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Studies on the *Eucibdelus* lineage:

1. *Trichocosmetes* KRAATZ, *Sphaeromacrops* gen.n., *Guillaumius* gen.n., and *Rhyncocheilus* SHARP (Coleoptera: Staphylinidae, Staphylininae)

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Abstract

The paper provides a study on some smaller genera of the *Eucibdelus* lineage (Coleoptera: Staphylinidae, Staphylininae). The genus *Trichocosmetes* KRAATZ, 1859 and two new genera (*Sphaeromacrops* gen.n., *Guillaumius* gen.n.) are treated, together comprising four described and eleven new species. New species: *Trichocosmetes fascipennis* (China), *T. gigas* (Myanmar), *T. inexpectatus* (China), *T. kabakovi* (Vietnam), *T. minor* (China), *T. norae* (Laos, China), *T. vietnamensis* (Vietnam), *Sphaeromacrops gracilis* (India), *S. nepalensis* (Nepal), *S. strigosifrons* (Thailand), *Guillaumius rougemonti* (Thailand), *G. shibatai* (Laos). New combinations: *Trichocosmetes antennalis* (CAMERON, 1932) and *T. varicornis* (COIFFAIT, 1977) are transferred to the genus *Sphaeromacrops*. In addition to that, a new species of *Rhyncocheilus* SHARP, 1889 is described from China: *R. monstrosipes*. The male genitalia of all species represented by males, as well as morphological details of some species, are illustrated. A key to species of *Trichocosmetes* is provided.

Key words: Coleoptera, Staphylinidae, Staphylininae, Staphylinina, *Eucibdelus* lineage, *Trichocosmetes*, *Sphaeromacrops*, *Guillaumius*, *Rhyncocheilus*, new genera, new species, systematics, taxonomy, zoogeography.

Introduction

This is the first of several parts to present the results of preparatory studies for a comprehensive monograph on the *Eucibdelus* lineage. Only a few attempts have hitherto been made to characterize or define this group of genera (e.g. HAYASHI 1997), leaving many problems unsolved. Even the characters to separate the genera, provided by authors like CAMERON (1932) or SCHEERPELTZ (1940) rather led to confusion and erroneous assignments of species. HAYASHI (1997, 1999) introduced a few useful characters, but also has drawn some doubtful conclusions, most likely based on the study of very limited material and by overemphasizing character states which are either highly variable, or show a continuous transition within each genus.

The evaluation of character states in a group of such highly adapted life forms (the majority of species is arboricolous-floricolous) is comparatively difficult, the probability of convergencies must be constantly considered. Some features which seem to be characteristic for the group, like the modified front tibiae, the shape of the labrum or the short keels at the bases of the tergites, are not developed in all species even within one genus. Thus, it is necessary to rather recognize trends than to search for strict synapomorphies. A special case are the genera *Sphaeromacrops* gen.n., *Guillaumius* gen.n. and *Philetaerius* SHARP, having a straight postmandibular ridge (which is bent around the base of the maxilla in all other genera). The latter genus also differs by the shape of the labrum which, in contrast to that of the rest of the group, has a well developed

transparent marginal portion. Because of their phenetic similarity and the presence of other important character states I still treat them as members of the *Eucibdelus* lineage. However, the current concept of this group of genera would probably not stand a cladistic assessment, unless additional character states are discovered to support its monophyly. It is to be hoped that in the subsequent course of this study a satisfactory solution at the generic and higher systematic level will be achieved. Thus, a characterization and a key to the genera of the *Eucibdelus* lineage will be provided in due time.

At the present state of knowledge the following valid genera can be included in this group (in chronological sequence): *Palaestrinus* ERICHSON, 1839; *Eucibdelus* KRAATZ, 1859; *Trichocosmetes* KRAATZ, 1859; *Rhyncocheilus* SHARP, 1889; *Philetaerius* SHARP, 1889; *Phytolinus* SHARP, 1889; *Menoedius* FAUVEL, 1903; *Parapalaestrinus* BERNHAUER, 1923; *Paraphytolinus* HAYASHI, 1999; *Sphaeromacrops* gen.n.; *Guillaumius* gen.n.

Terminology of mandibular dentation and head structures

The mandibular dentation is a very useful character state to subdivide this group of genera. "Incisor" and "mola" are well established terms for the distal and (medio-)proximal portions of the mandible. However, there is no established terminology for the various phenotypes of the dentation of the medial margin. The incisor is usually not modified, but the mola displays a wide range of dentation diversity. In the genera *Palaestrinus*, *Parapalaestrinus* and *Menoedius* the medial margins of both mandibles are symmetrically bi- or tridentate, in all other genera they are asymmetrical. In *Eucibdelus*, the mola of the left mandible is larger than that of the right mandible, slightly bicuspid or truncate, with the medial margin of the mola straight and long. In the remaining genera, the left mandible has an additional, acute tooth which usually originates on the dorsal surface of the mandible. HAYASHI (1999) named this tooth "canine", and used the term "molar" for the remaining portion of the mola. Although these terms might be misleading in a few cases, I deem them a proper terminology, mainly to avoid the permanent use of periphrastic descriptions. The "canine" can be recognized by its isolated position, the ventral edge of the incisor usually runs ventrad of the canine and is confluent with the "molar". This fact is helpful in cases where the "canine" is not distinctly elevated above the level of the "molar", like in *Trichocosmetes*. In *Philetaerius*, however, the interpretation poses difficulties, because the "canine" is shifted mediad and the course of the ventral edge of the incisor is not very clear.

The terminology of the major sutures and ridges mainly follows SMETANA & DAVIS (2000). However, there is a problem with the interpretation of the nuchal and postgenal ridges. At least in this group of genera they cannot be clearly separated. Either both terms refer to the same structure, or they are confluent. In the following I will consequently use only one name: nuchal ridge.

Acknowledgement and abbreviations

The material used for this study was made available by the following institutional and private collections. The help of the respective curators and colleagues is greatly appreciated.

CDP	coll. M. Dvořák, Praha
CKC	coll. P. Krásenský, Chomutov
CKP	coll. O. Kabakov, St. Petersburg
CRL	coll. G. de Rougemont, London
CSO	coll. A. Smetana, Ottawa

CST	coll. Y. Shibata, Tokyo
FMC	Field Museum of Natural History, Chicago (A.F. Newton, P. Parillo)
HUB	Museum der Alexander-Humboldt-Universität, Berlin (M. Uhlig, B. Jäger)
NHML	The Natural History Museum, London (M. Brendell)
NMB	Naturhistorisches Museum, Basel (M. Brancucci)
NME	Naturkundemuseum Erfurt (M. Hartmann, J. Willers)
NMW	Naturhistorisches Museum Wien
SEC	Snow Entomological Collections, Lawrence, Kansas (R. Brooks, J.S. Ashe)

Furthermore, I am indebted to A. Smetana for his valuable comments on the manuscript, particularly for arguments concerning the terminology of the mandibular dentation.

Trichocosmetes KRAATZ

Trichocosmetes KRAATZ 1859: 69

Typus generis: *Staphylinus leucomus* ERICHSON; by monotypy.

List of species:

Trichocosmetes fascipennis sp.n., *T. gigas* sp.n., *T. inexpectatus* sp.n., *T. kabakovi* sp.n., *T. leucomus* (ERICHSON), *T. minor* sp.n., *T. norae* sp.n., *T. reitteri* BERNHAUER, *T. vietnamensis* sp.n.

DESCRIPTION: Large, robust species; head subrectangular to trapezoid or heart-shaped, densely punctate, punctures usually contiguous, to various extent irregular, interstices reduced to sharp ridges; disc sometimes with shiny, impunctate areas; labrum markedly pentagonal, due to distinctly angulate lateral margin; mandibles (Figs. 15, 16) variably shaped, either distinctly extended laterad, lateral portion declivous only basally, with wide and flat mandibular furrow, or not extended laterad, lateral portion entirely declivous, with variably deep mandibular furrow (especially in *T. gigas*, mandibular furrow very narrow and deep); mandibular furrow with long, moderately dense pubescence; medial margin of left mandible with large canine, which is not or only weakly elevated above level of molar, molar with slightly emarginate apex, thus weakly bicuspid, medial margin of right mandible with distinctly bicuspid molar, proximal cusp with truncate and sometimes emarginate apex, distal cusp pointed; segment 3 of maxillary palpi densely setose, basal two segments (particularly segment 2) of labial palpi with very long setae on medial face; last segment of maxillary palpi glabrous or with a few short, inconspicuous setae, last segment of labial palpi distinctly setose; terminal segments of both palpi fusiform, frequently slightly depressed; anterior margin of labium copiously ciliate; submentum with one or two pairs of setae, medial setae very large, lateral pair exceedingly fine or unilaterally absent, rarely with three pairs; submentum usually with 4 larger setae slightly removed from anterior margin, often with an additional seta close to each metatentorial pit, with numerous additional fine setae along anterior margin and on remaining surface; ventral face of head exceedingly densely punctate, punctures separated by less than their diameters; surface (incl. mentum and submentum) with dense microsculpture; nuchal ridge slightly bending mediad; antennae with scapus very long, usually as long as segments 2 and 3 combined, segments 8 - 10 slightly asymmetrical, segment 11 strongly asymmetrical, with one end of apex distinctly extended, apical margin markedly concave; pubescence of head brownish-grey, erect or semi-erect, with intermixed scattered, decumbent, short silvery hairs (these hairs are slightly modified: flatter, wider, almost like very slender scales); pronotum pyriform, widest near anterior angles, sides narrowed toward base in wide concave arc; with large lateral portion deflexed, superior lateral line not visible from above; hypomera small, forming no angle with pronotum; surface densely punctate, but with conspicuous impunctate, shiny patches, two median ones (which are sometimes confluent and form an impunctate midline), a pair of admedian ones, situated at about half length of pronotum, and two sublateral ones, situated in anterior half at about half distance between midline and

lateral margin; pubescence usually as on head, modified silvery hairs variably concentrated in small, rather conspicuous aggregations, preferably around impunctate shiny patches; prosternum carinate, carina variably extended anteriad, markedly elevated above level of lateral margin, without pair of large setae; furcasternum very short; intercoxal depression variably deep, medially (tapering parts of median carina) variably densely pubescent, remaining, depressed portion with moderately dense, usually asperate punctation; scutellum densely and at base usually coarsely punctate, posterior half with more or less heart-shaped patch of dark tomentose pubescence; elytra about as long as wide, distinctly wider than pronotum; sides slightly, arcuately widened in middle, each elytron with two depressions at posterior margin, a larger one near sutural angle, a smaller near lateral angle, causing obtuse gibbosity between depressions, lateral depression more sparsely punctate; first four segments of front tarsi patellate, at least segment 1 (usually segments 1 - 4) to various extent asymmetrical; segment 4 of middle and hind tarsi simple, symmetrical, not bilobed or subbilobed; front tibiae modified, markedly dilated, clavate, without spines (except terminal ones), dorsal apical margin slightly or distinctly concave, apico-lateral angle extended into short, sharply pointed process, bearing a patch of long and dense hairs; at least middle tibiae with spines (exception: *T. gigas*; in this species the ground pubescence of the tibiae is so dense that it is not possible to verify whether spines are present or not); first three or four abdominal tergites with a pair of short carinae at base, usually delimiting basal depression laterally, rarely carinae only developed as narrow, sometimes inconspicuous furrows (in this case basal depressions not delimited laterally); first three visible tergites with paired patches of dark tomentose pubescence; basal depressions basad of dark tomentose patches usually with rusty-red or almost golden pubescence; remaining tergites with mixed rusty-red, golden and silvery pubescence (Remark: the interpretation of the pubescence color pattern may pose difficulties and also depends on the cleanness of the specimen), tergite seven with predominantly dark pubescence, tergite VIII and all sternites entirely silvery pubescent (exception: *T. gigas*, with abdominal segments VII and VIII entirely golden pubescent); male sternite VIII with variably deep medio-apical emargination, but differences between species not very pronounced; posterior margin of tergite VIII frequently narrowly, variably deeply notched medially.

Aedeagus very robust; median lobe broad, rather bulky, face adjacent to paramere usually with irregular subapical carina; paramere bent to left side (ventral view), bearing variable number of peg setae on face adjacent to median lobe; internal sac (Fig. 21) of very characteristic build, very uniform throughout all genera of the lineage.

The genus shares many characters with *Rhyncocheilus*, *Phytolinus*, *Sphaeromacrops* and *Guillaumius*, including the presence of the canine on the left mandible. It differs from *Rhyncocheilus* by the shape of segments 1 - 4 of the front tarsi (which in *Trichocosmetes* are patellate and almost identical to those of *Phytolinus* and *Guillaumius*), from *Phytolinus* by the lack of the carina on the ventral face of the profemur and the long segment 5 of the front tarsi, from *Rhyncocheilus*, and from *Phytolinus* by the shape of the labrum and the fourth segment of the middle and hind tarsi (bilobed and usually asymmetrical in *Rhyncocheilus* and *Phytolinus*). It differs from *Sphaeromacrops* and *Guillaumius* by the shape of the postmandibular ridge, the punctuation of the deflexed parts of the pronotum and the more robust body shape (see also the descriptions of *Sphaeromacrops* and *Guillaumius*).

BIONOMICS: Data on the habitat requirements of the members of this genus are scarce and ambiguous. Although most specimens of *T. leucomus* were obviously caught running on the ground or on the wing (various sources) and *T. reitteri* was collected repeatedly on human faeces (Smetana, pers. comm.), I am nevertheless inclined to assume a preferably arboricolous lifestyle. This is supported not only by the morphological adaptations, but also by a personal observation during my field trip to Laos, when I collected *T. norae*. The locality was a small forest stream in

northern Laos, where the specimens were exclusively found sitting on medium-sized leaves directly above the water surface (at a distance of about 0.5 - 1.0 m from the water). When disturbed, they let themselves drop into the water and escape by being carried away by the current. However, no predatory activity could be observed. It seems that in search of prey they frequently visit dung, probably also carrion. At any rate, no species of that genus has ever been observed to be floricolous.

Key to species of *Trichocosmetes*

- 1 Tergites VII and VIII (5th and 6th visible) entirely covered by golden pubescence; spines on middle and hind tibiae not visible (lacking?); head distinctly widened posteriad, almost heart-shaped *T. gigas*
- Tergite VIII entirely covered by silvery pubescence, tergite VII dark; at least middle tibiae with conspicuous spines; head not widened posteriad, tempora parallel or convergent posteriad 2
- 2 Silvery pubescence on elytra extensive, very dense and long, pattern very conspicuous 3
- Silvery pubescence on elytra inconspicuous, very short, shorter than surrounding dark pubescence, pattern inconspicuous 6
- 3 First 3 visible tergites without or with inconspicuous carinae at base, basal depression not delimited laterally; eyes markedly shorter than tempora; labrum moderately densely punctate, clypeus and labrum with distinct isodiametrical microsculpture *T. fascipennis*
- At least first 3 visible tergites with a pair of very conspicuous carinae at base, delimiting basal depression laterally; eyes as long as, or longer than tempora, if markedly shorter, then labrum densely and coarsely punctate, and clypeus and labrum without isodiametrical microsculpture 4
- 4 Lateral faces of middle and hind tibiae with conspicuous row of stout, dark spines; abdominal tergites with fine, almost stitch-like punctation *T. leucomus*
- Hind tibiae without spines (except terminal ones); at least lateral portions of first two visible tergites with numerous large, almost pit-like punctures 5
- 5 Eyes very large, longer than tempora *T. minor*
- Eyes small, shorter than tempora *T. inexpectatus*
- 6 Front legs yellow (lateral face of femur and dorsal face of tibia to some extent darkened); spines on hind tibiae stout, clearly visible amid ground pubescence; lateral margin of labrum markedly obtusely angulate *T. norae*, *T. kabakovi*
- Front legs entirely black; spines on hind tibiae rather fine, almost inconspicuous amid ground pubescence; lateral margin of labrum right-angled 7
- 7 Patch of dark tomentose pubescence on 3rd visible tergite markedly extended laterad, almost reaching postero-lateral angle of tergite; sides of pronotum with sinuate emargination in front of base shallow; eyes conspicuously longer than tempora (ratio 1.17 - 1.29); posterior portion of head only weakly vaulted above level of neck *T. vietnamensis*
- Patch of dark tomentose pubescence on 3rd visible tergite hardly extended laterad; sides of pronotum with very distinct sinuate emargination in front of base, constriction almost like bottle-neck; eyes as long as or inconspicuously longer than tempora (ratio 1.00 - 1.05); posterior portion of head strongly vaulted above level of neck *T. reitteri*

Trichosometes leucomus* (ERICHSON)Staphylinus leucomus* ERICHSON 1839: 362; KRAATZ 1859: 70*Staphylinus cinctus* KOLLAR et REDTENBACHER 1848: 504*Rhyncocheilus franzi* COIFFAIT 1976: 247; SCHILLHAMMER 1994: 74

TYPE MATERIAL: *Staphylinus leucomus*: There is one specimen (♂) in the collection of the HUB bearing the following labels: "Nepal. [handwritten on small yellow label] \ 21923 \ Hist.-Coll. (Coleoptera) Nr. 21923 or 21925 Staphylinus spec. Nepal (N°21925) or Bengalen (N°21923) Zool. Mus. Berlin \ Trichosometes leucomus Er. Det. J. Müller" (HUB). According to an information by Bernd Jäger, all Erichson types of species described from the Hope collection are missing in the HUB. In the Hope collection (Oxford), too, there was no specimen of *Staphylinus leucomus*. The same is true for *Palaestrinus sykesii* ERICHSON, described from the same collection. Thus, the status of the above specimen is doubtful.

Staphylinus cinctus: 2 syntypes (♂ ♀): "Hügel 81 \ cinctus Rdt. Kaschm. [only ♂ specimen] \ leucomus Er. det. Bernhauer" (NMW).

Rhyncocheilus franzi: **Holotype** ♂: "Umg. Maharigaon 3000 - 3500 m Pa 213 [on underside] \ Gebiet von Jumla Westnepal, lg.H.Franz \ TYPE \ Rhyncocheilus franzi H. Coiffait det. 1976 \ Trichosometes leucomus Er. det. A.F.Newton 1989" (NMW).

DESCRIPTION: 13.0 - 18.5 mm long (8.5 - 9.5 mm, abdomen excluded; 10.5 mm in the Yunnan specimen). - Black, rather opaque; head (including labrum) and pronotum with dark metallic, olivaceous-green or brassy-green lustre; impunctate, shiny patches on pronotum with purplish-violaceous iridescence; surface of scutellum and elytra with inconspicuous metallic lustre; abdominal tergites black, posterior margins narrowly and obscurely dark rufo-brunneous; mandibles yellowish-brown to rufo-brunneous, medial margin and base of mandibular furrow to variable extent blackened; maxilla to a large extent dark brown, last segment of maxillary and labial palpi dark brown to black, rarely only tips of palpi blackened; antennae with basal segment yellowish-red, segment 2 rufo-testaceous with black base and frequently darkened apical portion, segment 3 usually entirely black, segments 4 - 8 black with reddish base, brightness of red color increasing distad, segments 9 - 11 usually entirely black; front legs yellow, front femora usually with infusate basal portion, mid and hind legs usually entirely black, femora sometimes brunneous; tarsi black.

Head slightly to markedly trapezoid, across eyes distinctly wider than long (ratio 1.35 - 1.37, 1.25 in the Yunnan specimen); eyes slightly prominent, distinctly longer than tempora (ratio 1.25 - 1.50, 1.15 in the Yunnan specimen), tempora slightly to markedly convergent; shape of labrum variably pentagonal, lateral margin obtusely angulate, margin with dense row of shorter and a sparser row of very long yellowish setae, surface densely and rugosely punctate; mandibles distinctly extended laterad, lateral portion declivous only basally, mandibular furrow wide and flat; area between eyes rather flat, surface of head somewhat uneven, densely punctate, punctures rather irregularly shaped (from round to penta- or hexagonal), contiguous, small ridges between punctures very shiny; clypeus with much finer, shallower and less dense punctation, separated from vertex by narrow impunctate line (rarely this narrow line is inconspicuous and the coarse punctation almost reaches the anterior margin); antennae with segment 1 long, about as long as segments 2 and 3 combined, segment 3 about 1.5 times as long as segment 2, segments 4 - 7 markedly oblong, segments 8 - 10 about as long as wide, segment 11 at not extended side about as long as segment 10; pronotum inconspicuously longer than wide (ratio 1.03 - 1.05, 1.08 in the Yunnan specimen), medial longitudinal shiny patches extensive, almost forming impunctate midline, admedian patches comma-like, pointing postero-laterad, sublateral patches irregularly rounded; punctation as dense as on head, but punctures less deep, regular, slightly umbilicate; pubescence as on head; elytra finely and very densely punctate, punctures almost contiguous, subhumeral depressions without microsculpture, between punctures very shiny; with extensive, long, silvery pubescence, except basal third of elytra, a small band at posterior margin and a small spot at suture with dark rusty-red pubescence; posterior half of elytra with numerous

evenly distributed, erect or semi-erect golden setae, very conspicuous in dark posterior portion, apical margin with a fringe of short hairs and numerous very long, fine golden setae; middle tibiae markedly bisinuate curved, hind tibiae less markedly curved, both bearing numerous stout spines, distal two thirds of middle and hind tibiae with long but moderately dense, silvery pubescence, surface of tibiae clearly visible; middle and hind tarsi rather stout; abdomen with first three or four visible tergites bearing a pair of carinae delimiting basal depression; punctation very fine, stitch-like; size of punctures uniform on all tergites, portion laterad of carinae usually with more profound microsculpture of transverse meshes, posterior half very shiny; paired patches of dark tomentose pubescence on first two visible tergites of equal size, on third visible tergite slightly extended laterad.

Aedeagus (Figs. 1, 2) slightly variably shaped, especially paramere of variable width.

ADDITIONAL MATERIAL EXAMINED:

I N D I A: UTTAR PRADESH: Mussorie, Dhanolti, 11. - 13.VII.1989, 2250 m, leg. A. Riedel (NMW); Umg. Dhanolti, 2200 - 2400 m, 30°25'N 78°15'E, 11. - 13.VII.1989, leg. M. Hiermeier [15-17] (NMW); Uttarkashi, 1158 m, Bhaghirathi riv., 21.X.1997, leg. Štátný (CKC).

N E P A L: JUMLA: Env. Talphi, 17. - 25.IX.1972, leg. H. Franz [Pa 186-187] (NMW); Sinja Khola between Chaunta and Neurigad, leg. H. Franz [Pa 213] (NMW); Maharigaon, 29°20.03'N 82°22.34'E, 3200 m, 21.VI.1997, leg. M. Hartmann (NME); Lamri - Jumla, 2600 - 2400 m, 29°18'-16'N 82°16'-11'E, 22.VI.1997, leg. M. Hartmann (NME, NMW); PARBAT: Ghoropani, 6.VI.1992, 2800 - 3200 m, leg. J. Moravec (NMB, NMW).

C H I N A: YUNNAN: "CHINA, N. W. Yunnan N. of Li jang [most likely Lijiang]: Jade Dragon Mt., 3200m, 12. VI. 1998 A. Gorodinski leg." (CST).

REMARK: The specimen from Yunnan differs slightly by being larger and more robust, and by relatively longer tempora. However, the shape of the aedeagus does not differ from those of the Himalayan specimens.

DISTRIBUTION: The species is at present known from the western portion of the Himalaya (northwestern India, Nepal, Pakistan (Smetana, pers. comm.)) and from southwest China (Yunnan).

Trichocosmetes fascipennis sp.n.

Holotype ♂: "China (Sichuan) Paß zw. Ya'an u. Fulin (Wa-shan olim) 2200m 16.VI 6./7.VII. Heinz leg. 1995" (CSO).

Paratype ♀: "China m., Sichuan m., 1999 pass Xiahe - Hongxi Ta Yan Pint, 17.-25.5. Dr. Vlad. Benes lgt., 3000m" (CDP).

DESCRIPTION: 17.4 - 21.8 mm long (10.0 - 11.0 mm, abdomen excluded). - Entirely black, including appendages and mouthparts (female specimen), or lateral margin of labrum, and mandibles and mouthparts to some extent rufo-brunneous (male specimen); base of antennal segments narrowly and obscurely reddish; metallic lustre of head and pronotum very indistinct.

Head rounded quadrangular, 1.17 - 1.28 times as wide as long; eyes hardly prominent, small; tempora subparallel, much longer than eyes (ratio 1.41 - 1.61), narrowed toward neck in regular arc; labrum moderately densely, not rugosely punctate, surface with distinct isodiametrical microsculpture, lateral margin almost right-angled, margin with dense row of pale setae with dark base, and a sparse row of long dark setae; mandibles not markedly extended laterad, lateral portion distinctly declivous; area between eyes distinctly vaulted, vertex almost domed medially at level of posterior margin of eyes, surface of head rather uneven, densely and coarsely punctate, punctures contiguous, even more irregularly shaped than in *T. leucomus*; clypeus almost glabrous, except for pair of large setae and a sparse row of finer setae close to anterior margin, surface of clypeus with distinct isodiametrical microsculpture; pubescence of head as in *T.*

leucomus; antennae shorter and stouter than in *T. leucomus*, slightly variable (sexual dimorphism ?); male with segment 10 slightly transverse, segment 11 at not extended side markedly shorter than segment 10 (ratio 0.5); female with segment 10 about as long as wide, segment 11 at not extended side only slightly shorter than segment 10 (ratio ca. 0.8); pronotum inconspicuously longer than wide (ratio 1.01 - 1.06); in shape similar to that of *T. leucomus*, but surface more uneven, basal portion more abruptly declivous; impunctate, shiny patches very distinct, more distinctly elevated than in *T. leucomus*, medial longitudinal ones forming almost complete impunctate midline (in the male specimen the midline becomes somewhat obsolete at level of admedian patches), admedian patches irregularly rounded, sublateral patches comma-like, pointing antero-laterad; punctation and pubescence hardly differing from that of *T. leucomus*; elytra similar to those of *T. leucomus*, but integument darker with hardly any metallic reflex; subhumeral depression with distinct microsculpture; band of silvery pubescence slightly less extensive, especially at suture somewhat narrower; posterior half without erect golden setae, long setae on apical margin rather stout; middle tibiae weakly bisinuate curved, hind tibiae not curved; middle tibiae spinous, hind tibiae without spines, pubescence of middle and hind tibiae and shape of respective tarsi as in *T. leucomus*; abdominal tergites without sharp carinae at base, on first two visible tergites with rudiments indicated by short, flat, oblique furrows; entire surface of tergites opaque due to distinct isodiametrical microsculpture; punctation fine, moderately dense, uniform, except for basal depressions, where punctation is much denser; patches of dark tomentose pubescence on first two visible tergites of equal size, on third visible tergite much larger.

Aedeagus: Fig. 3.

ETYMOLOGY: The specific epithet is derived from the Latin words *fascia*, -ae (band) and *penna*, -ae (wing), and refers to the conspicuous transverse band of silvery pubescence on the elytra.

DISTRIBUTION: The species is at present known only from two places in southern Sichuan, China.

Trichocosmetes inexpectatus sp.n.

Holotype ♀: "CHINA: Shaanxi, Qinling Shan 6 km E Xunyangba 1000 - 1300 m, 23.V.-13.VI.2000, leg. C. Holzschuh" (NMW).

DESCRIPTION: 17.6 mm long (8.6 mm, abdomen excluded). - Black; foreparts with dark olivaceous-green metallic lustre, but less distinctly than in *T. leucomus*; femora obscurely rufo-brunneous, palpi dark reddish-testaceous, with last segment of maxillary and labial palpi conspicuously darker, mandibles dark reddish-testaceous with medial margin to some extent and mandibular furrow entirely black.

Head rounded quadrangular, slightly wider than long (ratio 1.16), eyes hardly prominent, small; tempora parallel, longer than eyes (ratio 1.3), straight for short distance behind eyes, narrowed toward neck in regular arc; labrum densely and very coarsely punctate, punctures forming irregular transverse rugae, surface without additional microsculpture, lateral margin almost right-angled, margin with dense row of rather long, pale setae and a few (5 - 6 on each lobe) very long dark setae; mandibles not markedly extended laterad, lateral portion distinctly declivous; area between eyes moderately vaulted, surface even, punctation of head dense, punctures partly confluent and forming longitudinal rugae in anterior half, in posterior half more regular, but continuity of punctation frequently interrupted by small shiny areas; clypeus less densely and less deeply punctate, medially even impunctate, without any microsculpture, very shiny; pubescence as in *T. leucomus*; proportions of antennal segments as in *T. leucomus*; pronotum as

long as wide, almost as wide as head, surface rather even; posterior and anterior medial longitudinal shiny patches clearly separated, not forming continuous impunctate midline, admedian patches comma-like, pointing postero-laterad, sublateral patches very indistinct, indicated only by a slight elevation of less densely punctate area and a small densified patch of silvery pubescence; punctuation comparable to that of *T. leucomus*, but punctuation not umbilicate; elytra densely and rather coarsely punctate, punctures distinctly larger and deeper than in preceding two species; subhumeral depressions with faint traces of microsculpture; pubescence similar to that of *T. fascipennis*, but silvery pubescence reduced to very narrow band near suture; middle tibiae markedly bisinuate curved, hind tibiae less markedly curved, middle tibiae spinous, hind tibiae without spines, distal two thirds of middle and hind tibiae with very dense, silvery pubescence, surface of tibiae hardly visible; middle and hind tarsi more slender than in preceding two species; first four visible tergites with pair of sharp carinae at base, delimiting basal depression, punctuation in depressions fine, stitch-like, laterad of carinae with numerous pit-like punctures, especially on first two visible tergites; patches of dark tomentose pubescence on first two visible tergites of equal size, those on third visible tergite much larger, confluent medially; basal depressions of first three visible tergites with dark golden pubescence.

Male unknown.

ETYMOLOGY: *Inexpectatus* (Latin) means "unexpected" and refers to the fact that I did not expect a member of this genus, or even of this lineage, to occur this far north in continental Asia.

DISTRIBUTION: The species is at present known only from the type locality.

Trichosmetes minor sp.n.

Holotype ♂: "Kuatun (2300m) 27,40n.Br. 117,40ö.L. J.Klapperich 1.5.1938 (Fukien)" (NMW).

Paratypes (6 exs.): C H I N A: FUJIAN: 4 exs.: same data as holotype (NMW); 1 ex.: same data as holotype but "11.5." (NMW); 1 ex.: C H I N A: JIANGXI: Jinggang Shan, env. Ciping, 2. - 14.VI.1994 (NMW).

Additional material: TAIWAN: 2 exs.: "Near Mt. LALASHAN Toayuan - Hsien, TAIWAN (1600 m) July 23rd Y. Shibata leg." (CST). – These specimens differ from the continental specimens by the less transverse head and the parallel tempora. They might represent a subspecies or even belong to a closely related new species, but the male specimen is lacking the aedeagus. Therefore an interpretation is not possible at the moment.

DESCRIPTION: 12.3 - 15.7 mm long (6.3 - 7.5 mm, abdomen excluded). - Black, foreparts with dark olivaceous-green metallic lustre; impunctate, shiny patches on head and pronotum with magenta and blue iridescence; labrum black; front legs yellowish red, mid and hind legs rufo-brunneous, ventral face of protibia, lateral face of profemur, medial faces (frequently distal two thirds) of middle and hind tibiae infusate, tarsi black; mandibles dark reddish-testaceous with medial margin to some extent and mandibular furrow entirely black; palpi dark reddish-testaceous to black-brown, if reddish-testaceous, then last segment conspicuously darker; antennae dark brown to black with bases to various extent reddish-testaceous (except segment 3 which is usually entirely black).

Head subrectangular to trapezoid, 1.23 - 1.26 times as wide as long; eyes large, 1.18 - 1.36 times as long as more or less convergent tempora (length of tempora variable, thus the wide ratio range); labrum rather densely and coarsely punctate, punctures isolated, not forming rugae, surface with microsculpture of very small, short, almost scaly meshes, lateral margin variably shaped, obtuse-angled (Fujian specimens) to right-angled (Jiangxi specimen), marginal setation similar to that of *T. leucomus*, but long setae darker; mandibles markedly extended laterad, lateral portion weakly declivous, mandibular furrow wide and flat; area between eyes moderately vaulted, surface of head rather uneven, punctuation very dense and coarse, punctures irregular, between antennal insertions becoming longitudinal; disc with a narrow, transverse, irregular,

slightly elevated, impunctate patch, posteriorly delimiting area of longitudinal punctures between antennae, and an omega-shaped, similar structure at level of posterior third of eye (this structure is not impunctate throughout, in most places only elevated); clypeus variably punctate, but always less dense and coarse than frons, surface with traces of isodiametrical microsculpture; pubescence of head as in preceding three species; antennae with segments 4 – 7 decreasingly oblong, segment 8 as long as wide, segments 9 and 10 slightly transverse, segment 11 at not extended side inconspicuously shorter than segment 10; pronotum 1.05 - 1.12 times as long as wide, surface rather even, basal portion rather abruptly declivous; posterior and anterior medial longitudinal shiny patches clearly separated, not forming continuous impunctate midline, posterior one distinctly removed from base, admedian patches comma-like, pointing postero-laterad, sublateral patches also distinct, slightly variable in size; punctuation and pubescence not appreciably differing from that of *T. leucomus*; elytra with punctuation similar to that of *T. leucomus*; subhumeral depressions impunctate, without microsculpture, very shiny; silvery pubescence much less extensive than in preceding three species, becoming very narrow medially, hardly reaching suture; remaining parts with greyish and rust-red pubescence; apical margin sparsely setose, with a few shorter and an equal number of longer golden-reddish setae; middle tibiae distinctly bisinuate curved, curvation of hind tibiae very weak, distal two thirds of middle and hind tibiae with dense, silvery pubescence, but less dense than in *T. inexpectatus*, surface of tibia still visible; first three visible tergites with pair of sharp carinae, delimiting basal depression, fourth visible tergite with rudimentary carinae, indicated by narrow longitudinal furrow; basal depressions on first two visible tergites with normal (not stitch-like) punctuation, lateral portions with numerous (especially on first exposed tergite), almost pit-like punctures, punctuation generally becoming finer toward apex of tergites, additionally toward apex of abdomen; patches of dark tomentose pubescence on first two visible tergites of equal size, those on third visible tergite larger, slightly extended laterad.

Aedeagus: Figs. 7, 21.

ETYMOLOGY: *Trichocosmetes minor* is the smallest known species of this genus, hence its name. *Minor* (Latin; comparative of *parvus*) means "smaller".

DISTRIBUTION: The species is at present known from two places in south-eastern China: Fujian (Wuyi Shan) and Jiangxi (Jinggang Shan, close to the Hunan border).

Trichocosmetes reitteri BERNHAUER

Trichocosmetes reitteri BERNHAUER 1934: 10

TYPE MATERIAL: **Holotype** ♂: "Giufu Shan [Jinfo Shan] Szechuan Reitter \ 1600 m Höhe \ *Trichocosmetes* Reitteri Brnh. Typus [white label] \ Reitteri Bernh. Typus *Trichocosmetes* [yellow label] \ Chicago NHMus M.Bernhauer Collection" (FMC).

DESCRIPTION: 17.3 - 17.8 mm long (9.1 mm, abdomen excluded). - Black, head and pronotum with dark olivaceous-green metallic sheen, elytra not metallic; antennae variable, usually segments 1 and 2 rufo-brunneous with distal half black, segment 3 almost entirely black, segments 4 - 6 mostly rufous, segments 7 - 9 dark with narrowly reddish bases, two outer segments entirely black (specimens with almost entirely rufo-brunneous antennae occur); labrum also with slight metallic reflex, margin obscurely reddish latero-basally; mandibles dark reddish-testaceous with medial margin narrowly and mandibular furrow mostly black; palpi reddish to black, last segment not markedly darker than rest of each palpus; legs black, middle and hind femora sometimes slightly paler, dark rufo-brunneous.

Head subquadrangular, above eyes distinctly wider than long (ratio 1.27 - 1.30); eyes slightly prominent, as long as or inconspicuously longer than tempora (ratio 1.00 - 1.05); tempora

subparallel, narrowed toward neck in almost regular arc; labrum conspicuously shaped, basal portion truncate, almost precisely rectangular, margin forming additional conspicuous angle between basal and apical portion; margin with dense fringe of moderately long pale setae and with row of a few long, darker setae; mandibles slightly extended laterad (extension less distinct than in *T. leucomus* or *T. norae*), lateral portion moderately declivous, mandibular furrow flat, moderately wide; area between eyes rather flat, but posterior portion of head medially strongly declivous toward neck; surface of head somewhat uneven, punctural grooves exceedingly irregular on interocular portion, posterior portion rather regularly punctate; on vertex at level of posterior margin of eyes with very narrow, transverse, slightly elevated, impunctate line, this line bending anteriorly medially, forming very acute angle, sometimes also with similar but indistinct, transverse structure further anteriorly; clypeus with very narrow portion less densely punctate, medially even impunctate, with variably distinct isodiametrical microsculpture; antennae sexually slightly dimorphic, female with segments 4 - 8 oblong (length decreasing distad), segment 9 about as long as wide, segment 10 slightly transverse; male with segments 4 - 7 oblong (but generally shorter than in female), segment 8 about as long as wide, segments 9 and 10 slightly transverse, not extended side of segment 11 about as long as segment 10 in both sexes; pronotum inconspicuously longer than wide, distinctly bottleneck-like constricted in front of base, declivous posterior portion with distinct medial depression; impunctate, shiny patches very distinct and extensive, medial longitudinal ones forming almost complete impunctate midline, very narrow and shortly interrupted at half length; admedian ones very large, irregularly subrectangular, pointing slightly postero-laterad, sublateral ones more or less rounded; punctation and pubescence as on posterior portion of head; elytra with rather uneven surface, punctation fine and dense, but less dense than in *T. leucomus*, interstices distinct and shiny, punctures separated by about half a puncture diameter; subhumeral depression without microsculpture; darker greyish-yellow pubescence prevailing, silvery pubescence scanty, much shorter, pattern very indistinct; apical margin with a sparse row of shorter and longer greyish-golden setae; middle tibiae strongly, hind tibiae weakly bisinuate curved, middle tibiae with numerous distinct spines, hind tibiae with only two or three rather short spines on lateral face; dense and rather long silvery pubescence occupying about three fourths of middle and hind tibiae, but surface of tibiae still visible; first three visible tergites with pair of sharp carinae, delimiting basal depression, carinae on fourth visible tergite indistinct, short, almost rudimentary; punctation fine and stitch-like on all tergites, only lateral portions of first two visible tergites with a few slightly larger punctures; patches of dark tomentose pubescence on first two visible tergites of equal size, those on third visible tergite slightly larger, only slightly extended laterad.

Aedeagus: Fig. 8.

ADDITIONAL MATERIAL EXAMINED:

C H I N A: SICHUAN: Jinfo Shan, 29°01'N 107°14'E, 1750 m, 26.VI.1998, leg. A. Smetana [C69] (NMW); ibidem, but 27.VI.1998 (CSO). – All specimens were collected with human dung traps.

DISTRIBUTION: The species is at present known only from the type locality in south-eastern Sichuan, China.

Trichocosmetes vietnamensis sp.n.

Holotype ♂: "VIETNAM Tuyen Quang Prov. 360m NaHang Res. 6-24.VI.97 S.Peck" (CSO).

Paratypes: 3 exs.: same data as holotype (2 CSO, 1 NMW).

DESCRIPTION: 15.4 - 16.2 mm long (7.9 - 8.4 mm, abdomen excluded). - This species is very similar to *T. reitteri*, but smaller and less robust; in addition to that it differs by the following

items: coloration more or less identical, but elytra more distinctly metallic; eyes longer than tempora (ratio 1.17 - 1.29); shiny, impunctate, elevated structure on vertex of head similar, but anteriad extended part usually separated from basal, transverse prong, and in combination with an additional, medio-longitudinal area more posteriad, appearing more or less cross-shaped; punctuation of head generally more regular; posterior portion of head less distinctly declivous, rather gently tapering toward level of neck; surface of pronotum less uneven, posterior declivous portion without medial depression; sides in front of base regularly concavely sinuate, not bottleneck-like constricted; curvation of middle and hind tibiae slightly less distinct; middle tibiae with a few stout spines laterally and with numerous long, rather thick, dark setae laterally and medially, conspicuous amid silvery pubescence; hind tibiae without spines but also with long, dark setae, but only laterally; paired patch of dark tomentose pubescence on third visible tergite exceedingly extended laterad, almost reaching lateral margin.

Aedeagus: Fig. 9.

ETYMOLOGY: The species is named after the country of its origin.

DISTRIBUTION: The species is at present known only from the type locality in the far North of Vietnam.

Trichocosmetes norae sp.n.

Holotype ♂: "N-Laos: Prov. Lg. Nam Tha ca. 20km SE Muang Sing 12./13.6.1996, 950m leg. Schillhammer (25)" (NMW).

Paratypes (14 exs.): 13 exs.: same data as holotype (10 NMW, 2 CSO, 1 CST); 1 ex.: "CHINA: Yünnan, Xishuangbanna ca. 50km NW Mengla 9.11.1999, ca. 800 m Jäch & Schönmann (CWBS 369)" (NMW).

Additional material: 1 ♀: MYANMAR (Kachin State): "Tingkawk Burma V. 26. 44 L.C.Kuiter \ SM0079415 KUNHM-ENT" (SEC). – The specimen does not differ externally from the typical specimens. It is not included in the type series, because it might belong to another very similar species (see also *T. kabakovi*).

DESCRIPTION: 21.1 - 26.0 mm long (10.8 - 13.5 mm, abdomen excluded). - Black, fore-parts (including labrum) with variably distinct dark olivaceous-green (usually) to almost coppery (exceptionally) metallic lustre; mandibles yellowish-red, medial and lateral margin of incisor and very base of mandibular furrow black; palpi yellowish-red with last segment of each palp usually entirely dark brown to black, rarely also last segment reddish, in this case at least tip of segment dark; antennae usually with basal two segments bright reddish, segment 3 entirely black, segments 4 - 7 black with base narrowly but conspicuously reddish, segment 8 with base very obscurely reddish, segments 9 - 11 entirely black (however, there is a certain variability; especially segment 2 can be darkened to a various extent); front legs yellow, lateral faces of femur and a narrow dorso-lateral strip of tibia usually infusate, mid and hind legs black, femora frequently obscurely brunneous; tarsi black.

Head subquadrate to slightly trapezoid, 1.22 - 1.31 times as wide as long; eyes weakly prominent; tempora subparallel to slightly convergent, slightly shorter to slightly longer than eyes (ratio 0.91 - 1.14); labrum with dense and coarse, slightly umbilicate punctuation, narrow interstices with variably profound, isodiametrical microsculpture, becoming more distinct at sparsely punctate base of labrum; lateral margin of labrum obtuse-angled; margin with dense row of moderately long golden setae and with submarginal row of numerous, very long setae of pale color with dark base; mandibles (Fig. 15) exceedingly extended laterad, lateral portion hardly declivous, mandibular furrow very wide and flat except at very base; area between eyes rather flat, vertex with two shallow admedian depressions; posterior portion of head medially strongly declivous toward neck; punctuation very dense and coarse, punctures very irregular, forming longitudinal or oblique rugae on most of head surface; pubescence of head as in all other species;

antennae slightly variable, but not sexually dimorphic; segments 4 - 7 distinctly oblong (length individually variable), segment 8 slightly oblong, segments 9 and 10 as long as wide or segment 10 slightly transverse, not extended side of segment 11 about as long as segment 10; pronotum slightly longer than wide (ratio 1.05 - 1.12), surface even, basal portion strongly declivous, frequently with inconspicuous medial depression; punctation dense, uniform, inconspicuously umbilicate; impunctate, shiny patches distinct, medial longitudinal ones forming interrupted impunctate midline, posterior patch reaching basal margin; admedian ones large, comma-like, pointing postero-laterad, sublateral ones more or less rounded; elytra finely and densely punctate, but punctures not contiguous, separated by about half a puncture diameter; surface rather uneven, especially laterally; subhumeral depressions shiny, without any trace of microsculpture; with large transverse band of silvery pubescence, but pattern often inconspicuous due to very short hairs; apical margin with a sparse row of shorter and an even sparser row of longer golden setae; first four visible tergites with pair of sharp carinae at base delimiting basal depression, carinae on fourth visible tergite usually shorter, less distinct, but still perceptible as carinae; paired patch of dark tomentose pubescence on third visible tergite distinctly extended laterad, almost reaching lateral margin; punctation fine, stitch-like, except anterior portion of basal depressions and lateral portions of first two visible tergites, where larger, but very flat punctures occur.

Aedeagus: Fig. 4.

ETYMOLOGY: I gladly dedicate this species to Mag. Nora Mühlegger (former Schüttengruber), who during her presence in the NMW was a permanent threat to our chocolate supplies. Among other meritorious activities, she did a good deal of editorial work for my *Gabrius* revision by meticulously arranging the illustration plates. Although she is no longer working for our department, her occasional visits are welcomed highlights among the ups and downs of a taxonomist's labour.

DISTRIBUTION: The species is at present known only from the north of Laos (Louang Nam Tha), China (S-Yunnan) and from N-Myanmar.

Trichocosmetes kabakovi sp.n.

Holotype ♂: "Vietnam vyerkh. r. NAM-MA u Dong Pao 1300m 27.5.1963 g. Kabakov [in Russian]" (CKP).

Paratype ♀: same data as holotype (NMW).

DESCRIPTION: 19.3 - 20.2 mm long (9.8 - 10.5 mm, abdomen excluded). – In addition to the smaller body size, the species differs from *T. norae* only by the shape of the aedeagus (Fig. 5): paramere shorter, not outreaching apex of median lobe, peg setae differently arranged (Fig. 5c).

REMARK: Should a richer material become available, the differences between *T. kabakovi* and *T. norae* might turn out as subspecific.

Trichocosmetes gigas sp.n.

Holotype ♂: "Tingkaw Burma V. 26. 44 L.C.Kuitert \ SM0079413 KUNHM-ENT" (SEC).

Paratype: 1 ♂: same data as holotype but "SM0079414 KUNHM-ENT" (NMW).

DESCRIPTION: 28.5 - 28.7 mm long (15.0 - 15.2 mm, abdomen excluded). - Black, opaque, without metallic lustre; labrum black, latero-basally narrowly reddish; mandibles obscurely rufo-brunneous, medial margin infuscate; palpi dark rufo-brunneous, penultimate segment of maxillary palpi to various extent darkened; basal three segments of antennae rufo-brunneous with distal third darkened, segments 4 - 8 black with narrowly rufescent base, remaining segments

black; deflexed portion of elytra yellowish; front legs (including tarsi) entirely yellowish, distal third of middle femur and distal two thirds of middle and hind tibiae yellowish, dorsal face of hind femur with narrow, longitudinal rufous stripe, middle and hind tarsi to large extent darkened.

Head heart-shaped, 1.15 - 1.17 times as wide as long; eyes not prominent, small, posteriorly markedly shifted medially; tempora distinctly longer than eyes (ratio 1.33 - 1.66), distinctly widened behind eyes, narrowed toward base in regular arc; labrum rather short, lateral angle weakly obtuse, densely but not rugosely punctate, punctures separated by about a puncture diameter, punctuation becoming sparser toward base, anterior half of labrum without microsculpture, basal half with distinct microsculpture, changing toward base from isodiametrical to shortly meshed; margin with very dense fringe of rather long, dark setae and with numerous (especially medially), exceedingly long, dark setae; mandible (Fig. 16) with lateral portion strongly declivous, mandibular furrow very narrow, deeply ingraved; surface of head with very irregular punctuation in anterior half, with more regular punctuation in posterior half, with long and narrow, slightly elevated, impunctate midline, anteriorly ending at slightly domed portion; at each side of midline with more or less distinct, crescent-shaped depression between eyes and with an additional, rather shallow, medial depression near posterior declivity; clypeus with dense (but less dense than on disc) punctuation but punctuation sparing out middle of anterior margin; surface of clypeus without microsculpture; pubescence of head with silvery hairs more scanty than in remaining species; antennae with segments 4 - 7 distinctly oblong, segments 8 and 9 about as long as wide, segment 10 inconspicuously transverse, segment 11 at not extended side about as long as segment 10, extension of segment 11 very long, at this side about twice as long as segment 10; pronotum slightly wider than long (ratio 1.03 - 1.08), surface indistinctly vaulted, middle portion almost flat, with conspicuous medial depression at posterior declivity and with an additional very conspicuous depression near anterior angles; punctuation exceedingly dense; posterior medial, shiny patch delimiting posterior depression, anteriorly extended into very narrow and sharp, almost ridge-like midline, anterior patch distinctly elevated, drop-shaped; admedian patches rather large, almost divided in two; sublateral patches small, knob-like; dark pubescence very dense and conspicuous, almost tomentose in antero-lateral depression, silvery pubescence only around admedian impunctate patches; elytra large, about as long as wide, with rather uneven surface; impunctate portion of subhumeral depression shiny, but with very fine isodiametrical microsculpture; pubescence very dense, almost tomentose, silvery-golden pubescence occupying middle third laterally, markedly narrowed medially, a small band reaching suture; deflexed portion entirely covered by silvery-golden pubescence; front tibia strongly clavate and explanate, apico-lateral bunch of densified setae shortly extended on lateral margin, forming short fringe; middle and hind tibiae distinctly curved, but not bisinuate, distal two thirds of tibiae markedly bent medially; without conspicuous spines (at least, if there are spines they are not visible among the very dense pubescence); distal two thirds of tibiae exceedingly densely covered by silvery pubescence, in clean specimens surface of tibia hardly visible; first four visible tergites with pair of carinae at base, but carinae not elevated, appearing rather as narrow furrows pointing postero-laterad, on fourth visible tergite very indistinct; basal depressions on first three visible tergites not delimited laterally; punctuation dense and stitch-like on medial portions of first four visible and entire remaining tergites, lateral portions of first four visible tergites with normal, not stitch-like punctuation, especially on first visible tergites with a few larger punctures in proximal two thirds; first two visible tergites with paired patches of dark tomentose pubescence of about equal size, that on third visible tergite medially confluent, large, markedly extended laterad, but not reaching lateral margin; tergite VI with large medial portion obscurely golden pubescent, tergites VII and VIII entirely covered by bright golden pubescence; styli of tergite IX also with golden pubescence; posterior margin of tergite VIII with small but distinct medio-apical notch.

Aedeagus: Fig. 6.

Female unknown.

ETYMOLOGY: The specific epithet is the Latin noun *gigas*, *-antis* (giant) in apposition. It refers to the remarkably large size of the species, which is one of the biggest Staphylinids known from Southeast-Asia.

DISTRIBUTION: The species is at present known only from the type locality: Myanmar, Kachin State, Tingkaw Sakan (Northwest of Myitkyina).

Sphaeromacrops gen.n.

Typus generis: *Rhyncochilus antennalis* CAMERON

DESCRIPTION: Slender, subparallel, moderately large (12 - 16 mm long). Head subquadrate, with spherically protruding eyes; punctuation of disc very dense and coarse, interstices reduced to sharp ridges, in anterior half forming longitudinal rugae; labrum variably extended anteriorly, without transparent portion, moderately densely punctate; medial margin of each mandible (Fig. 17) with unicuspid molar near base, molar continuously confluent with medial margin of mandible, left mandible with small canine, hardly reaching beyond medial margin of mandible; lateral portion of mandible distinctly declivous; mandibular furrow rather wide, but less flat than in most *Trichocosmetes*; palpi not densely setose, basal two segments of labial palpi only with terminal wreath of setae; last segment of maxillary and labial palpi glabrous; anterior margin of labium not ciliate; mentum with 2 pairs of antero-lateral setae, but setae very fine, lateral ones exceedingly fine, almost inconspicuous, rarely lacking; ventral face of head very shiny, with moderately dense but coarse, pit-like punctuation, interstices with moderately dense micropunctuation, but without microreticulation; submentum with one pair of large, very long setae, slightly removed from anterior margin, with four fine, moderately long setae at anterior margin and occasionally with two exceedingly fine setae at level of metatentorial pits; gular sutures almost contiguous, nuchal ridge bent medially, meeting gular suture; postmandibular ridge straight, leading posteriorly for about two thirds of eye length; antennae with three or four outer segments white; prosternum carinate, carina hardly elevated above level of lateral margin; sternacostal ridge forming distinct angle with lateral margin, intercoxal depression distinct, very deep, with moderately dense, asperate punctuation, punctures bearing fine hairs; pronotum with punctuation as on posterior half of head, with several impunctate, slightly elevated, shiny patches, one medio-basally (distinct), one antero-medially (indistinct), two variably distinct admedian patches (more shifted laterad than in *Trichocosmetes*), sublateral patches lacking; deflexed lateral portion, including hypomera, impunctate, shiny; elytra subrectangular, with well developed, prominent shoulders; suture markedly elevated; with distinct depression at sutural angle, lateral depression indistinct or lacking, gibbosity at posterior margin conspicuous; punctuation exceedingly dense, slightly rugose; silvery pubescence short, forming inconspicuous pattern of small patches; scutellum with conspicuous patch of dark tomentose pubescence apically, medial portion with dense pit-like punctuation, anterior margin to various extent impunctate and shiny; legs very long and slender; front tibiae not modified, only weakly, conically dilated toward apex, all tibiae more or less distinctly spinose, but spines not very stout; first four segments of front tarsi not patellate, each segment about as long as wide, subbilobed, segment 4 of middle and hind tarsi simple; only one species with indistinct curvature of middle and hind tibiae; first three visible tergites with pair of slightly divergent basal carinae, delimiting basal depression; basal half of tergite with rather coarse and dense, almost pit-like punctuation, posterior half very finely but also very densely punctate; first three visible tergites with pair of tomentose, blackish or rust-red pubescence, small or even inconspicuous on first two, more extensive on third visible tergite

(sometimes dark pubescence on fourth visible tergite appearing like tomentose patch, comparable to that of preceding tergite); remaining parts of first three visible tergites with silvery pubescence, visible tergite 4 usually entirely dark, remaining tergites with silvery pubescence; posterior margin of tergite VIII rarely with medio-apical notch.

Male sternite VIII with moderately deep medio-apical emargination, without semi-membranous extension, disc with three large setae; male sternite IX (Fig. 20) with strongly asymmetrical, short basal portion, apex subtruncate, very weakly emarginate, bearing numerous exceedingly fine and short hairs.

Aedeagus small, with stout, slightly asymmetrical median lobe; paramere bent to left side (ventral view), bearing variable number of peg setae; internal sac identical to that of *Trichocosmetes*.

RECOGNITION: Among the genera of the *Eucibdelus* lineage with a straight postmandibular ridge, the genus is easily recognized by the sphaerically protruding eyes, the unmodified front tibiae and the shape of the front tarsi. From *Philetaerius*, which has similar front tarsi as well as unmodified front tibiae, it differs by the contiguous punctation of the fore parts, the shape of the labrum and by the white distal antennal segments.

BIONOMICS: No information on the habitat requirements is available.

ETYMOLOGY: The generic name is derived from the Greek words *σφαίρα* (globe), *μαχρός* (large) and *ὠπός* (eye) and refers to the large, sphaerically protruding eyes.

REMARK: As the available material of this new genus is very scarce, there is no information on the variability. Additionally, the differences between the species are very subtle and not sufficient to contrive a useful key. Hopefully, there will be more material available in the future, to assess the variability and to provide a key to species of *Sphaeromacrops*. For the time being, the descriptions and illustrations, and above all, direct comparison of the specimens has to serve for identification.

***Sphaeromacrops antennalis* (CAMERON) comb.n.**

Rhynchophilus [sic!] *antennalis* CAMERON 1932: 231

Trichocosmetes antennalis: SCHILLHAMMER 1999: 62

TYPE MATERIAL: **Holotype** ♀ (by monotypy): "Type (round label) \ Shillong Y.R.Rao coll. 13.VII.18 \ R. antennalis Cam. Type \ M.Cameron. Bequest. B.M. 1955-147. \ belongs in *Trichocosmetes* det. A.F. Newton 1989" (NHML). - The antennae are partly broken off, left 4 segments, right 3 segments are missing.

DESCRIPTION: 16 mm long (7.8 mm, abdomen excluded). - Black, weakly shining; fore body (including labrum) with rather conspicuous, dark olivaceous-green metallic lustre; mandibles dark reddish-testaceous, with medial and lateral margin, and entire incisor black; palpi pale rufo-brunneous; basal four segments of antennae reddish, segments 5 - 7 black (base of segment 5 narrowly reddish), four outer segments white, concave terminal face of segment 11 black; front legs reddish yellow, mid and hind legs paler yellowish, distal third of tibiae and basal one or two segments of tarsi dark brown to black, apex of hind femora narrowly brownish; deflexed portion of elytra reddish-yellow, pale portion broad at shoulders, distinctly narrowing posteriad; abdominal segments with posterior margins and paraterga to various extent obscurely reddish.

Head subquadrate, above eyes 1.15 times as wide as long, at posterior margin of eyes 1.02 times as long as wide; eyes strongly sphaerically prominent; tempora inconspicuously convergent, slightly longer than eyes (ratio 1.08), narrowed toward base in regular arc; surface between eyes very flat, very irregularly punctate, interstices of punctures variably wide, shiny, forming inconspicuous, confused rugae, and two conspicuous, admedian, impunctate, shiny patches at

level of half length of eyes, patches with scattered micropunctuation; posterior half of head exceedingly densely, regularly punctate, punctures contiguous, interstices reduced to very sharp ridges; anterior portion (clypeus) glabrous except for pair of large setae and a few very fine hairs, slightly rugose; pubescence of head fine, dark, with a few modified silvery hairs on vertex; antennae with segments 1 and 3 of about equal length, segment 4 distinctly oblong, segments 5 - 10 weakly oblong (of same length as segment 4 but slightly wider, segments gradually, but inconspicuously becoming wider distad), segment 11 distinctly oblong, at not extended side about as long as segment 10; pronotum 1.15 times as long as wide; punctuation as on posterior portion of head; impunctate shiny patches weakly developed, posterior medial one short, not reaching posterior margin, admedian ones inconspicuous; scutellum with pit-like punctuation less dense medially, punctate area not sharply delimited against glabrous basal portion; elytra distinctly longer and wider than pronotum, very densely and slightly rugosely punctate, size of punctures as on pronotum, but posteriad slightly decreasing in size; subhumeral depression without traces of microsculpture; abdominal tergites with dark, tomentose patches on first two visible tergites very indistinct, but with heart-shaped tomentose patch on visible tergite 4; male sternite IX: Fig. 20; male tergite X: Fig. 19.

Aedeagus: Fig. 11.

ADDITIONAL MATERIAL EXAMINED:

I N D I A: MEGHALAYA: Khasi Hills, Mawphlang village, 25°26.7'N 91°45.2'E, ca. 1700 m, 2. - 3.VI. / 10.VI.1996, leg. Jendek & Šauša (1 ♂, NMW).

DISTRIBUTION: The species is at present known only from Meghalaya in Northeast India.

Sphaeromacrops nepalensis sp.n.

Holotype ♂: "Jenis Ivo leg. Nepal centr. Gorkha 26-31.5.1992" (NMW).

Paratype ♂: "NEPAL Khandbari Dis. Arun Valley at Num main bridge 1150m 21.IV.1984 Smetana & Löbl" (CSO).

DESCRIPTION: 15 mm long (7.5 mm, abdomen excluded). - Measurements: head 1.15 times as long as wide (1.0 at posterior margin of eye), tempora 1.05 times as long as eyes, pronotum 1.16 times as long as wide.

In build and coloration very similar to *S. antennalis*, but differing as follows: slightly smaller; labrum shorter, margin reddish; antennal segments proportionately slightly longer, segment 11 entirely white; disc of head with indistinct, cross-shaped, impunctate portion between eyes; admedian impunctate patches of pronotum very inconspicuous, almost lacking; middle tibiae with more numerous spines.

Aedeagus: Fig. 12.

Female unknown.

ETYMOLOGY: The species is named after the country of its origin.

DISTRIBUTION: The species is at present known only from Nepal.

Sphaeromacrops strigosifrons sp.n.

Holotype ♀: "NW - THAILAND, Mae Hong Son, Ban Huai Po \ 9. - 16.5.1991, 1600 - 2000 m, leg. J Horak" (NMW).

DESCRIPTION: 14.2 mm long (7.2 mm, abdomen excluded). - Measurements: head 1.17 times as wide as long (1.0 at posterior margin of eye); eyes 1.15 times as long as tempora; pronotum 1.11 times as long as wide.

The species is very similar to *S. antennalis* in build and coloration and differs as follows: slightly smaller (even smaller than *S. nepalensis*); labrum slightly broader, punctuation less dense, punctures very shallow, hardly impressed; eyes longer than tempora (ratio 1.15); shiny, impunctate patches on frons very small and indistinct; anterior half of disc of head with punctures longitudinally confluent, forming distinct, long and sharp rugae; antennae with segments 5 - 8 black, only three outer segments white, but segment 11 also with terminal face black; pronotum with inconspicuous shiny midline in anterior third, admedian patches distinct, comma-like; scutellum with uniform, pit-like punctuation, sharply delimited against glabrous basal portion; elytra slightly shorter; middle and hind tibiae weakly but perceptibly bisinuate curved.

Male unknown.

ETYMOLOGY: The specific epithet is a combination of the Latin words *strigosus*, *-a*, *-um* (striped) and *frons*, *-ntis* (forehead, brow) and refers to the conspicuous longitudinal rugae on the forehead.

***Sphaeromacrops varicornis* (COIFFAIT) comb.n.**

Eucibdelus varicornis COIFFAIT 1977: 235

Trichocosmetes varicornis: SCHILLHAMMER 1999: 62

TYPE MATERIAL: **Holotype** ♂ (by monotypy): "km 87 von Phuntsholing 22.5. [date handwritten] \ Nat.-Hist.Museum Basel - Bhutan Expedition 1972 \ HOLOTYPE \ *Eucibdelus varicornis* H. Coiffait 1977" (NMB).

DESCRIPTION: 12 mm long (6.7 mm, abdomen excluded). - Measurements: head 1.13 times as wide as long (1.06 times as long as wide at posterior margin of eye); eyes 1.13 times as long as tempora; pronotum 1.17 times as long as wide.

In build and coloration similar to preceding species but much smaller; punctuation of head and labrum almost as in *T. strigosifrons*, but rugae on frons shorter and less pronounced, additionally with indistinct, cross-shaped shiny patch, anterior prong of "cross" confluent with impunctate clypeal portion; antennae with segments 6 and 7 black, segment 5 with distal half black and proximal half reddish, segment 11 almost entirely white, very tip of segment narrowly darkened; middle portion of pronotal disc with rather irregular punctures; tarsal segment 5 of front tarsi very short, markedly shorter than segments 3 and 4 combined (in all other species this segment is at least as long as segments 3 and 4 combined, usually longer).

Female unknown.

Aedeagus: Fig. 13.

DISTRIBUTION: The species is at present known only from the type locality in Bhutan.

***Sphaeromacrops gracilis* sp.n.**

Holotype ♂: "NE-INDIA: Meghalaya W Garo Hills Nokrek NP; ca. 1100 m \ 25°29.6'N 90°19.5'E 9.-17.5.1996 leg. Jendek & Sausa" (NMW).

DESCRIPTION: 12.5 mm long (6.4 mm, abdomen excluded). - Measurements: head 1.13 times as wide as long (1.04 times as long as wide at posterior margin of eye); eyes inconspicuously longer than tempora (ratio 1.01); pronotum 1.13 times as long as wide.

Of approximately the same size as *S. varicornis*, and almost identical in coloration, but segment 5 of antennae entirely red, segment 6 black with broad reddish base, segment 7 entirely black, segments 8 - 11 white, segment 11 with very tip narrowly blackish; head with two small shiny admedian patches at level of half eye length; punctation of anterior portion of head less rugose, slightly umbilicate, punctures hardly confluent, more polygonal; 5th segment of front tarsi normal.

Aedeagus: Fig. 14.

Female unknown.

ETYMOLOGY: *Gracilis*, -e (Latin) means "slender". The name refers to the very slender and gracile, almost spidery appearance of the insect, which is characteristic for the entire genus.

DISTRIBUTION: The species is at present known only from the type locality.

***Guillaumius* gen.n.**

Typus generis: *Guillaumius shibatai* sp.n.

DIAGNOSIS: This genus is somewhat intermediate between *Sphaeromacrops* and *Trichocosmetes*, sharing important character states of both genera.

Character states in common with *Sphaeromacrops*: postmandibular ridge straight; segments 2 and 3 of maxillary palpi sparsely setose; anterior margin of labium not ciliate; 3 outer segments of antennae white; deflexed portion of pronotum to various extent impunctate, shiny; protibiae with conspicuous spines. - The setation of the submentum is similar, but anterior margin with only two setae, setae at level of metatentorial pits lacking. The setae of the mentum are not visible (at 80 x magnification), rarely an exceedingly fine seta can be seen in one of the anterior angles.

Character states in common with *Trichocosmetes*: last segment of labial palpi setose; medial face of basal two segments of labial palpi with long setae; dentation of medial margins of mandibles (Fig. 18); front tibia modified, distinctly clavate; segments 1 - 4 of front tarsi patellate; sternacostal ridge forming no angle with lateral margin of prosternum.

Character states unique to *Guillaumius*: ventral face of head almost glabrous, with only a few, very fine, irregularly scattered punctures, punctures forming fine transverse rugae; base of ventral face of head entirely impunctate, smooth; nuchal ridge markedly sinuately bent anteriorly; base of sternites with very weak transverse depression; posterior margin of elytra without conspicuous depressions.

REMARK: The position of *Guillaumius* is somewhat problematic. A closer affinity with *Trichocosmetes* would render those character states which are shared with *Sphaeromacrops* homoplastic (partly the character state conformity could also be explained by plesiomorphy), and vice versa. As already mentioned in the introduction, the evaluation of character states is difficult in this group.

BIONOMICS: The only available information (de Rougemont, pers. comm.) is that the single known specimen of *G. rougemonti* was caught on the wing in the late afternoon.

ETYMOLOGY: See respective paragraph under *G. rougemonti*.

Guillaumius shibatai sp.n.

Holotype ♂: "N-Laos, May 1999, Oudom Xay prov., NAM MIANG riv., 30km SE Muang Yai, 1200m, Lao coll. leg." (CST).

Paratypes: 5 exs.: same data as holotype (3 CST, 2 NMW).

DESCRIPTION: 9.0 - 11.5 mm long (5.8 - 6.0 mm, abdomen excluded). - Black, with moderately conspicuous, dark olivaceous-green metallic sheen; pronotum with impunctate, shiny areas obscurely reddish; labrum reddish-testaceous, medial margins of lobes narrowly darkened; mandibles reddish-yellow with medial margin narrowly blackish; antennae with basal four segments reddish, segment 4 variably darkened apically, segments 5 - 8 black with narrow reddish base, segments 9 - 11 white, very tip of segment 11 somewhat darkened; deflexed portion of elytra reddish-yellow at shoulders, hardly extending apicad; legs reddish, apices of femora darkened, tibiae either entirely black, or reddish and gradually darkened toward apex, basal four segments of front tarsi obscurely reddish, usually darkened laterad; paraterga reddish.

Head rounded subquadrangular, 1.14 - 1.16 times as wide as long above eyes; eyes moderately prominent; tempora parallel or inconspicuously divergent, 1.21 - 1.24 (exceptionally 1.13) times as long as eyes; area between eyes moderately vaulted, punctation coarse and rather dense, punctures confluent, forming longitudinal rugae on anterior two thirds of head, rugose area medially somewhat angulately extending posteriad; rugae somewhat irregular, eddy-like on vertex, sometimes interrupted by small shiny areas; rugose area rather sharply delimited against punctate basal portion of head; ground pubescence half-erect and long on rugose portion, almost decumbent and short on posterior portion and on tempora; labrum rather long, lateral angles well marked, between lateral angles and apex deeply concavely emarginate, moderately densely and rather finely punctate, surface with fine, short-meshed, almost isodiametrical microsculpture; lateral portion of mandible declivous, mandibular furrow moderately wide; antennae with segment 1 longer than segment 3, but shorter than segments 2 and 3 combined, segments 4 - 8 oblong, segments 9 and 10 about as long as wide, segment 11 at not extended side slightly shorter than segment 10; furrow of neck very wide and deep, punctate posterior portion well hidden under pronotum; pronotum about as long as wide (length/width ratio 0.97 - 1.02), medio-basal shiny patch very distinct, midline becoming exceedingly narrow and almost obsolete at half of its length; admedian shiny patches large, irregularly rectangular, pointing postero-laterad; punctation regular; lateral portion of pronotum with rather badly delimited, narrow impunctate area along superior lateral line; scutellum densely punctate almost up to elevated basal line, dark tomentose pubescence occupying posterior two thirds of scutellum; elytra with rather even surface, posterior gibbosities very inconspicuous due to very shallow medial depression and lacking sublateral depression; punctation very dense, punctures contiguous, slightly declivous, surface thus appearing slightly asperate; modified silvery hairs forming patchy pattern (conspicuous only in very clean specimens); middle and hind tibiae distinctly bisinuate curved, with numerous stout spines, distal two thirds with moderately dense silvery pubescence; first three visible tergites with distinct and sharp, oblique carinae, basal depression extending laterad beyond carinae; basal half of first three visible tergites with dense microsculpture of transverse meshes; basal depressions moderately densely punctate, with a few larger punctures, posterior and lateral portion with fine, stitch-like punctation; third visible tergites with dark golden pubescence posteriad of basal depressions (on third visible tergite also in basal depression); patches of dark tomentose pubescence lacking or inconspicuous (on third visible tergite), first, second and fourth exposed tergites with dark, medially obscurely rusty-red pubescence, remaining tergites with moderately dense silvery pubescence; sternites entirely covered by short silvery pubescence.

Aedeagus: Fig. 10.

ETYMOLOGY: I take the opportunity to dedicate this new species to my colleague Yasutoshi Shibata (Staphylinidae specialist from Tokyo), to acknowledge his generosity and obligingness.

DISTRIBUTION: The species is at present known only from the type locality in northern Laos.

***Guillaumius rougemonti* sp.n.**

Holotype ♀: "THAILAND r. Kwae Noi Ban Sai Yok III.1987 G. de Rougemont" (CRL).

DESCRIPTION: 10 mm long (5.1 mm, abdomen excluded). - Black, head and pronotum partly obscurely dark reddish (specimen probably slightly teneral), with very inconspicuous metallic lustre; elytra with conspicuous, dark olivaceous-green metallic lustre; labrum entirely reddish-testaceous; mandibles reddish-yellow with medial margin narrowly blackish; antennae with basal three segments reddish, segment 3 slightly darkened apically, segments 4 - 8 black with narrow reddish base, segments 9 - 11 white, distal half of segment 11 somewhat darkened; deflexed portion of elytra reddish-yellow, pale portion broadest at shoulders, narrowing apicad; legs reddish, basal four segments of front tarsi mostly blackish, middle and hind tibiae somewhat darkened distad; posterior margins of tergites narrowly, obscurely reddish.

Head rounded subquadrangular, 1.14 times as wide as long above eyes (1.03 at posterior margin of eye); eyes moderately prominent; tempora slightly convergent, 1.2 times as long as eyes; area between eyes moderately vaulted, punctation coarse and rather dense, punctures confluent, interstices forming longitudinal rugae on anterior two thirds of head, in shape of long and sharp ridges on frons and long and deep fissures on vertex, rugose area sparing out clypeus and a moderately wide glabrous area around antennal insertions; toward base of head punctures gradually becoming shorter and more oblique, pointing toward slight medial longitudinal depression in posterior third of head; ground pubescence erect on anterior two thirds, half-erect on posterior third, decumbent on tempora; disc of head without modified silvery hairs, with a few of them on tempora; labrum moderately long, lateral angles well marked, moderately densely and very finely punctate, punctures very flat, surface with fine, short-meshed, almost isodiametrical microsculpture; lateral portion of mandible (Fig. 18) declivous, mandibular furrow moderately wide; antennae with segment 1 longer than segment 3, but shorter than segments 2 and 3 combined, segments 4 - 8 oblong, segments 9 and 10 about as long as wide, segment 11 at not extended side slightly shorter than segment 10, with dense tomentose ground pubescence only on three outer segments, segments 5 - 8 with rather sparse ground pubescence, getting denser distad; furrow of neck very wide and deep, punctate posterior portion well hidden under pronotum; pronotum 1.08 times as long as wide, with almost complete impunctate midline, midline becoming exceedingly narrow and almost obsolete at half of its length; admedian shiny patches large, irregularly rectangular, pointing postero-laterad; punctation very irregular, shape of punctures mostly stream-lined, in a wavy arrangement; scutellum densely punctate almost up to elevated basal line, dark tomentose pubescence occupying almost posterior two thirds of scutellum; elytra with very even surface, posterior gibbosities very inconspicuous due to very shallow medial depression and lacking sublateral depression; punctation very dense, punctures declivous posteriad, surface thus appearing asperate; modified silvery hairs forming patchy, inconspicuous pattern; middle and hind tibiae distinctly bisinuate curved, with numerous stout spines, distal two thirds with moderately dense silvery pubescence, longer and denser medially than laterally; first three visible tergites with distinct and sharp carinae, delimiting basal depression; basal half of first three visible tergites with dense microsculpture of transverse meshes; basal depressions sparsely punctate, with a few larger punctures, posterior and lateral portion with fine, stitch-like punctation; portion posteriad of basal depressions (on third visible tergite also basal depression) with dense golden pubescence; patches of dark tomentose

pubescence lacking or inconspicuous (on third visible tergite), fourth exposed tergite entirely with dark pubescence, remaining tergites with moderately dense silvery pubescence; sternites entirely covered by short silvery pubescence.

Male unknown.

DIAGNOSIS: The species is very similar to *G. shibatai* and differs by the following items: smaller size; tempora inconspicuously convergent; pronotum slenderer, with more irregular punctuation, punctures almost stream-lined, in a wavy arrangement; impunctate, shiny lateral portion of pronotum much more extensive and well delimited (like in *Sphaeromacrops*); elytra with less even surface, punctuation more distinctly asperate; golden pubescence of tergites much brighter, also on first and third exposed tergites.

ETYMOLOGY: The specific as well as the generic epithet are named in honour of Guillaume de Rougemont who provided me with the first specimen of this new genus.

DISTRIBUTION: The species is at present known only from the type locality.

A new species of *Rhyncocheilus* SHARP

A revision of the genus will be subject to future studies. One new species, however, is so peculiar that it is worth being described before the revision is accomplished.

***Rhyncocheilus monstrosipes* sp.n.**

Holotype ♂: "CHINA Hunan SE GUIDONG env. 26.04N 113.56E 26-31.V.1994" (NMW).

Paratypes (3 ♂♂): 1 ex.: same data as holotype (NMW); 1 ex.: "CHINA Fujian prov. Shaowu env. 5-10.7.1991" (NMW); 1 ex.: "KUATUN, FUKIEN China 8.7.46 (TSCHUNG SEN.)" (NMW).

DESCRIPTION: 19.3 - 20.9 mm long (9.3 - 10.3 mm, abdomen excluded). - Black, opaque; elytra rufo-brunneous; labrum rufo-brunneous, base indistinctly darkened to various extent; mandibles reddish-testaceous, medial and lateral margin black; antennae with basal three segments reddish, remaining segments black, with bases narrowly and obscurely reddish; palpi reddish with segment 2 of maxillary palpi and basal segment of labial palpi somewhat darker; posterior margins of abdominal segments rather broadly, but obscurely reddish; legs entirely pale brown, dorsal face of protibia indistinctly darkened.

Head heart-shaped, 1.26 - 1.30 times as wide as long, widest above half length of tempora; eyes very small, hardly prominent; tempora much longer than eyes (ratio 1.47 - 1.63), conspicuously convexly widened behind eyes; base of head slightly concave; frons separated from clypeus by distinct, transverse, suturiform line; disc of head with pair of conspicuous depressions at level of about half of eye length, between depressions distinctly elevated; entire surface of head densely punctate, punctures polygonal in anterior half, more rounded in posterior half, contiguous, interstices reduced to narrow, shiny ridges; with variably distinct indication of impunctate midline; clypeus also densely and coarsely punctate laterally, medially only densely rugose; pubescence very short, decumbent, golden; tempora with conspicuous, punctate ridge, leading from posterior margin of eye exactly along lateral outline of head, almost reaching neck; ventral face of head with lateral half of gena densely, coarsely and deeply punctate, medial half glabrous and very shiny, with very few scattered punctures; mentum with 3 or 4 setae in antero-lateral portion; postmandibular ridge delimiting deep depression around base of maxillae; ventral base of head also with conspicuous depression; labrum very large, markedly extended anteriorly, medial margins of lobes contiguous basally for half length, anteriorly slightly divergent; surface of labrum moderately densely but coarsely punctate, interstices strongly rugose, obscuring margins of

punctures; pubescence of surface formed by moderately long, decumbent silvery hairs, margin with a very sparse row of short, pale setae and with an equally sparse row of exceedingly long setae, setae pale laterally, becoming dark medially; antennae with segments 2 and 3 of equal length, combined slightly longer than segment 1 (ratio 1.2), segments 4 - 10 about as long as wide, asymmetrical, distad increasingly serrate, segment 11 asymmetrically fusiform; transverse furrow of neck indistinct, densely rugose; punctate portion of neck with golden pubescence; pronotum short, as long as or shorter than head, 1.06 - 1.13 times as wide as long, widest in anterior third, narrowed toward base in almost straight line; surface rather uneven, posteriorly with conspicuous lateral gibbosities, and with depression between gibbosity and impunctate, posterior medial longitudinal patch, latter extended anteriorly into very narrow impunctate midline, becoming obsolete at about half of pronotal length; admedian impunctate patches large, distinctly elevated, pointing postero-laterad; punctation as on vertex, pubescence slightly more conspicuous, golden but turning into slightly longer silvery pubescence on lateral portion; scutellum coarsely and densely punctate, with very dense and long silvery pubescence; elytra very finely and exceedingly densely punctate, surface slightly uneven, suture hardly elevated; entirely covered (including posterior margin) by long, very dense, wavy, silvery pubescence; front tibia strongly clavate and explanate, about half as wide as long; dorsal distal margin deeply emarginate medially, distal and lateral margin with very dense fringe of whitish hairs; dorsal surface with very short, decumbent pubescence, ventral surface with longer semi-erect pubescence; protarsi and remaining legs not differing from other *Rhyncocheilus*; first four visible tergites of abdomen with pair of carinae at base delimiting basal depression, portion posteriorly of basal depression conspicuously domed (characteristic for the entire genus); tergite VII with medio-basal, impunctate, obtuse carina, tergite VIII with a similar structure but more obtuse and much less distinct; basal depressions with dense, pit-like punctation, area lateral of medial carinae on tergites VII and VIII with similar punctures but less dense; portion lateral of carinae (on first four visible tergites) with much finer punctation, posterior half of entire tergite with stitch-like punctation; latero-basal portion (around tergal spiracles) of first five visible tergites variably extensively glabrous and shiny; lateral portions of first four and medial portion of fifth visible tergites with long and dense silvery pubescence; male sternite VIII with wide, moderately deep medio-apical emargination, with narrow semi-membranous extension; male sternite IX: Fig. 24; male tergite X: Fig. 23.

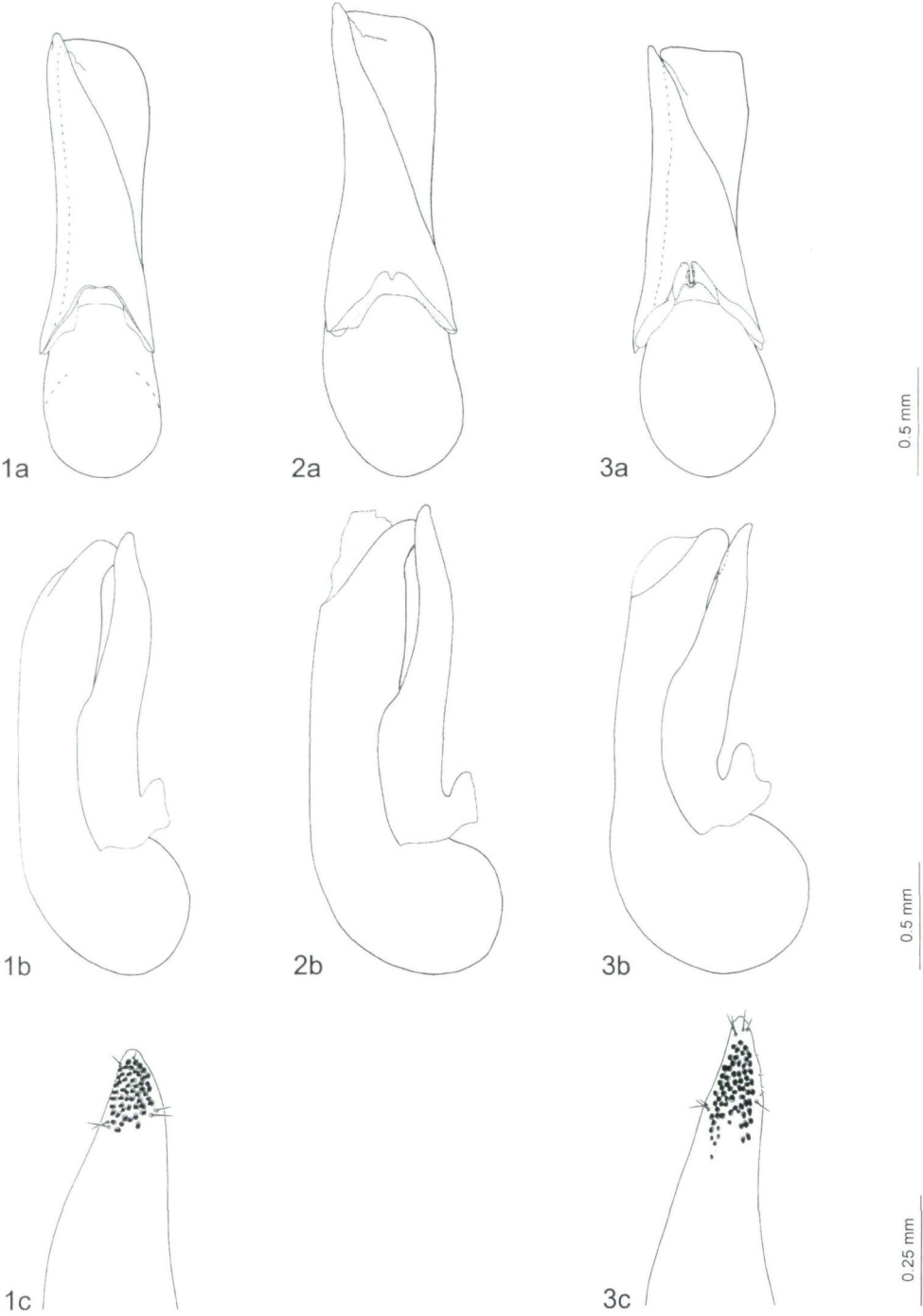
Aedeagus: Fig. 22.

Female unknown.

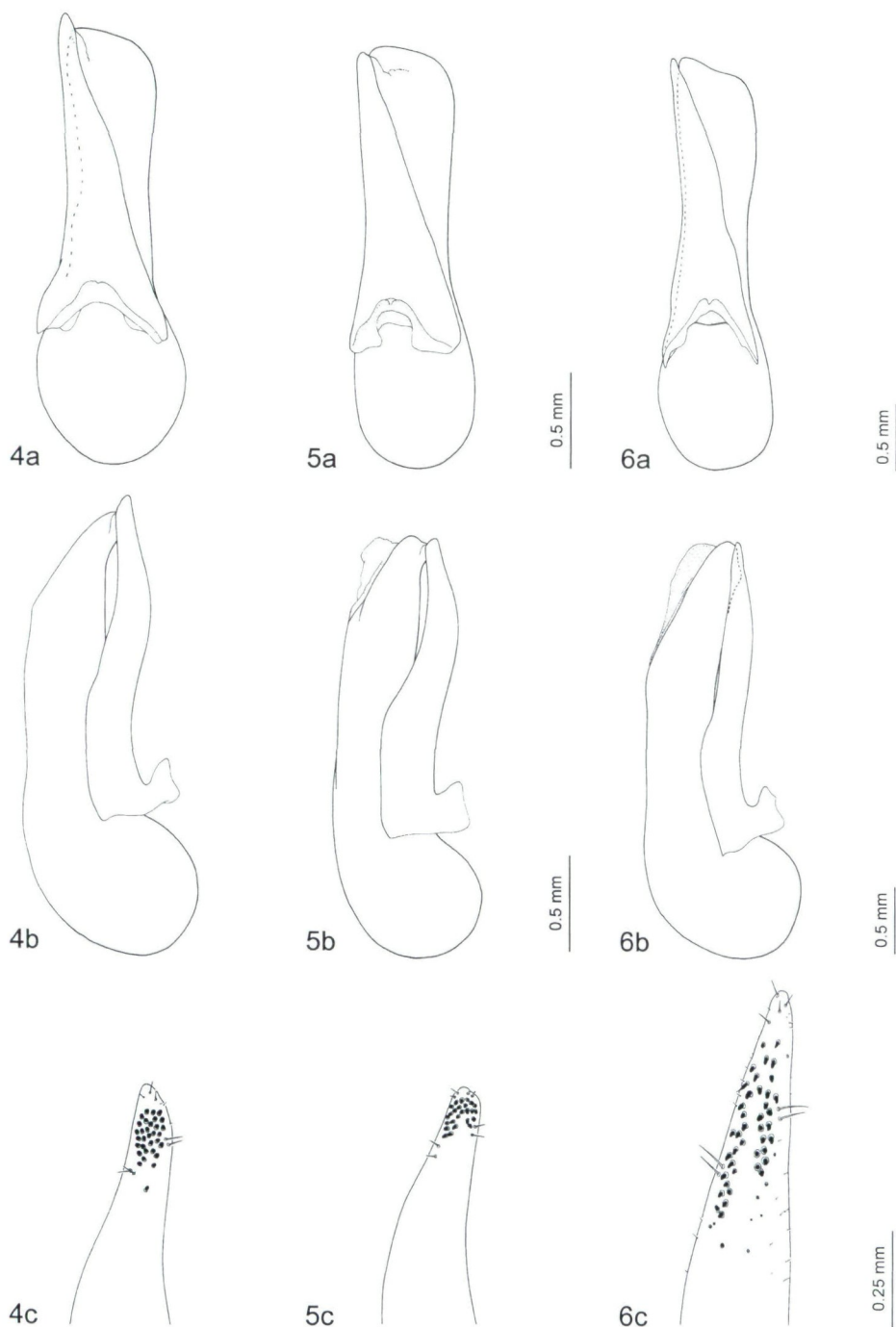
REMARK: The general appearance of this species is so outstanding that the temptation to erect a separate genus for it is very great, but the hitherto gained experience has shown that the habitual diversity within one genus can be tremendous. However, the characters causing this conspicuous appearance are rather unimportant at the generic level. The postocular ridge is a structure of the integument, not one of the primary cuticular ridges or sutures on the ventral face of the head; the shape of the head, labrum and protibia, and the elytral pubescence are (partly transitional) characters which in one or other form also appear within other genera. All major characters correspond well with those of *Rhyncocheilus*.

ETYMOLOGY: The name refers to the exceedingly strange shape of the modified protibiae. A similar shape, but less conspicuous can be observed in *Trichocosmetes gigas* (see above) and most species of *Parapalaestrinus* BERNHAUER.

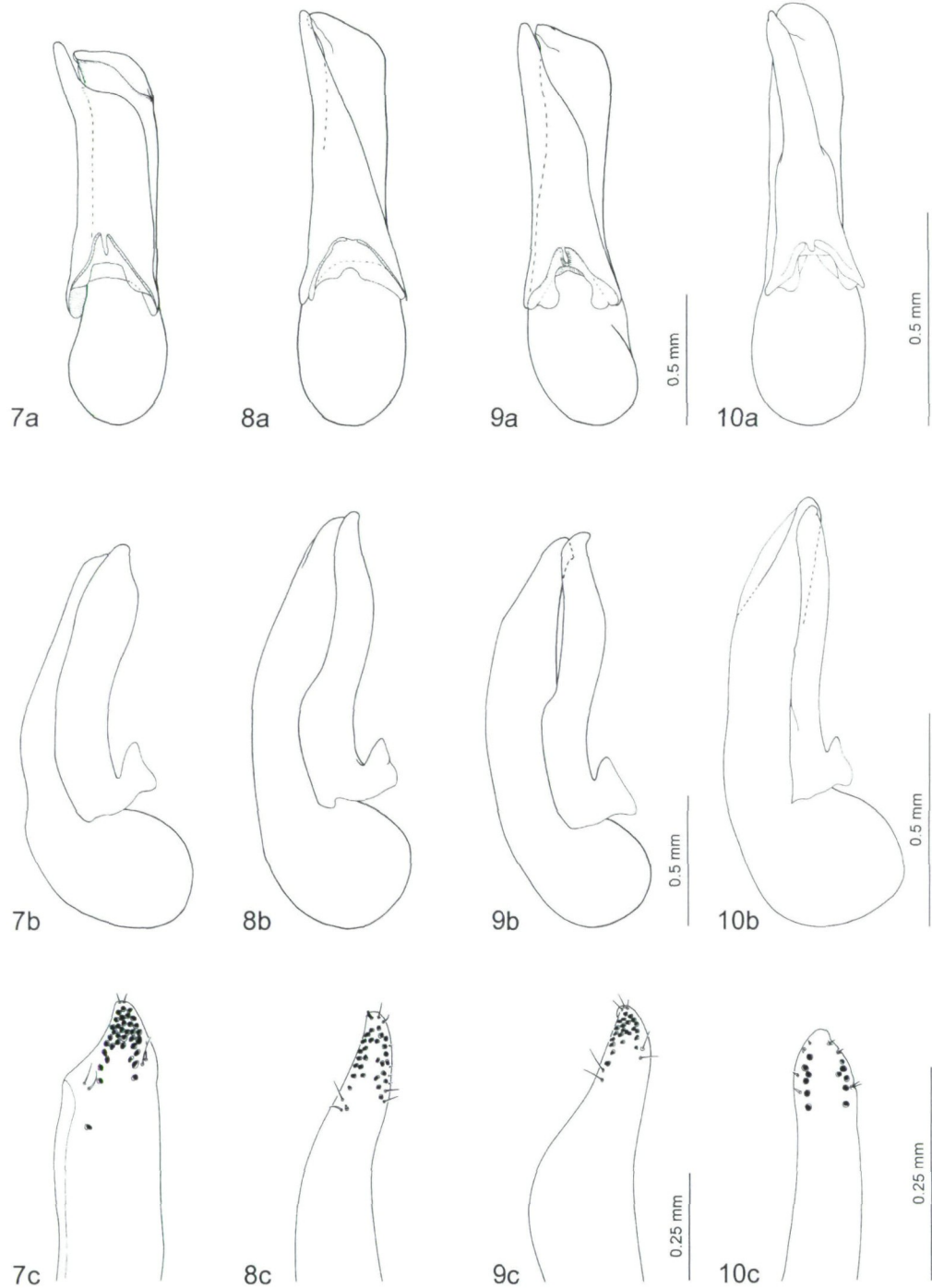
DISTRIBUTION: The species is at present known only from south-eastern China: Hunan, Fujian.



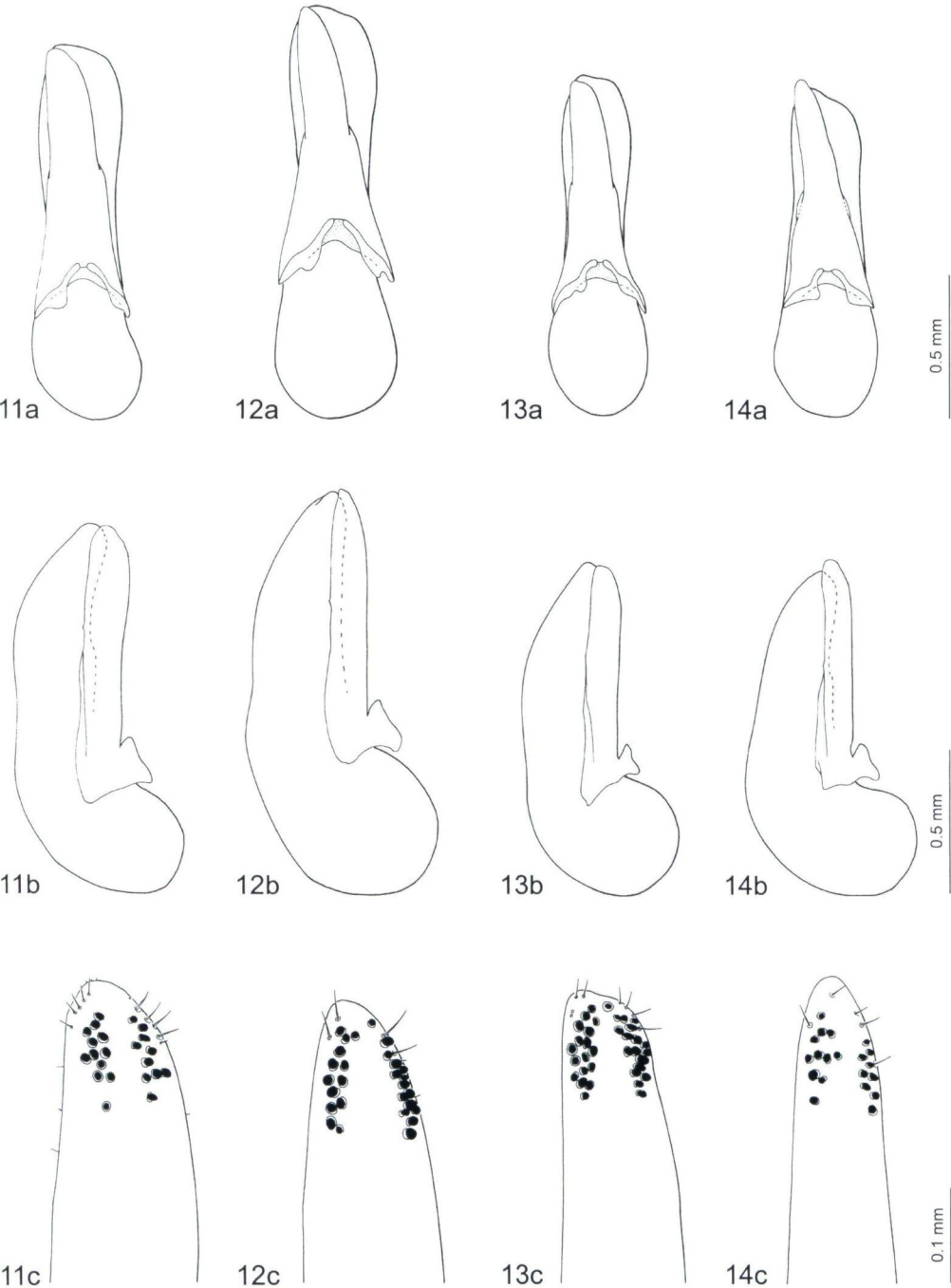
Figs. 1 - 3: aedeagus of *Trichocosmetes leucomus* (1, 2), *T. fascipennis* (3) - a) ventral view, b) lateral view, c) apical portion of paramere.



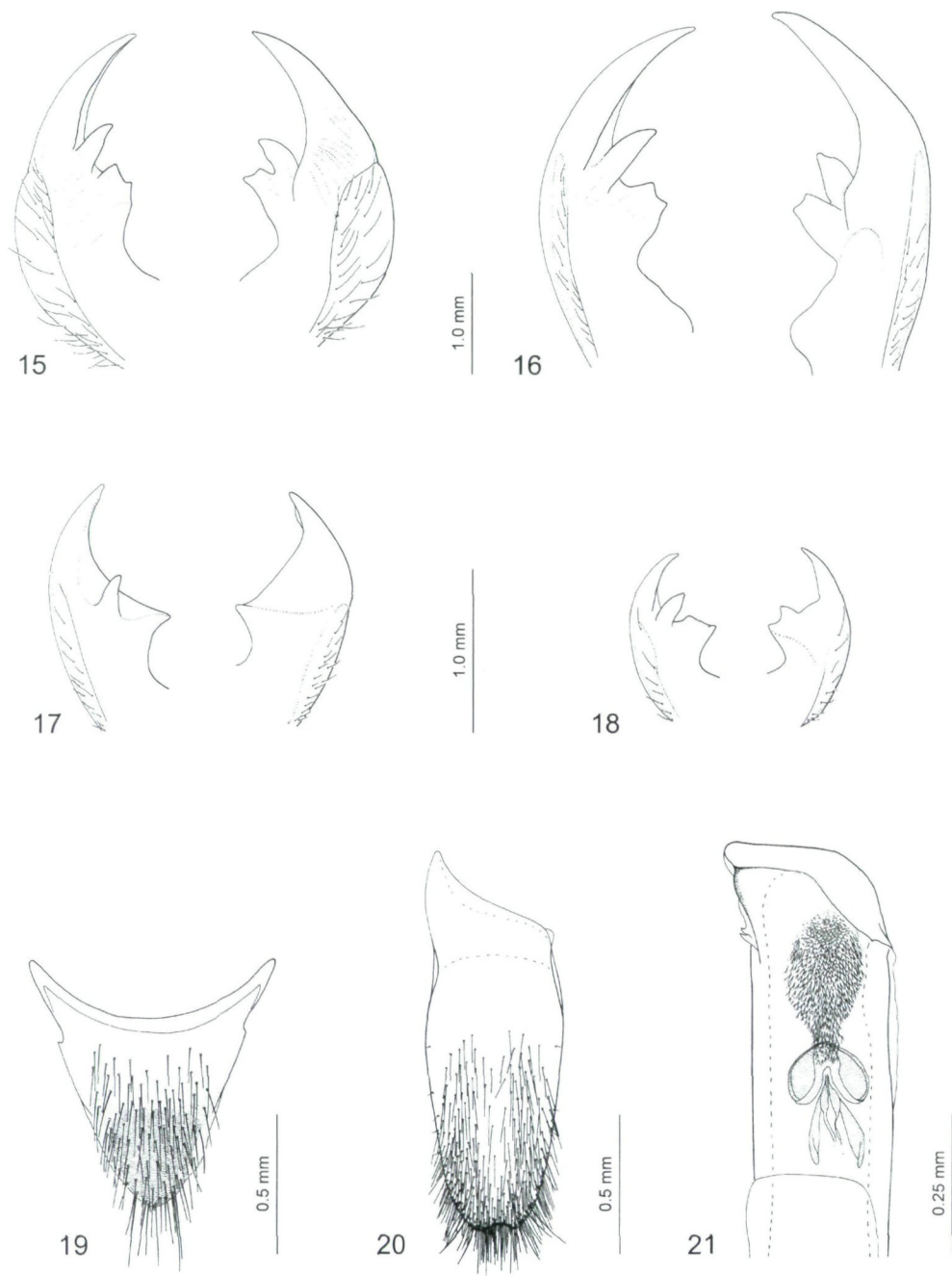
Figs. 4 - 6: aedeagus of *Trichocosmetes norae* (4), *T. kabakovi* (5), *T. gigas* (6) - a) ventral view, b) lateral view, c) apical portion of paramere.



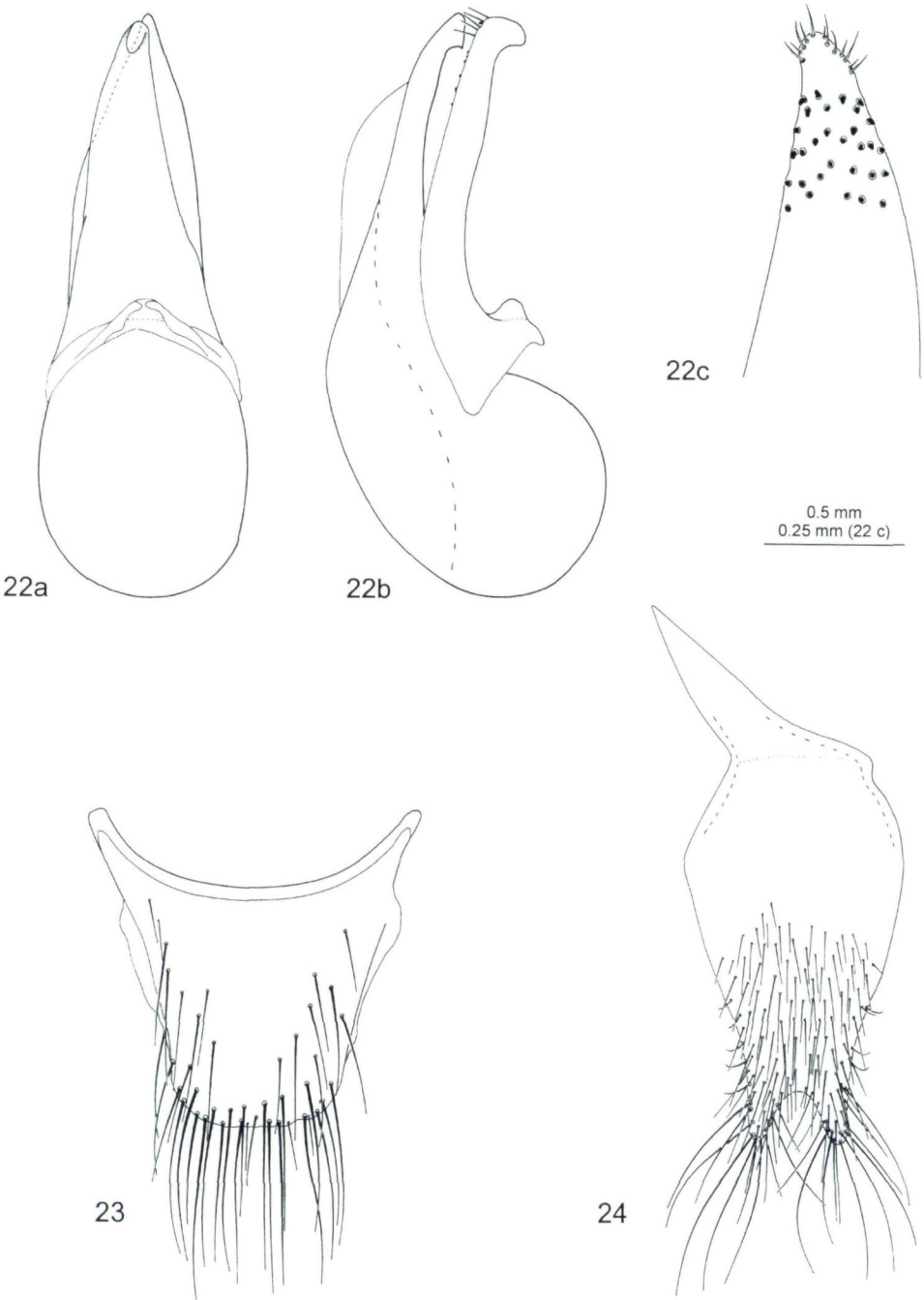
Figs. 7 - 10: aedeagus of *Trichocosmetes minor* (7), *T. reitteri* (8), *T. vietnamensis* (9), *Guillaumius shibatai* (10) - a) ventral view, b) lateral view, c) apical portion of paramere.



Figs. 11 - 14: aedeagus of *Sphaeromacrops antennalis* (11), *S. nepalensis* (12), *S. varicornis* (13), *S. gracilis* (14) - a) ventral view, b) lateral view, c) apical portion of paramere.



Figs. 15 - 21: 15 - 18) mandibles of *Trichocosmetes norae* (15), *T. gigas* (16), *Sphaeromacrops nepalensis* (17), *Guillaumius rougemonti* (18); 19 - 20) male tergite X (19) and male sternite IX (20) of *S. antennalis*; 21) *T. minor*, internal structure of aedeagus.



Figs. 22 - 24: *Rhyncocheilus monstrosipes*: 22) aedeagus, ventral view (a) lateral view (b), apical portion of paramere (c); 23) male tergite X; 24) male sternite IX.

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