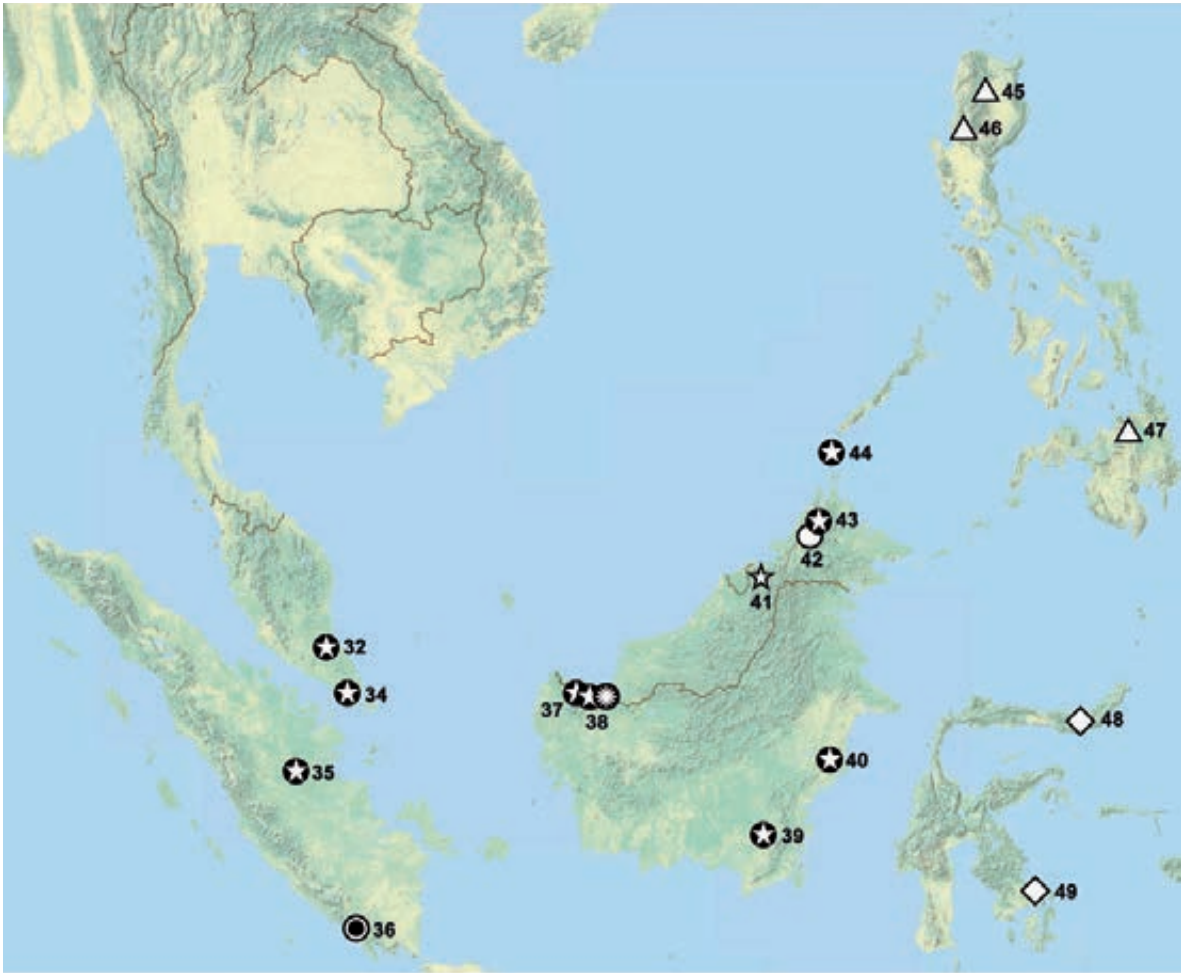
★ – *C. methocoides* Westwood; ■ – *C. elongatus* Pic; ● – *C. laosicus* Gressitt et Rondon; ○ – *C. serratulus* Holzschuh; ☆ – *C. canaliculatus* Holzschuh; ● – *C. dembickyi* sp. n.; ◇ – *C. belokobylskiji* sp. n.; ▽ – *C. lobanovi* sp. n.; ⊗ – *C. kareli* Holzschuh; △ – *C. fulgidus* Holzschuh; □ – *C. olesteroides* Pascoe (NB: the locality numbers correspond to the numbers and names of localities in Table).



**Map 3.** Geographical distribution of the genus *Clytellus* Westwood and related species in western Malaysia and Singapore.

□ – *C. gressitti* sp. n.; ⬤ – *C. shibatai* Hayashi; ◼ – *C. viridipennis* Hayashi; ● – *C. tatiana* sp. n.; ◇ – *C. kiyoyamai* Hayashi; ○ – *C. malayanus* Hayashi, stat. n.; △ – *C. kubani* sp. n.; ☀ – *C. mononychus* Holzschuh; ▽ – *C. makarovi* sp. n.; ☆ – *C. perhentianus* sp. n. (NB: the locality numbers correspond to the numbers and names of localities in Table).





**Map 4.** Geographical distribution of the genus *Clytellus* Westwood and related species in Malaysia, Singapore, Indonesia, Brunei and Philippines.

★ – *C. westwoodii* Pascoe; ● – *C. kasatkini* sp. n.; ☼ – *C. barclayi* sp. n.; ☆ – *C. vivesi* sp. n.; ○ – *C. monilis* Holzschuh; △ – *C. benguetanus* Schultze; ◇ – *C. selebensis* Gestro (NB: the locality numbers correspond to the numbers and names of localities in Table).



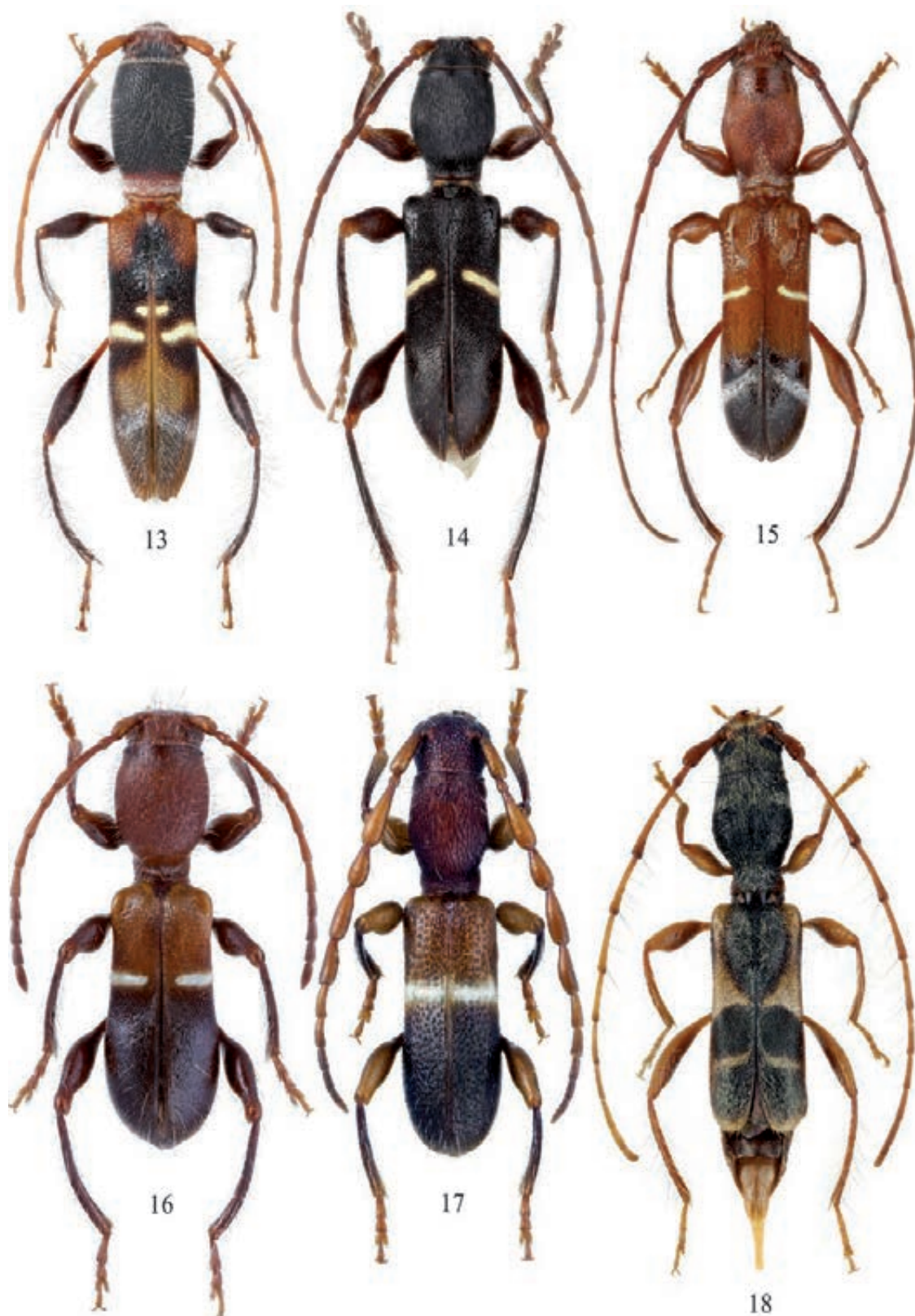
**Figs 1–6.** *Tillomorpha* Blanchard in Gay, habitus.

1–3 – *T. lineoligera* Blanchard in Gay, male; 4–6 – *T. myrmicaria* Fairmaire et Germain, male; 1, 4 – dorsal view; 2, 5 – lateral view; 3, 6 – ventral view.



**Figs 7–12.** Tillomorphina Lacordaire, habitus.

7–9 – *Lamproclytus elegans* Fisher, male; 10–12 – *Pentanodes dietzii* Schaeffer, male; 7, 10 – dorsal view; 8, 11 – lateral view; 9, 12 – ventral view.



**Figs 13–18.** Tillomorpha Lacordaire, habitus.  
13 – *Euderces longicollis* (Linsley), male; 14 – *E. picipes* (Fabricius), male; 15 – *E. pini* (Olivier), male;  
16 – *E. reichei* LeConte, male; 17 – *Tetranodus rugipennis* Chemsak, male; 18 – *Epropetes atlantica* Martins, female.



**Figs 19–24.** Tillomorphina Lacordaire, habitus.

19–21 – *Epipodocarpus andinus* Bosq, male (dorsal, lateral and ventral views, respectively); 22 – *Pseudomyrmecion ramalium* Bedel, male; 23 – *Cleroclytus banghaasi* (Reitter), male; 24 – *Tillomorphites robustus* Vitali, holotype (after Vitali, 2011, reproduced courtesy of Francesco Vitali).



**Figs 25–30.** *Tillomorpha* Lacordaire, habitus.  
25, 26 – *Epipedocera undulata* (Hope), male (dorsal and ventral views, respectively); 27, 30 – *Halme cleriformis* Pascoe, male and female, respectively; 28, 29 – *Centroclytus* sp. (Borneo), female (dorsal and lateral views, respectively).



**Figs 31–42.** Tillomorpha Lacordaire, male, details.

31, 35 – *Tillomorpha lineoligera* Blanchard in Gay; 32, 36 – *T. myrmicaria* Fairmaire et Germain; 33 – *Euderces longicollis* (Linsley); 34, 41 – *Pseudomyrmecion ramalium* Bedel; 37 – *Pentanodes dietzii* Schaeffer; 38 – *Tetranodus rugipennis* Chemsak; 39 – *Epipodocarpus andinus* Bosq; 40 – *Euderces pini* (Olivier); 42 – *Cleroclytus banghaasi* (Reitter); 31–34 – head, frontal view; 35–42 – head and prothorax, lateral view.



**Figs 43–54.** *Tillomorpha* Lacordaire, details.

43 – *Tillomorpha lineoligera* Blanchard in Gay, male; 44 – *T. myrmicaria* Fairmaire et Germain, male; 45, 50 – *Epropetes atlantica* Martins, female; 46, 49 – *Euderces pini* (Olivier), male; 47 – *E. longicollis* (Linsley), male; 48, 54 – *Centroclytus* sp. (from Borneo), female; 51 – *Pseudomyrmecion ramalium* Bedel, male; 52 – *Cleroclytus banghaasi* (Reitter), male; 53 – *Halme cleriformis* Pascoe, male; 43–48 – pro- and mesosterna; 49–54 – left metepisternum.





**Figs 55–58.** *Clytellus shibatai* Hayashi, male.

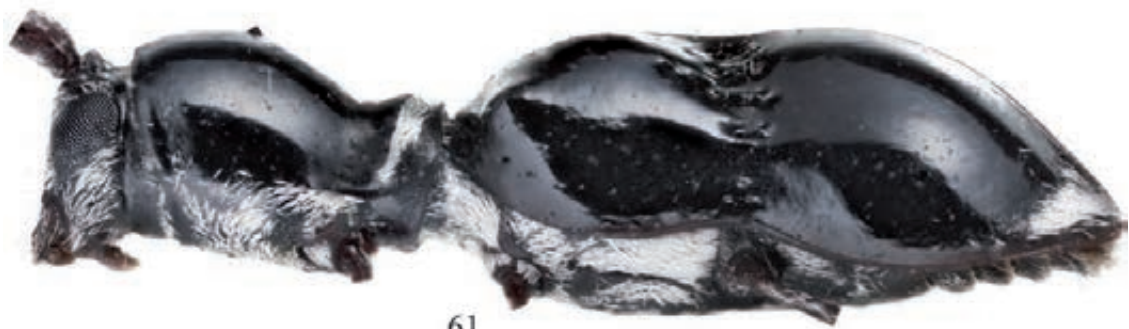
55, 56 – habitus, dorsal and lateral views, respectively (a – constriction in apical one-third of pronotum, b – constriction in front of pronotum base, c – fascia of microsculpture in basal one-third of elytra, d – depression of elytra); 57 – head and prothorax, lateral view (a – area of constriction in front of pronotum base with longitudinal grooves, b – longitudinal groove at bottom of constriction in front of pronotum base, c – curved profile of prosternum); 58 – body cross-section.



59



60



61



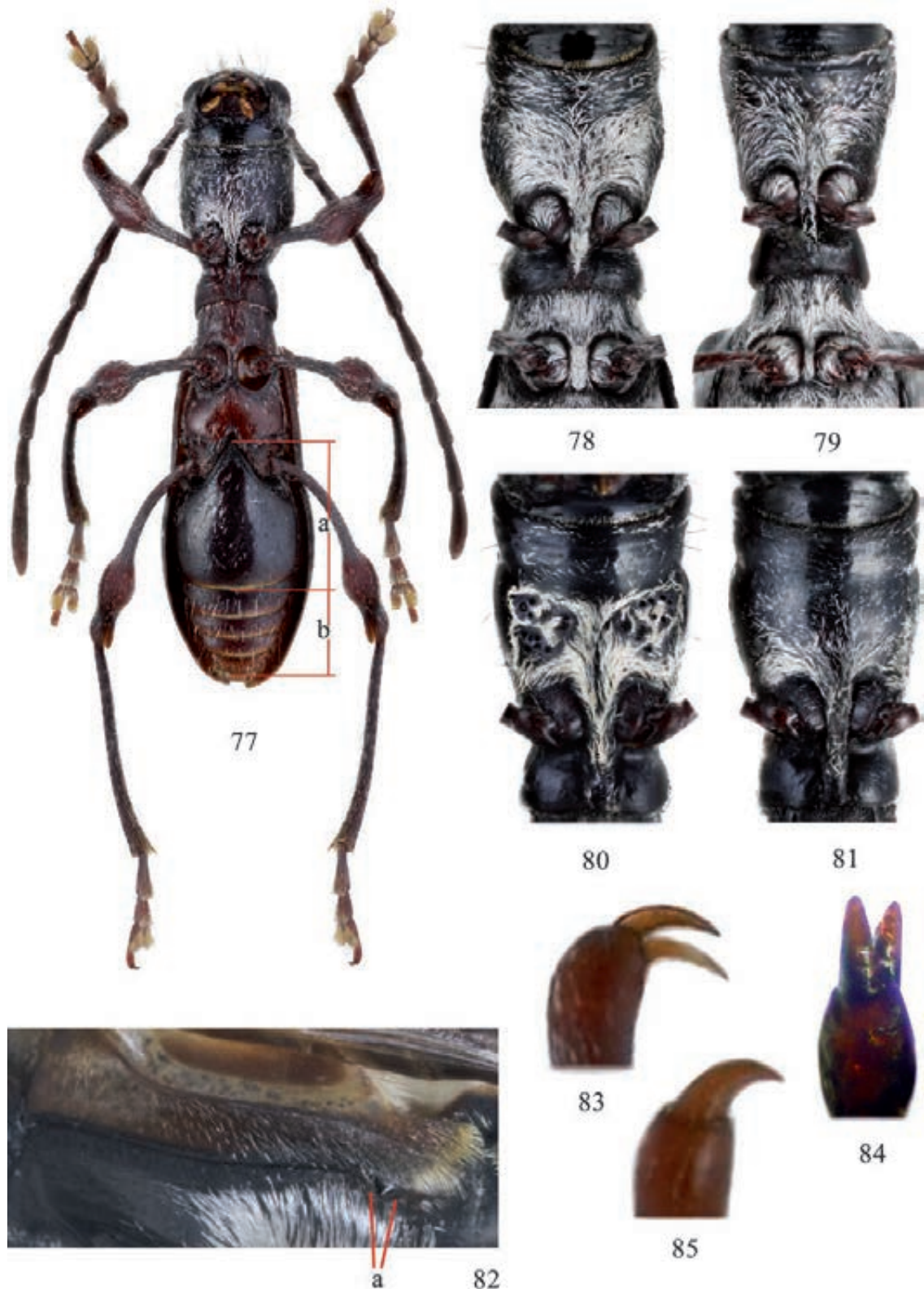
62

**Figs 59–62.** *Clytellus* Westwood, male, habitus, lateral view.  
59 – *C. methocoides* Westwood (from Laos); 60 – *C. canaliculatus* Holzschuh; 61 – *C. mononychus* Holzschuh;  
62 – *C. makarovi* sp. n., holotype.



**Figs 63–76.** *Clytellus* Westwood, details.

63, 68 – *C. westwoodii* Pascoe, female (63 – from Philippines, 68 – holotype); 64 – *C. lobanovi* sp. n., holotype male; 65 – *C. perhentianus* sp. n., holotype male; 66, 69 – *C. malayanus* Hayashi, stat. n., male; 70, 71 – *C. tatancae* sp. n., holotype female; 67 – *C. shibatai* Hayashi, male (see also Fig. 57); 72, 73 – *C. kubani* sp. n., holotype male; 74, 75 – *C. barclayi* sp. n., holotype male; 76 – *C. monilis* Holzschuh, holotype female; 63, 66, 70, 73, 74 – head and prothorax, lateral view; 64, 65 – head, frontal view; 67–69, 71, 72, 75, 76 – pronotum.



**Figs 77–85.** *Clytellus* Westwood.

77 – *C. methocoides* Westwood, male, habitus, ventral view (a – 1<sup>st</sup> visible sternite, b – visible sternites 2–5; NB: specimen with a strongly abraded ventral setation); 78 – *C. elongatus* Pic, male; 79 – *C. mononychus* Holzschuh, male; 80, 81 – *C. malayanus* Hayashi, stat. n., male and female, respectively; 82 – *C. shibatai* Hayashi, male, left metepisternum (a – denticle at apex); 83 – *C. methocoides*, male, claws not fused at base; 84 – *C. dembickyi* sp. n., holotype female, claws partly fused at base; 85 – *C. mononychus*, male, one claw; 78, 79 – pro- and mesosterna; 80, 81 – prosternum.



**Figs 86–92.** *Clytellus elongatus* Pic.

86, 92 – holotype female; 87 – labels of the holotype; 88–91 – male; 89 – head and prothorax, lateral view; 90 – basal part of elytra, lateral view; 91, 92 – pronotum and basal part of elytra, dorsal view.

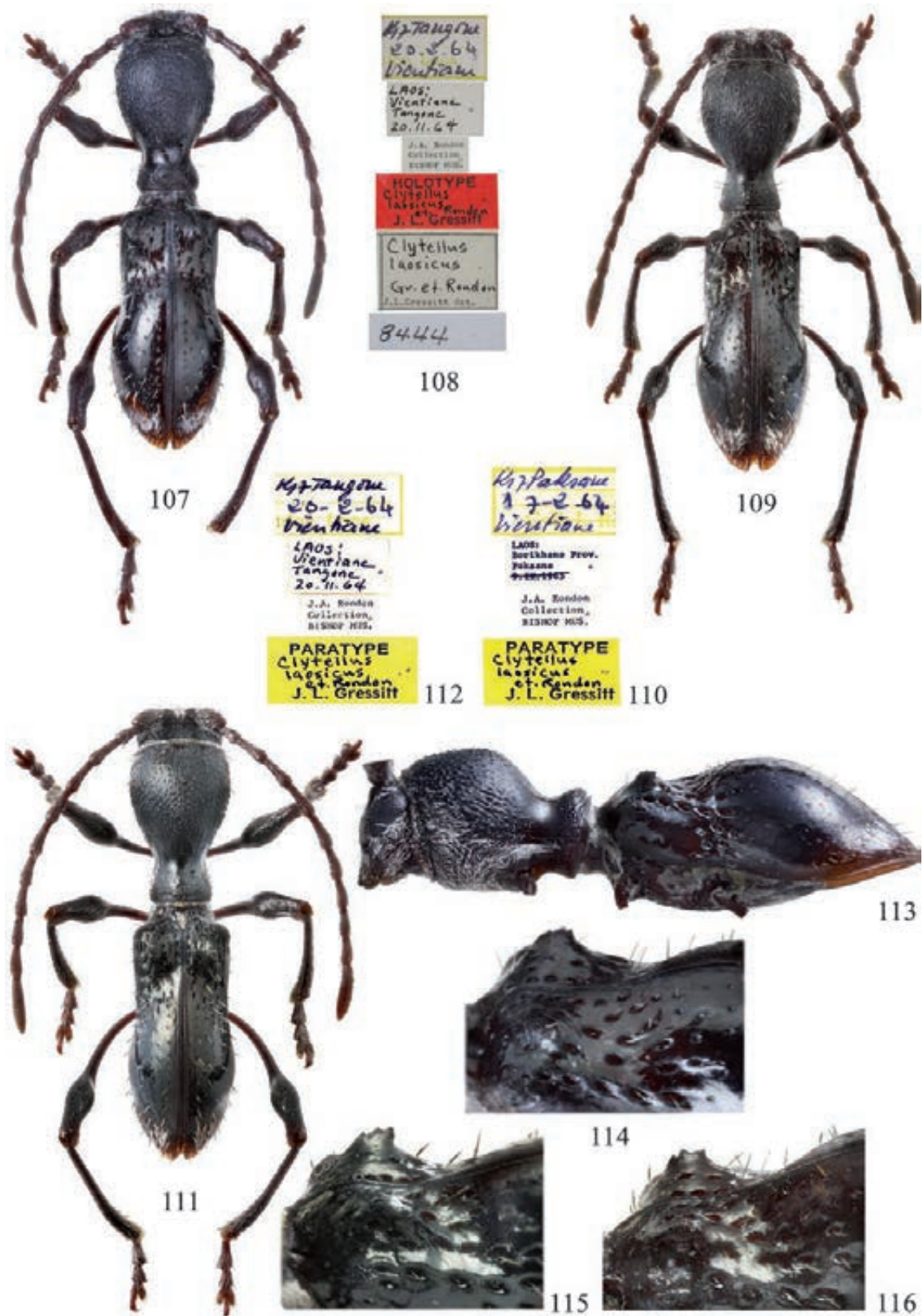


**Figs 93–97.** *Clytellus methocoides* Westwood.  
 93 – holotype female; 94 – labels of the holotype; 95 – male (from China); 96 – female (from Laos); 97 – female (from Vietnam); 93, 95–97 – habitus.



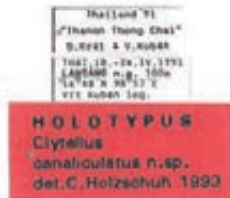
**Figs 98–106.** *Clytellus methocoides* Westwood.

98, 99, 104, 106 – female (from Laos) (98 – photograph by Vítězslav Kubáň); 100, 101 – female (from Vietnam); 102 – male (from China); 103, 105 – male (from Laos); 98, 101 – habitus, lateral view; 99, 100, 102 – elytra, lateral view; 103, 104 – pronotum and basal part of elytra, dorsal view; 105, 106 – prosternum.



**Figs 107–116.** *Clytellus laosicus* Gressitt et Rondon, male.  
 107, 113, 114 – holotype; 108 – labels of the holotype; 109, 116 – paratype (from Paksane, Laos); 110 – labels of the paratype; 111, 115 – paratype (from Tangone, Laos); 112 – labels of the paratype; 107, 109, 111 – habitus, dorsal view; 113 – habitus, lateral view; 114–116 – basal part of elytra, lateral view.

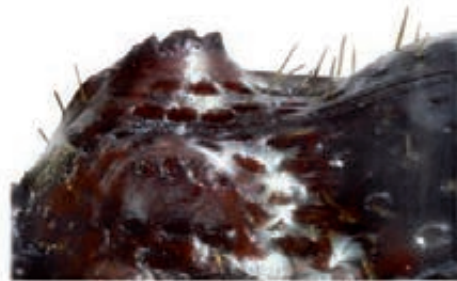




119



121



122

**Figs 117–122.** *Clytellus canaliculatus* Holzschuh.

117, 121 – holotype male; 118, 120, 122 – male (from “Siam, Prae”); 119 – labels of the holotype; 120 – pronotum and basal part of elytra, dorsal view; 121, 122 – basal part of elytra, lateral view.



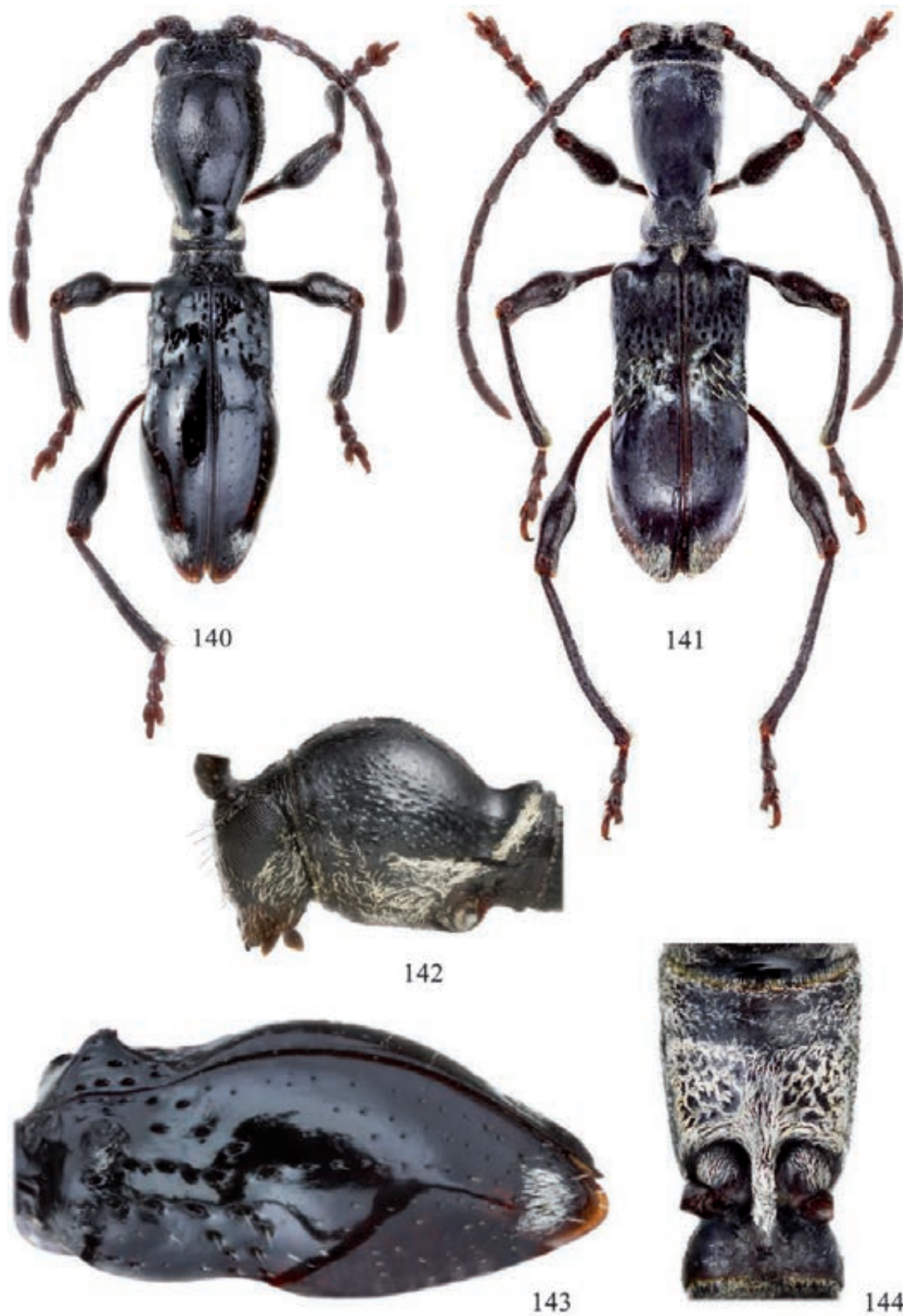
**Figs 123–129.** *Clytellus serratulus* Holzschuh.

123 – holotype male; 124 – labels of the holotype; 125 – female (from Thailand); 126 – female (from Laos, paratype of *C. laosicus* Gressitt et Rondon; 127 – labels of the paratype); 128 – female (from Laos, “allotype” of *C. laosicus* Gressitt et Rondon; 129 – labels of the “allotype”); 123, 125, 126, 128 – habitus.

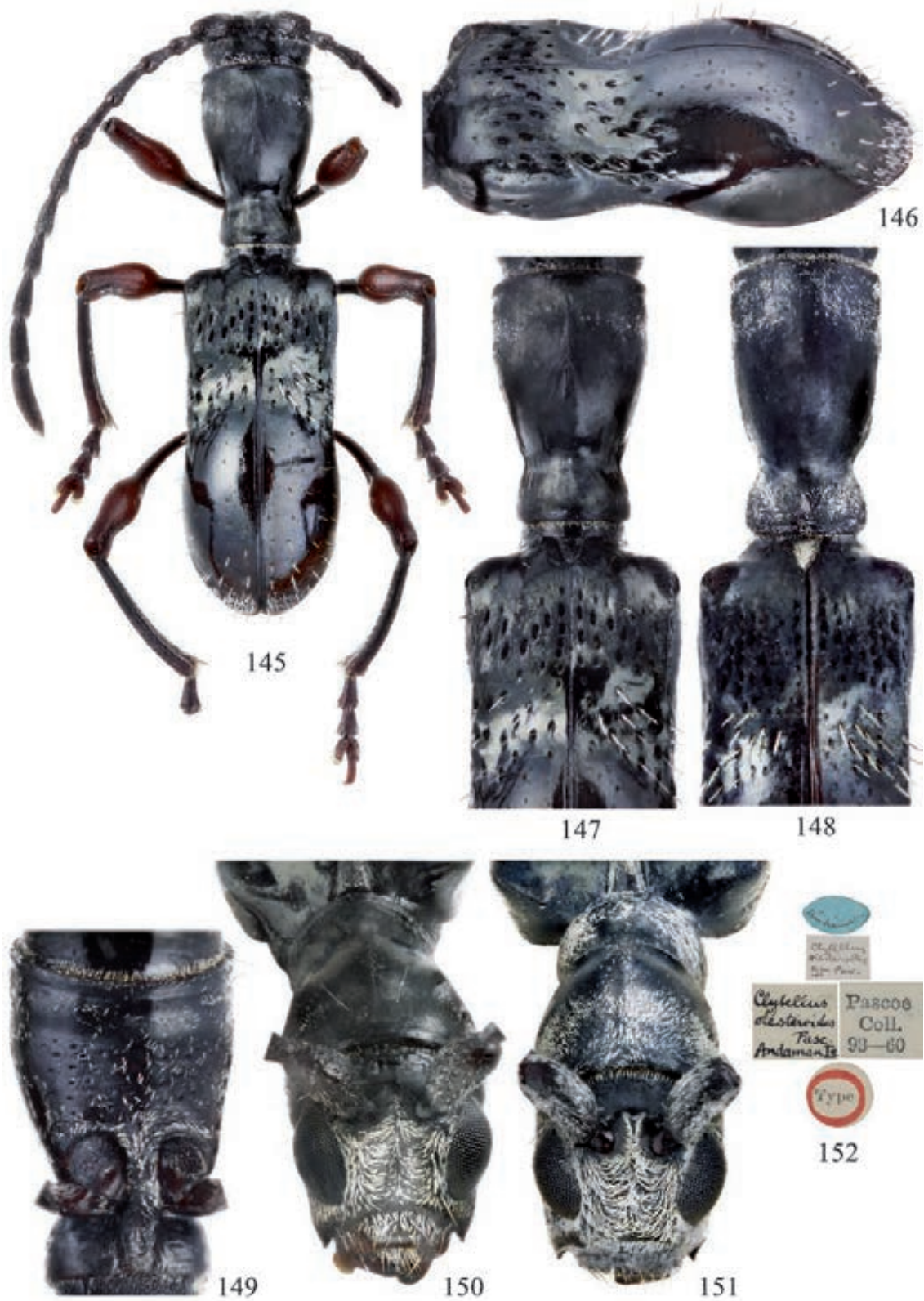


**Figs 130–139.** *Clytellus serratulus* Holzschuh.

130, 133, 139 – female (from Laos, paratype of *C. laosicus* Gressitt et Rondon; 131 – labels of the paratype); 132, 136 – holotype male; 134, 137 – female (from Thailand); 135 – female (from Laos, “allotype” of *C. laosicus* Gressitt et Rondon); 138 – (from Laos, paratype of *C. laosicus* Gressitt et Rondon; habitus and labels see in Figs 126, 127); 130 – habitus, dorsal view; 132, 133 – basal part of elytra, lateral view; 134 – elytra, lateral view; 135 – habitus, lateral view; 136–139 – pronotum and basal part of elytra, dorsal view.



**Figs 140–144.** *Clytellus* Westwood.  
140, 142, 143 – *C. dembickyi* sp. n., holotype female; 141, 144 – *C. olesteroides* Pascoe, male; 142 – head and prothorax, lateral view; 143 – elytra, lateral view; 144 – prosternum.



**Figs 145–152.** *Clytellus* Westwood.

145–147, 149, 150 – *C. gressitti* sp. n., holotype male; 148, 151 – *C. olesteroides* Pascoe, male (151 – holotype; 152 – labels of the holotype); 146 – elytra, lateral view; 147, 148 – pronotum and basal part of elytra, dorsal view; 149 – prosternum; 150, 151 – head and pronotum, frontodorsal view.



**Figs 153–159.** *Clytellus shibatai* Hayashi.  
 153 – holotype male (photograph by Eduard Vives); 154 – labels of the holotype (photograph by Nobuo Ohbayashi);  
 155, 157, 159 – female; 156, 158 – male; 156, 157 – prosternum; 158, 159 – pronotum and basal part of elytra.



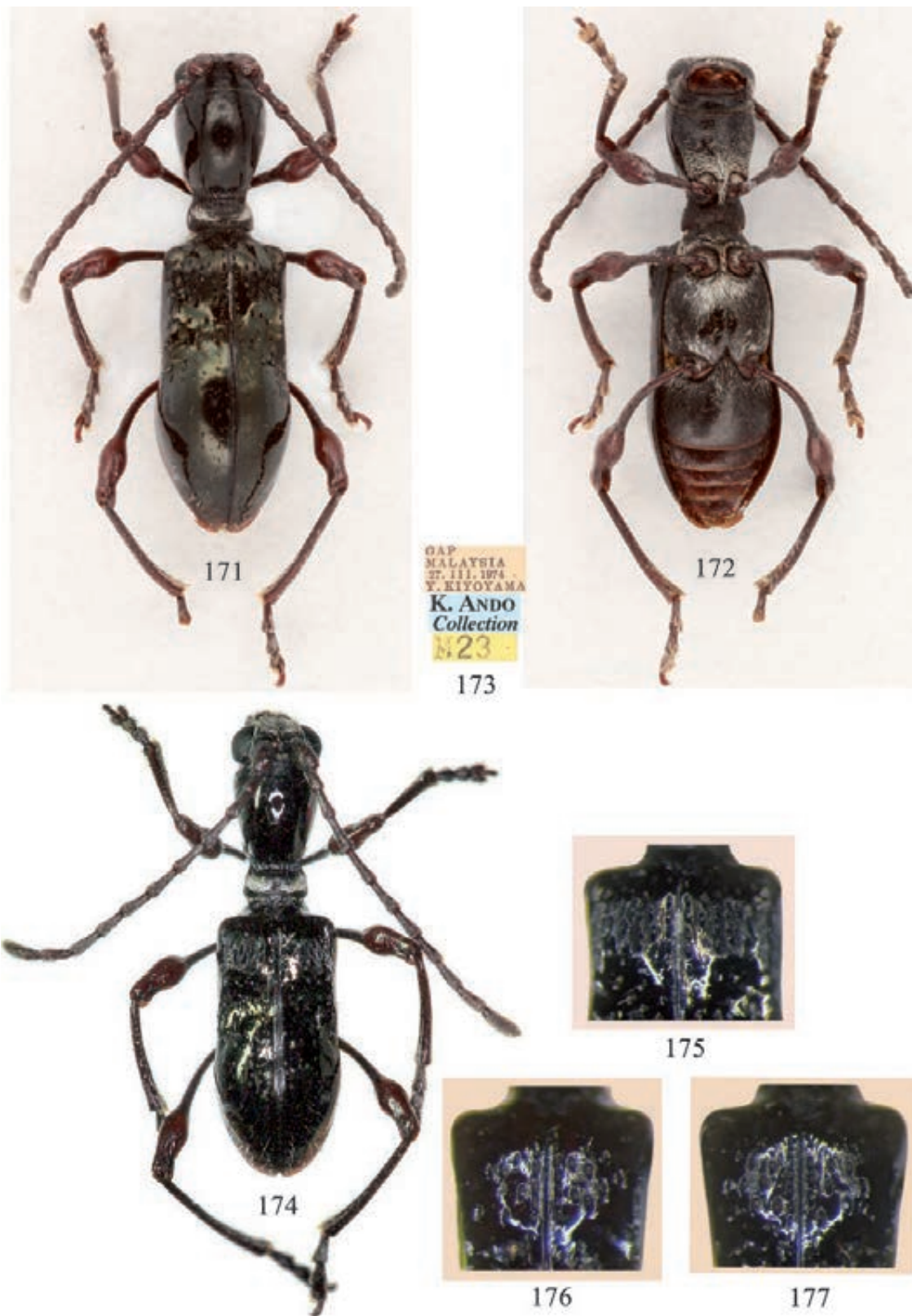
**Figs 160–164.** *Clytellus* Westwood.

160, 163, 164 – *C. vivesi* sp. n., holotype female; 161, 162 – *C. viridipennis* Hayashi, holotype male and its labels, respectively (photographs by Shigehiko Shiyake); 163 – pronotum and basal part of elytra, dorsal view; 164 – head and prothorax, lateral view.



**Figs 165–170.** *Clytellus viridipennis* Hayashi (photographs by Nobuo Ohbayashi).  
 165, 166 – paratype male, habitus, dorsal and ventral views, respectively; 167 – labels of the paratype; 168, 169 – female, habitus, dorsal and ventral views, respectively; 170 – labels.





**Figs 171–177.** *Clytellus* Westwood.

171, 172, 175 – *Clytellus* sp., male (EUM; photographs by Nobuo Ohbayashi); 173 – labels of this specimen, photograph by Nobuo Ohbayashi); 174 – *Clytellus* sp., male (OMNH; photograph by Eduard Vives); 176, 177 – *C. viridipennis* Hayashi (176 – paratype male; 177 – female; photographs by Nobuo Ohbayashi); 171, 174 – habitus, dorsal view; 172 – habitus, ventral view; 175–177 – basal part of elytra, dorsal view.



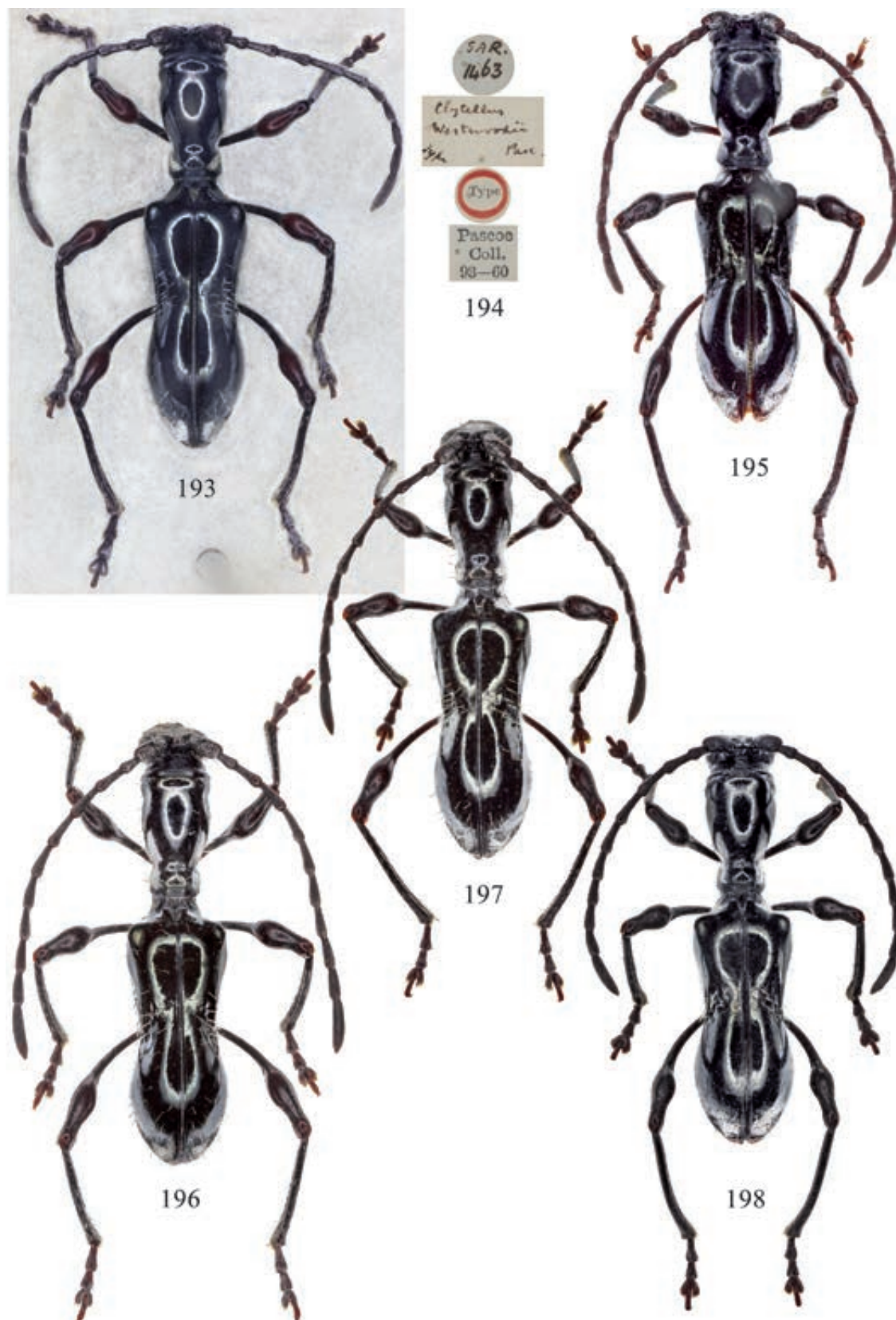
**Figs 178–184.** *Clytellus* Westwood.

178, 179, 182 – *C. monilis* Holzschuh holotype female; 180 – labels of the holotype; 181, 183, 184 – *C. tatianae* sp. n., holotype female; 178, 184 – habitus; 179 – head and prothorax, lateral view; 181 – elytra, lateral view; 182, 183 – pronotum and basal part of elytra, dorsal view.



Figs 185–192. *Clytellus* Westwood.

185, 189, 191 – *C. kiyoyamai* Hayashi, holotype male (photographs by Kiyoshi Ando; 188 – labels of the holotype, photograph by Kiyoshi Ando); 186, 190, 192 – *C. kareli* Holzschuh, holotype female (187 – labels of the holotype); 185, 186 – habitus; 189–192 – basal part of elytra (189, 190 – dorsal view; 191, 192 – lateral view).



**Figs 193–198.** *Clytellus westwoodii* Pascoe.  
 193 – holotype female; 194 – labels of the holotype; 195 – female (from the Philippines); 196 – male; 197 – female (both from South Kalimantan, Indonesia); 198 – female (from western Malaysia); 193, 195–198 – habitus.

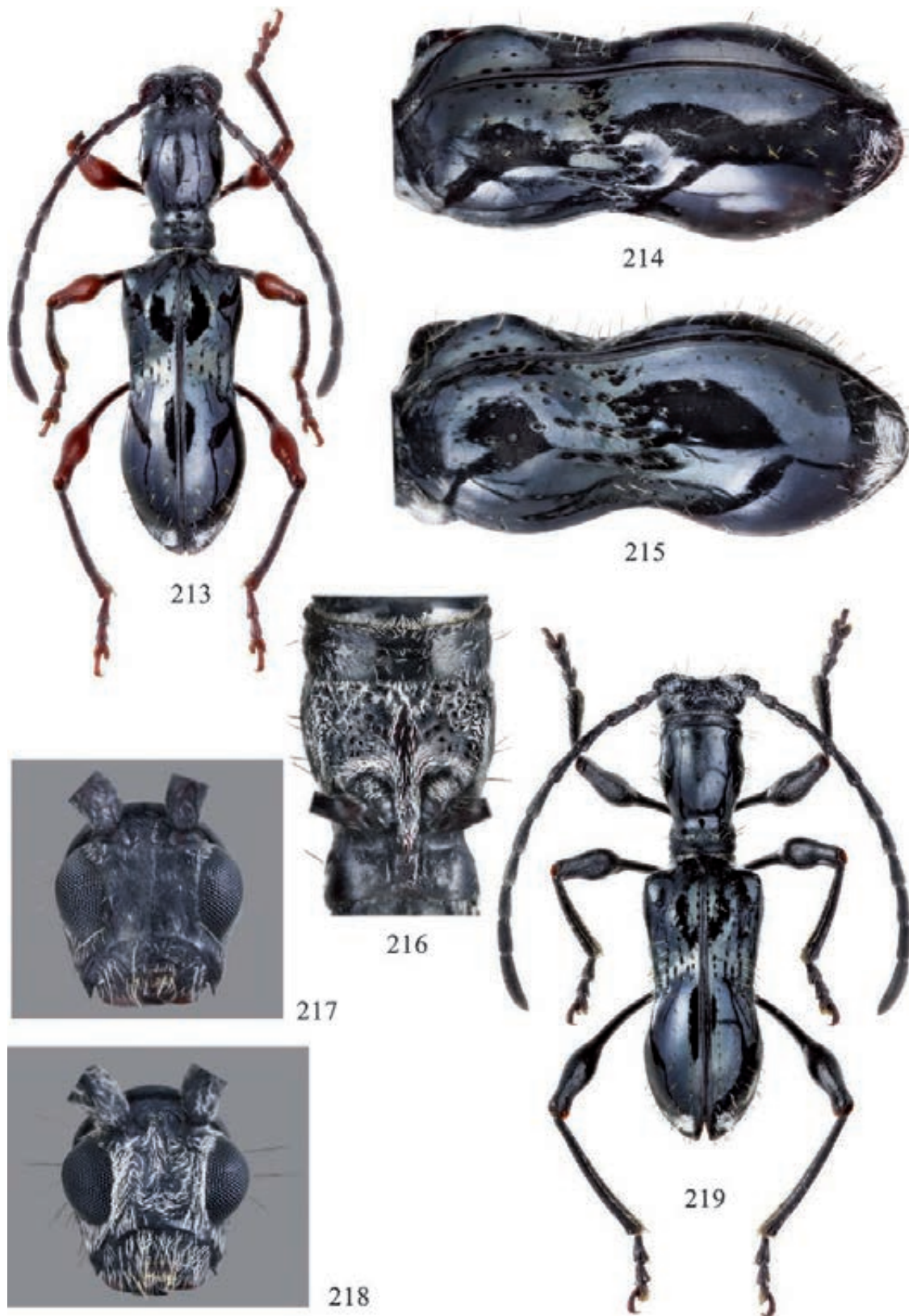


**Figs 199–205.** *Clytellus westwoodii* Pascoe, details.

199 – holotype female; 200, 201, 204 – male (from South Kalimantan, Indonesia); 202, 203 – female (from South Kalimantan, Indonesia); 205 – female (from central Sumatra); 199, 200 – pronotum and basal part of elytra, dorsal view; 201, 203 – prosternum; 202 – elytra, lateral view; 204, 205 – head and prothorax, lateral view.



**Figs 206–212.** *Clytellus malayanus* Hayashi, stat. n.  
 206 – holotype female; 207 – labels of the holotype (both photographs by Eduard Vives); 208, 211, 212 – male; 209, 210 – female; 206, 208, 209 – habitus; 210, 211 – pronotum and basal part of elytra, dorsal view; 212 – elytra, lateral view.



**Figs 213–219.** *Clytellus* Westwood.

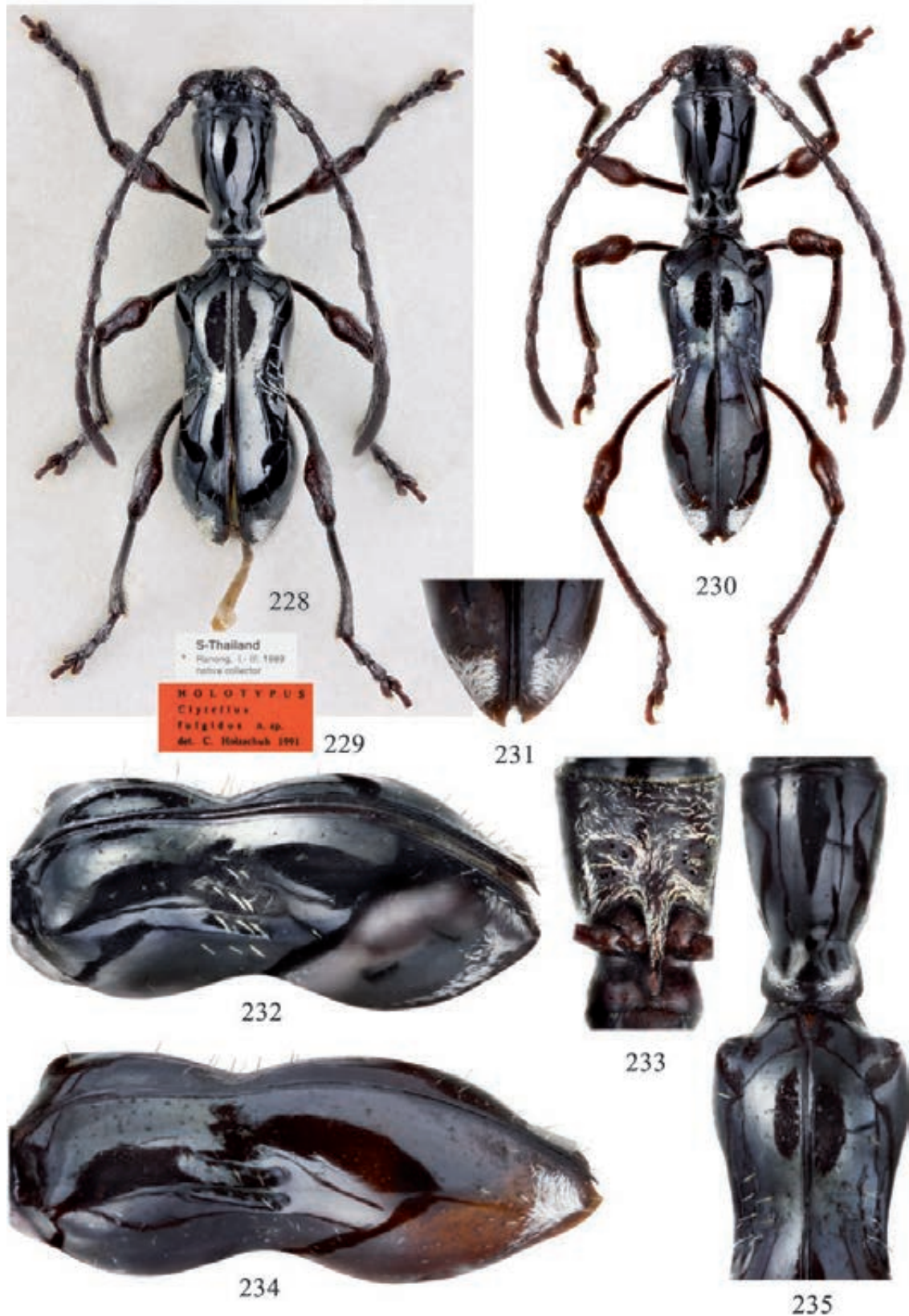
213, 214, 217 – *C. belokobylskiji* sp. n., holotype female; 215, 216, 218, 219 – *C. lobanovi* sp. n., holotype male; 213, 219 – habitus; 214, 215 – elytra, lateral view; 216 – prosternum; 217, 218 – head, frontal view.



**Figs 220–227.** *Clytellus* Westwood.

220, 221 – *C. lobanovi* sp. n., holotype male; 222 – *C. belokobylskiji* sp. n., holotype female; 223–227 – *C. barclayi* sp. n., holotype male; 220, 223 – pronotum and basal part of elytra, dorsal view; 221, 222 – head and prothorax, lateral view; 224 – prosternum; 225 – basal part of elytra, dorsal view (NB: brown marker emphasizing some puncturation forming a w-shaped pattern); 226 – habitus; 227 – elytra, lateral view.





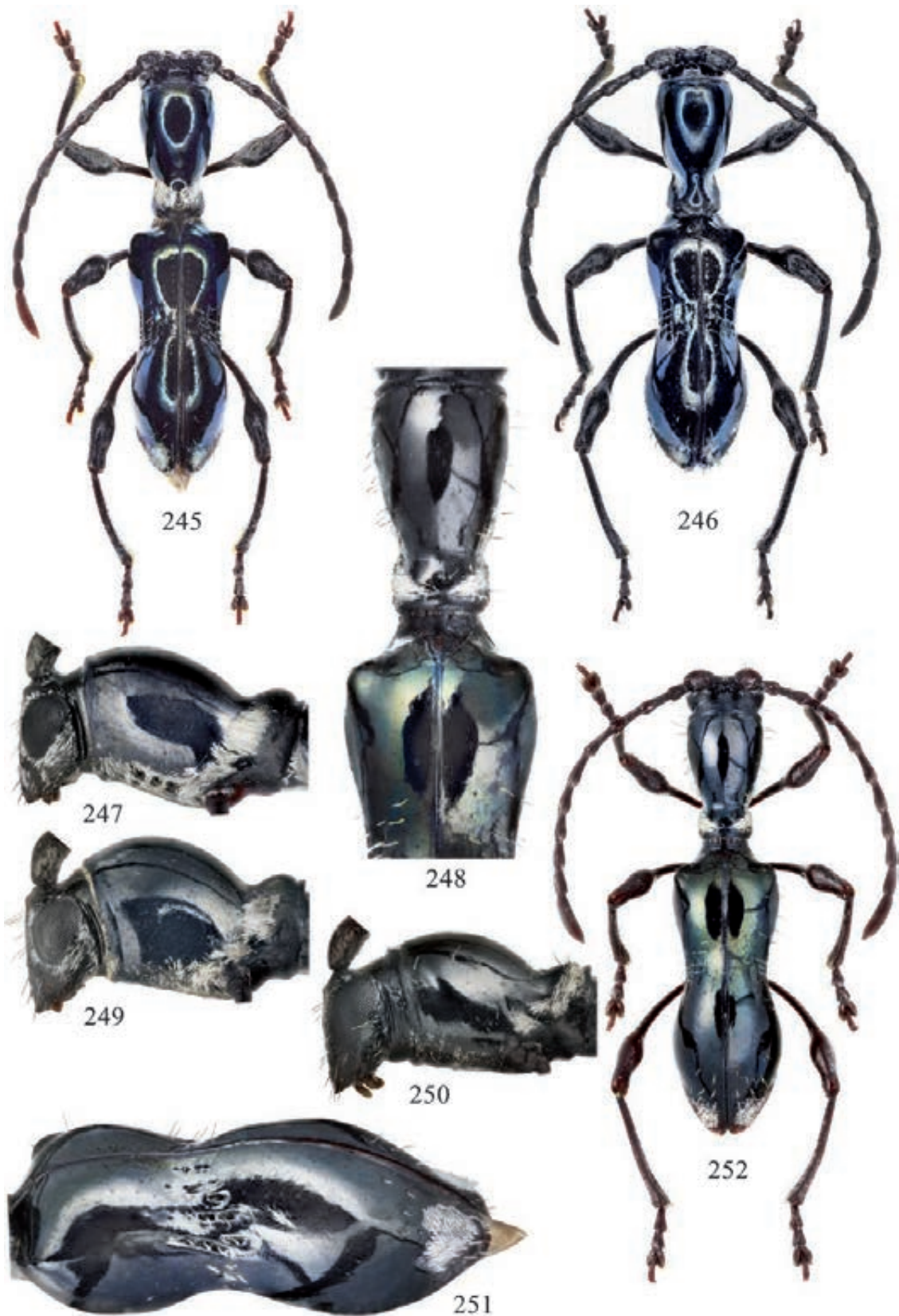
**Figs 228–235.** *Clytellus* Westwood.

228, 232 – *C. fulgidus* Holzschuh, holotype male; 229 – labels of the holotype; 230, 231, 233–235 – *C. kubani* sp. n., holotype male; 228, 230 – habitus; 231 – apex of elytra, dorsal view; 232, 234 – elytra, lateral view; 233 – prosternum; 235 – pronotum and basal part of elytra, dorsal view.



**Figs 236–244.** *Clytellus* Westwood.

236 – *C. selebensis* Gestro, holotype male; 237 – labels of the holotype; 238 – *C. benguetanus* Schultze, holotype male; 239 – labels of the holotype; 240, 241, 243 – *C. selebensis*, male; 242, 244 – *C. benguetanus*, male; 236, 238 – habitus; 240–242 – pronotum and basal part of elytra; 243, 244 – prosternum.

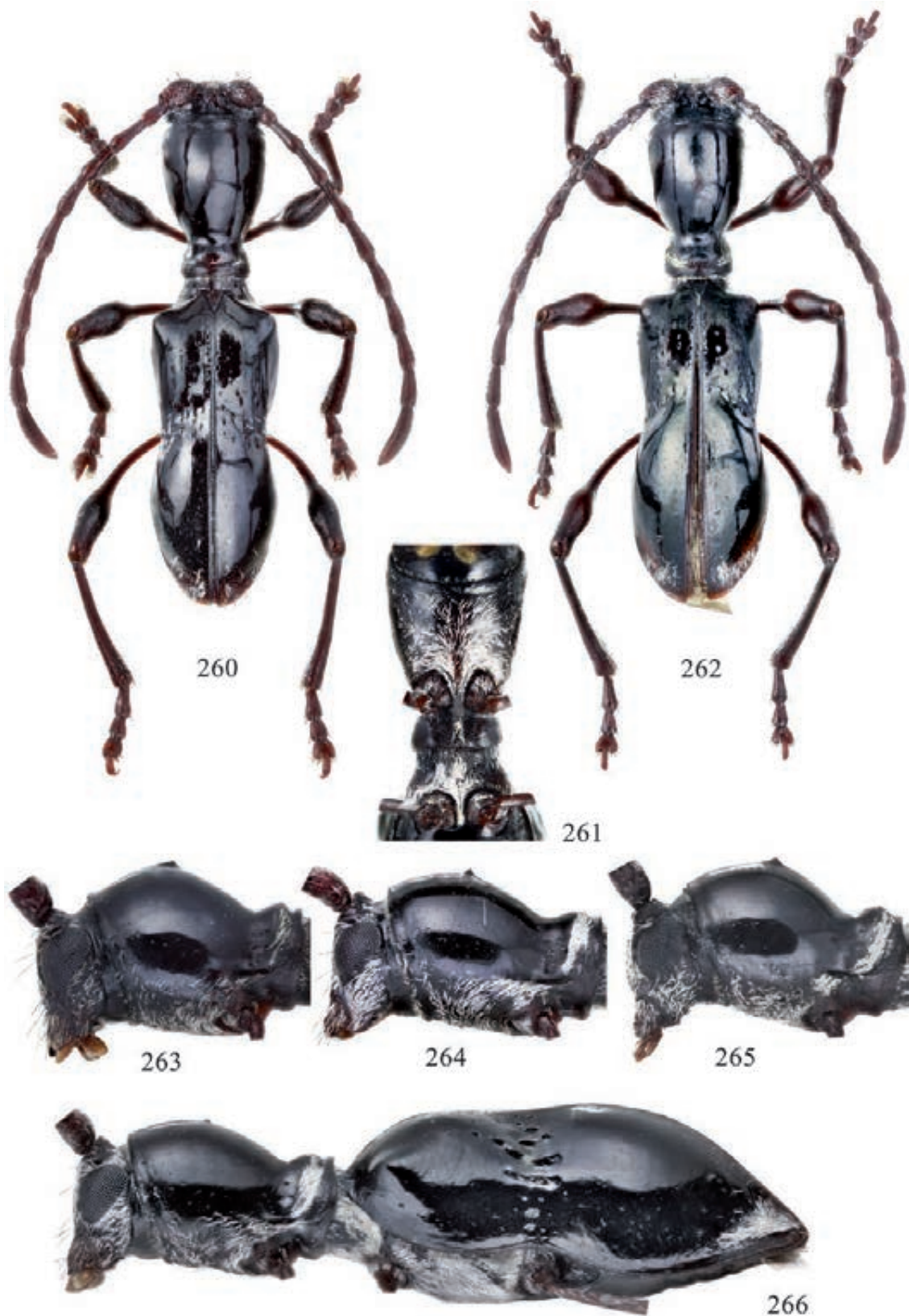


**Figs 245–252.** *Clytellus* Westwood.

245, 247, 251 – *C. selebensis* Gestro, male; 246, 249 – *C. benguetanus* Schultze (246 – male; 249 – female); 248, 250, 252 – *C. kasatkini* sp. n., holotype female; 245, 246, 252 – habitus; 247, 249, 250 – head and prothorax, lateral view; 248 – pronotum and basal part of elytra; 251 – elytra, lateral view.



**Figs 253–259.** *Clytellus mononychus* Holzschuh.  
 253 – paratype male (cAM); 254 – labels of the paratype; 255, 259 – paratype female (cCH); 256 – labels of the paratype; 257, 258 – male (cPV); 253, 255, 257 – habitus; 258, 259 – pronotum and basal part of elytra.



**Figs 260–266.** *Clytellus* Westwood.

260, 261, 263 – *C. makarovi* sp. n., holotype male; 262, 265 – *C. perhentianus* sp. n., holotype male; 264, 266 – *C. mononychus* Holzschuh, male (264 – cPV; 266 – paratype, cAM); 260, 262, 266 – habitus (260, 262 – dorsal view; 266 – lateral view); 261 – prosternum; 263–265 – head and prothorax, lateral view.



**Figs 267–273.** *Clytellus* Westwood.

267, 268, 271, 272 – *C. mononychus* Holzschuh (267 – paratype male, cAM; 268, 271 – male, cPV; 272 – paratype female, cCH); 269, 270 – *C. perhentianus* sp. n., holotype male; 273 – *C. makarovi* sp. n., holotype male; 267–269 – head, frontal view; 270–273 – elytra, frontodorsal view.

### To the reader's attention

Corrections of the misprints and omissions found in the present work have been published elsewhere (Miroshnikov, 2014\*), but are repeated below:

page	column	line	As printed	Correct form
18	left	36	bettles	beetles
23	right	11	metatibae	metatibiae
30	left	6–7	four species	five species
53	right	8	the the type	the type
75	right	4–5	antennomere 4	antennomere 3
75	right	6	antennomere 3	antennomere 4
75	right	13	antennomere 4	antennomere 3
75	right	14	antennomere 3	antennomere 4
92	left	18	fig 1	fig. 1
123	–	2	from Sichuan	from Yunnan
140	left	32	Figs 55–84	Figs 55–85
226	–	3	photograph b	photograph by

*Agastophysis meiyingae* sp. n. is described again as new to fully comply with the provisions of the International Code of Zoological Nomenclature (1999), because, due to an inadvertent omission of the Material section on page 27, right column (see below\*\*), the availability of that name has been jeopardized.

\*Miroshnikov A.I. 2014. A new species of the genus *Agastophysis* Miroshnikov, 2014 (Coleoptera: Cerambycidae) from China and corrigenda to the author's publications of 2013 and 2014. – *Russian Entomological Journal*. Vol. 23. No. 3. Pp. 195–197.

\*\*Missing text fragment: Material. Holotype ♂ [IZAS, IOZ(E) 1905118], China, Xizang Prov., Shannan distr., Naidong, 1981, leg. Xin-Nian Li & Bao-Hai Wang.

Advances in studies on Asian cerambycids

