

# The *Rugilus* species of the Palaearctic and Oriental regions (Coleoptera: Staphylinidae: Paederinae)

VOLKER ASSING

## Abstract

The East Palaearctic and Oriental species of the paederine genus *Rugilus* Leach, 1819 are revised, based on a study of types and additional material. In all, 85 valid species, at least one of them of doubtful status, are recognized in the Palaearctic and Oriental regions. They are attributed to two subgenera, 67 species to the nominate subgenus and 16 species to *Eurystilicus* Fagel, 1953; two species are of uncertain subgeneric affiliations and treated as incertae sedis. Numerous species are (re-)described and illustrated, 27 of them for the first time: *Rugilus (Rugilus) aequabilis* n. sp. (China: Yunnan), *R. (R.) biformis* n. sp. (China: Yunnan), *R. (R.) confluens* n. sp. (China: Sichuan, Yunnan), *R. (R.) dabaicus* n. sp. (China: Hubei), *R. (R.) dalaoicus* n. sp. (China: Hubei), *R. (R.) daxuensis* n. sp. (China: Sichuan), *R. (R.) desectus* n. sp. (China: Yunnan), *R. (R.) emeiensis* n. sp. (China: Sichuan), *R. (R.) fodens* n. sp. (China: Daba Shan), *R. (R.) glabripennis* n. sp. (China: Yunnan), *R. (R.) gonggaicus* n. sp. (China: Sichuan), *R. (R.) kleebergi* n. sp. (Nepal: Rolwaling), *R. (R.) manasluensis* n. sp. (Nepal: Manaslu), *R. (R.) meilixuensis* n. sp. (China: Yunnan), *R. (R.) nuicus* n. sp. (China: Yunnan), *R. (R.) parvincisus* n. sp. (China: Yunnan), *R. (R.) pungens* n. sp. (China: Yunnan), *R. (R.) reticulatus* n. sp. (China: Shaanxi, Henan), *R. (R.) schuelkei* n. sp. (China: Yunnan), *R. (R.) truncatus* n. sp. (Nepal: Everest range), *R. (R.) wuyicus* n. sp. (China: Jiangxi), *R. (Eurystilicus) appendiculatus* n. sp. (Malaysia: Sabah), *R. (E.) bifidus* n. sp. (Myanmar, China), *R. (E.) bihamatus* n. sp. (Philippines), *R. (E.) brevior* n. sp. (China: Sichuan), *R. (E.) uncatus* n. sp. (Thailand, Sri Lanka), and *R. (?) lucens* n. sp. (Nepal). Eleven synonymies are proposed: *Rugilus* Leach, 1819 = *Tetragnathostilicus* Scheerpeltz, 1976, n. syn.; *Rugilus rufipes* Germar, 1836 = *R. pecticensis* (Coiffait, 1939), n. syn.; *R. ceylanensis* (Kraatz, 1859) = *R. luteipennis* (Kraatz, 1859), n. syn., = *R. sutteri* (Scheerpeltz, 1957), n. syn., = *R. wittmeri* (Coiffait, 1978), n. syn.; *R. rufescens* (Sharp, 1874) = *R. kamchaticus* Ryabukhin, 2007, n. syn.; *R. japonicus* Watanabe, 1961 = *R. ferreirai* (Scheerpeltz, 1978), n. syn.; *R. ocellaris* (Fauvel, 1895) = *R. kolbei* (Bernhauer, 1915), n. syn., = *R. triangulus* Last, 1984, n. syn.; *R. pygmaeus* (Kraatz, 1859) = *R. parvus* (Cameron, 1931), n. syn.; *Stilicoderus signatus* Sharp, 1889 = *Stilicoderus reitteri* Bernhauer, 1938, n. syn. One valid species previously attributed to *Rugilus* is moved to the genus *Stilicoderus* Sharp, 1889: *Stilicoderus melancholicus* (Schubert, 1911), n. comb. Lectotypes are designated for *Stilicoderus gracilis* Eppelsheim, 1895, *S. velutinus* Fauvel, 1895, *S. ocellaris* Fauvel, 1895, *S. plagiatus* Cameron, 1924, *S. chinensis* Bernhauer, 1938, and *S. reitteri* Bernhauer, 1938. A key to the *Rugilus* species of the East Palaearctic and Oriental regions and a catalogue of the species of the Palaearctic and Oriental regions are provided. A considerable number of species of the nominate subgenus is subject to pronounced sexual dimorphisms, wing dimorphisms, and biased sex ratios.

**Key words:** Staphylinidae, Paederinae, Stilicina, *Rugilus*, *Stilicoderus*, subgeneric assignment, new species, new synonymies, new combinations, lectotype designations, descriptions, key to species, catalogue, Palaearctic region, Oriental region, sexual dimorphism, wing dimorphism, sex ratio.

## Zusammenfassung

Die ostpaläarktischen und orientalischen Arten der Paederinengattung *Rugilus* Leach, 1819 werden auf der Grundlage einer Untersuchung von Typen und weiterem Material revidiert. Insgesamt umfasst die *Rugilus*-Fauna der Paläarktis und der Orientalis derzeit 85 valide Arten, davon mindestens eine mit zweifelhaftem Status. Die Arten werden zwei Untergattungen zugeordnet: 67 Arten zu *Rugilus* s. str. und 16 Arten zu *Eurystilicus* Fagel, 1953. Die Untergattungszugehörigkeit von zwei Arten ist ungeklärt. Zahlreiche Arten werden beschrieben und abgebildet; davon sind 27 neu für die Wissenschaft: *Rugilus (Rugilus) aequabilis* n. sp. (China: Yunnan), *R. (R.) biformis* n. sp. (China: Yunnan), *R. (R.) confluens* n. sp. (China: Sichuan, Yunnan), *R. (R.) dabaicus* n. sp. (China: Hubei), *R. (R.) dalaoicus* n. sp. (China: Hubei), *R. (R.) daxuensis* n. sp. (China: Sichuan), *R. (R.) desectus* n. sp. (China: Yunnan), *R. (R.) emeiensis* n. sp. (China: Sichuan), *R. (R.) fodens* n. sp. (China: Daba Shan), *R. (R.) glabripennis* n. sp. (China: Yunnan), *R. (R.) gonggaicus* n. sp. (China: Sichuan), *R. (R.) kleebergi* n. sp. (Nepal: Rolwaling), *R. (R.) manasluensis* n. sp. (Nepal: Manaslu), *R. (R.) meilixuensis* n. sp. (China: Yunnan), *R. (R.) nuicus* n. sp. (China: Yunnan), *R. (R.) parvincisus* n. sp. (China: Yunnan), *R. (R.) pungens* n. sp. (China: Yunnan), *R. (R.) reticulatus* n. sp. (China: Shaanxi, Henan), *R. (R.) schuelkei* n. sp. (China: Yunnan), *R. (R.) truncatus* n. sp. (Nepal: Everest-Gebiet), *R. (R.) wuyicus* n. sp. (China: Jiangxi), *R. (Eurystilicus) appendiculatus* n. sp. (Malaysia: Sabah), *R. (E.) bifidus* n. sp. (Myanmar, China), *R. (E.) bihamatus* n. sp. (Philippinen), *R. (E.) brevior* n. sp. (China: Sichuan), *R. (E.) uncatus* n. sp. (Thailand, Sri Lanka), and *R. (?) lucens* n. sp. (Nepal). Elf Namen werden synonymisiert: *Rugilus* Leach, 1819 = *Tetragnathostilicus* Scheerpeltz, 1976, n. syn.; *Rugilus rufipes* Germar, 1836 = *R. pecticensis* (Coiffait, 1939), n. syn.; *R. cey-*

*lanensis* (Kraatz, 1859) = *R. luteipennis* (Kraatz, 1859), **n. syn.**, = *R. sutteri* (Scheerpeltz, 1957), **n. syn.**, = *R. wittmeri* (Coiffait, 1978), **n. syn.**; *R. rufescens* (Sharp, 1874) = *R. kamchaticus* Ryabukhin, 2007, **n. syn.**; *R. japonicus* Watanabe, 1961 = *R. ferreirai* (Scheerpeltz, 1978), **n. syn.**; *R. ocularis* (Fauvel, 1895) = *R. kolbei* (Bernhauer, 1915), **n. syn.**, = *R. triangulus* Last, 1984, **n. syn.**; *R. pygmaeus* (Kraatz, 1859) = *R. parvus* (Cameron, 1931), **n. syn.**; *Stilicoderus signatus* Sharp, 1889 = *Stilicoderus reitteri* Bernhauer, 1938, **n. syn.** Eine bisher der Gattung *Rugilus* zugeordnete Art wird in die Gattung *Stilicoderus* Sharp, 1889 gestellt: *Stilicoderus melancholicus* (Schubert, 1911), **n. comb.** Für folgende Namen werden Lectotypen designiert: *Stilicoderus gracilis* Eppelsheim, 1895, *S. velutinus* Fauvel, 1895, *S. ocularis* Fauvel, 1895, *S. plagiatus* Cameron, 1924, *S. chinensis* Bernhauer, 1938, and *S. reitteri* Bernhauer, 1938. Eine Bestimmungstabelle der ostpaläarktischen und orientalischen *Rugilus*-Arten sowie ein Katalog der *Rugilus*-Fauna der Paläarktis und der Orientalis werden erstellt. Bei zahlreichen Arten der Untergattung *Rugilus* wurden bemerkenswerte Geschlechtsdimorphismen, Flügelmorphismen und auffällige Geschlechterverhältnisse festgestellt.

## Contents

1	Introduction.....	116
2	Material and methods.....	117
3	The <i>Rugilus</i> fauna of the Palaearctic and Oriental regions.....	118
3.1	Diversity and distribution .....	118
3.2	Subgeneric classification .....	118
3.3	Sexual dimorphisms, wing dimorphisms, and sex ratios.....	119
4	The species of <i>Rugilus</i> .....	119
5	Key to the <i>Rugilus</i> species of the East Palaearctic and Oriental regions.....	181
6	Catalogue of the Palaearctic and Oriental <i>Rugilus</i> species.....	185
7	Species excluded from <i>Rugilus</i> .....	185
8	References.....	188

## 1 Introduction

The speciose stilicine genus *Rugilus* Leach, 1819 currently includes more than 200 species worldwide (NEWTON et al. 2001). The vast majority of these species was originally described in *Stilicoderus* Berthold, 1827, a junior synonym of *Rugilus*. In the Palaearctic region the genus was previously represented by approximately 60 described species in three subgenera (ASSING 2005, 2008, 2011; RYABUKHIN 2007; SMETANA 2004). Thirteen species, four of them adventive, have been recorded from North America (HOEBEKE 2010; NEWTON et al. 2001; NEWTON unpublished). Twelve species were previously known from the Oriental region, with the distributions of some of them also extending into the south of the East Palaearctic. FAGEL (1963) presented a key to the 110 species recorded from the Ethiopian region at that time, with some species represented by several subspecies. At present, 117 species are known from the Afrotropical region, including Madagascar (NEWTON unpublished). According to ROUGEMONT (1995), only two non-autochthonous species have been recorded from the Australian region. However, two species were described from Papua New Guinea (eastern New Guinea and New Britain) (BERNHAEUER 1915, LAST 1984). A total of 39 species has been reported from the Neotropical region (NEWTON unpublished).

FAGEL (1953) proposed subgeneric classification including twelve subgenera, ten of them described by himself, for the *Rugilus* species of the Afrotropical region, stating that only two of the subgenera were present also

in other zoogeographic regions, the nominate subgenus in the Palaearctic and *Eurystilicoderus* Fagel, 1953 in South Asia and Japan. One of the newly proposed names, *Eustilicoderus* Fagel, 1953, is a primary homonym of *Eustilicoderus* Sharp, 1886 and was subsequently replaced with *Fossulostilicoderus* (FAGEL 1963). FAGEL's subgeneric classification has not been revised.

The *Rugilus* fauna of the West Palaearctic can be considered rather well-studied. Keys and redescriptions, including illustrations of the male genitalia, were provided by COIFFAIT (1970, 1984). Only few species have been described since then. All the West Palaearctic species are currently attributed to the nominate subgenus. The fauna of the East Palaearctic and Oriental regions, in contrast, has been subject to much fewer and less comprehensive studies.

Based on the presence of four (rather than two) teeth at the anterior margin of the labrum, SCHEERPELTZ (1976) established the subgenus *Tetragnathostilicoderus* for two species from the Himalaya, the designated type species *R. gracilis* (Eppelsheim, 1895) and the newly described *R. nepalensis*. COIFFAIT (1978) described the subgenus *Stilidentus* based on the same character to accommodate four Himalayan species, *R. quadridentatus* (Coiffait, 1976) and three new taxa: *R. dorjulensis* (type species), *R. gogonensis*, and *R. brahmanus*. Both SCHEERPELTZ (1976) and COIFFAIT (1978), however, were apparently unaware of the fact that, more than a century before, SAULCY (1865) had already observed that some West Palaearctic species had a quadridentate and others a bidentate labrum. ROUGEMONT (1987) synonymized

*Stilidentus* with *Tetragnathostilicus*, keyed the nine species he attributed to the subgenus, and presented illustrations of the male sexual characters. Based on the quadridentate labrum, other external characters (facies, punctation of head and pronotum), and the “aedeagal type” he considered the species included in *Tetragnathostilicus* a monophyletic group. Stating that two West Palaearctic species [*R. rufipes* Germar, 1836 and *R. subtilis* (Erichson, 1840)], too, had a quadridentate labrum, he nevertheless retained *Tetragnathostilicus* as a valid subgenus primarily based on biogeographic considerations. ROUGEMONT (1988, 1998) added another seven species to the subgenus and confirmed its validity, again largely based on biogeographic arguments, despite his observation that “the morphological differences ... alone scarcely warrant taxonomic separation”. *Tetragnathostilicus* previously included 16 species with more or less restricted distributions in the region from Middle Asia in the west across the southern slopes of the Himalaya to China in the southeast (ROUGEMONT 1987, 1998; SMETANA 2004). Two species from Nepal (Bahrabise) and Bhutan were described by COIFFAIT (1978, 1982) exclusively from females, although the species of this species group can reliably be identified only by the male sexual characters. ROUGEMONT (1998) clarified the identity of the species from Nepal, *R. prodoni* (Coiffait, 1982), based on material collected close to the type locality, confirmed the presence of *Eurystilicus* in the Oriental region, with 23 described species plus “ca. 10 others seen”, and postulated two additional unnamed groups including one and two species, respectively.

The present paper was initiated mainly by a study of remarkably diverse *Rugilus* material from China made available to me by MICHAEL SCHÜLKE. An examination of this material revealed that it included a considerable number of undescribed species, several of them previously misidentified, and that many taxa have more or less restricted distributions. Subsequently, more specimens from other sources were studied, with a focus on the fauna of China and the Himalaya. When dealing with the representatives of species belonging to subgenera other than *Rugilus*, however, it became clear that the scope had to be expanded to include all of the East Palaearctic and also the Oriental region. The species distributed in the Himalaya, however, are treated only partly. For descriptions and illustrations of these species see ROUGEMONT (1987, 1998).

#### A c k n o w l e d g e m e n t s

I am indebted to all the colleagues indicated in the material section for the loan of specimens under their care, to LEE H. HERMAN (New York) and ALFRED F. NEWTON (Chicago) for cross-checking the catalogue with their unpublished databases, and to A. F. NEWTON additionally for providing accurate, up-to-date diversity figures. In particular, I am grateful to MICHAEL SCHÜLKE for the generous gift of the holotypes of numerous spe-

cies described in this paper, as well as to ANDREAS KLEEGERG for the permission to retain the holotypes of *R. kleebergi* and *R. lucens*. Finally, thanks are due to BENEDIKT FELDMANN (Münster) for proof-reading the manuscript and helpful comments, and to HEINRICH TERLUTTER (Coesfeld), who reviewed an earlier draft.

## 2 Material and methods

The material treated in this study is deposited in the following public institutions and private collections:

BMNH	The Natural History Museum, London (R. G. BOOTH)
CAS	Chinese Academy of Sciences, Beijing
cAss	author's private collection
cFel	private collection BENEDIKT FELDMANN, Münster
cKas	private collection VITALY KASTCHEEV, Almaty
cKle	private collection ANDREAS KLEEGERG, Berlin
CNC	Canadian National Collection, Ottawa (A. SMETANA)
cPüt	private collection ANDREAS PÜTZ, Eisenhüttenstadt
cRou	private collection GUILLAUME DE ROUGEMONT, London
cSch	private collection MICHAEL SCHÜLKE, Berlin
cSme	private collection ALEŠ SMETANA, Ottawa
FMNH	Field Museum of Natural History, Chicago (A. F. NEWTON; via L. H. HERMAN)
IRSNB	Institut royal des Sciences naturelles de Belgique, Bruxelles (Y. GÉRARD)
MHNG	Muséum d'Histoire naturelle, Genève (G. CUCCODORO)
MNHNP	Muséum national d'Histoire naturelle, Paris (A. TAGHAVIAN)
MNHUB	Museum für Naturkunde der Humboldt-Universität, Berlin (J. FRISCH, J. WILLERS)
NHMB	Naturhistorisches Museum, Basel (M. BRANCUCCI, M. GEISER)
NHMW	Naturhistorisches Museum, Wien (H. SCHILLHAMMER)
NME	Naturkundemuseum, Erfurt (M. HARTMANN, assisted by W. APFEL)
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg (L. BEHNE)
SMNH	Swedish Museum of Natural History, Stockholm (B. VIKLUND)
SMNS	Staatliches Museum für Naturkunde, Stuttgart (W. SCHAWALLER, K. WOLF-SCHWENNINGER)
SNSD	Senckenberg Naturhistorische Sammlungen, Dresden (O. JÄGER)
ZIN	Zoological Institute, Russian Academy of Sciences, St. Petersburg (B. KOROTYAEV)
ZSM	Zoologische Staatssammlung, München (M. BALKE)

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs.

Head length was measured from the anterior margin of the frons to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, aedeagal length from the apex of the ventral process to the base of the capsule. The side of the aedeagus with the sperm duct opening is referred to as the ventral, the opposite side as the dorsal aspect.

The individual labels of type specimens are separated by slashes; they are cited in the original spelling and format, except

that slashes were replaced with commas and that capitalized geographic names of countries are given in standard format (i. e., “China” rather than “CHINA”). Moreover, the following adaptations were made according to the general format requirements of the journal: names of persons (except authors of species) in small capitals, scientific names of genera and species in italics, dates with the months always in Roman numbers.

The biogeographic limits are based on LÖBL & SMETANA (2004), if not indicated otherwise.

### 3 The *Rugilus* fauna of the Palaearctic and Oriental regions

#### 3.1 Diversity and distribution

In all, 85 species and one subspecies are recognized from the Palaearctic and the Oriental regions, including at least one name of doubtful status; 67 species are attributed to the nominate subgenus, 16 to *Eurystilicus*, and two species are of unknown subgeneric affiliations. Twenty-seven species are described for the first time and ten new synonymies are proposed. Two names, one of them a new synonym, are excluded from the genus.

The type material of some of the species described from the Himalaya has not been revised, so that the fauna of this region may still be subject to taxonomic changes. Future discovery of additional species is most likely in the Oriental region and particularly in China. In the course of the revision unidentified females from numerous Chinese localities were studied; at least some of them most likely belong to undescribed species.

In the study region, the genus as a whole is distributed in practically all of the Palaearctic and Oriental regions including the Wallacea, with the southeasternmost autochthonous species recorded from the Maluku Islands and Timor (Indonesia). The distribution of the nominate subgenus is essentially confined to the Palaearctic. In the East Palaearctic, the southern limit runs along the southern slopes of the Himalaya into southern China (Yunnan, Jiangxi); no species of *Rugilus* s. str. have become known from Taiwan. The distribution of the subgenus *Eurystilicus*, in contrast, is predominantly Oriental, with some species ranging also into the south and east of the East Palaearctic, as well as into the Australian region. The species known from the Australian region are of Oriental, in one case also of Palaearctic affiliations. The regions with – by far – the highest diversity are China and the Himalaya.

#### 3.2 Subgeneric classification

The *Rugilus* fauna of the Palaearctic and Oriental regions evidently includes various phylogenetic lineages that have been attributed to three subgenera: *Rugilus*, *Tetra-*

*gnathostilicus*, and *Eurystilicus*. A comprehensive analysis of the intrageneric phylogenetic affiliations is not within the scope of the present paper, particularly because such a study would have to be based on the *Rugilus* fauna also of other zoogeographic regions.

Therefore, the predominantly Oriental lineages characterized by a more or less homogeneously and mostly rather finely punctate head and pronotum (e. g., Figs. 205–206, 223, 236), the absence of an impunctate band along the midline of the pronotum, the presence of three molar teeth on both mandibles, the basal one enlarged, a more or less distinctly bidentate anterior margin of the labrum, the presence of a long seta in the anterior and posterior angles of the pronotum, a mostly broadly and often weakly concave posterior margin of the male sternite VIII (e. g., Figs. 168, 174, 184, 189, 194, 201), and a usually short, weakly sclerotized ventral process of the aedeagus (e. g., Figs. 164–165, 175–182, 185–186) are preliminarily attributed to *Eurystilicus*. An additional, probably synapomorphic character of *Eurystilicus* is the chaetotaxy of the abdominal sternites VII and VIII. Sternite VII has a pair of – often broken off – long dark setae in the middle (e. g., Fig. 238) and sternite VIII a long dark lateral seta on either side (e. g., Fig. 259). These setae are present also in the nominate subgenus, but finer, shorter, and less prominent.

Except for two species, all other species are assigned to the nominate subgenus, and the subgenus *Tetragnathostilicus* is placed in synonymy with *Rugilus*. Based on the morphology of the mouthparts, particularly of the labrum, and on the morphology of the aedeagus, there is little doubt that the species previously attributed to *Tetragnathostilicus* are closely related to a West Palaearctic lineage including at least nine species (*R. rufipes*, *R. rossii*, *R. tauricus*, *R. arabs*, *R. lesbius*, *R. frischi*, *R. penicillatus*, *R. subtilis*, *R. dilutipes*). A comparison of both groups yielded no morphological evidence suggesting that they should be distinct on the subgeneric level (see also Introduction). Based on preliminary studies, the above West Palaearctic lineage is distinguished from other West Palaearctic lineages, especially the species allied to *R. orbiculatus*, at least by a different morphology of the labrum and of the aedeagus, suggesting that separating *Tetragnathostilicus* from *Rugilus* would render the remainder of the subgenus *Rugilus* paraphyletic. The type species of *Rugilus* is *R. orbiculatus*, that of *Tetragnathostilicus* is *R. gracilis*. *Rugilus rufipes* is the type species of *Stilicosoma* Casey, 1905. Consequently, if *R. rufipes* and its allies were to be merged with the species previously in *Tetragnathostilicus*, this name would have to be placed in synonymy with the senior name *Stilicosoma*. Therefore, until the phylogenetic affiliations within *Rugilus* are resolved, it seems both practicable and in accordance with the observations outlined above to include all the species previously in *Tetragnathostilicus* in the nominate subgenus and to establish the following synonymy: *Rugi-*

*lus* Leach, 1819 = *Tetragnathostilicus* Scheerpeltz, 1976, n. syn.

Two species, *R. pygmaeus* and *R. lucens* (male sexual characters unknown), probably belong to neither the nominate subgenus nor *Eurystilicus* and are treated as species incertae sedis.

### 3.3 Sexual dimorphisms, wing dimorphisms, and sex ratios

Remarkable sexual dimorphism were observed in a considerable number of species especially from China. The males of these species have – usually conspicuously – long elytra with pronounced humeral angles and fully developed hind wings, whereas the female have short, posteriorly more or less widened elytra with weakly pronounced humeral angles, reduced hind wings, and often also an abdominal tergite VII without a palisade fringe. In at least two species (*R. parvincisus*, *R. biformis*), the males are wing-dimorphic and the females micropterous.

Remarkably, a more or less strongly biased sex ratio was observed in most of these species, with the males represented in the samples by low to very low proportions (sometimes < 10%). It is unclear if this phenomenon is a result of a biased pre-zygotic sex determination, a shorter life expectancy of the males, or of the males leaving the populations through dispersal by flight, in which case wing-dimorphism and biased sex ratio would be inter-related. Similarly, the adaptive values of both wing-dimorphism and unbalanced sex ratio are currently unknown. A practical consequence of the rarity of males is that it was not possible to identify or describe several evidently new species of which only females were available.

## 4 The species of *Rugilus*

In this section, only the species from the East Palaearctic (except the Himalaya) and the Oriental regions are treated comprehensively. Species from the West Palaearctic and the Himalaya are addressed only in those cases where a) type material was examined, b) nomenclatural or taxonomic changes are proposed, c) records of biogeographic interest are reported, or d) new species are described.

*Rugilus (Rugilus) rufipes* (Germar, 1836)

*Stilicus pecticensis* Coiffait, 1939: 166 ff.; n. syn.

#### Comment

*Stilicus pecticensis* was described as a variety of *Rugilus rufipes* from a single male collected in “Corubert,

près de Bellême, (Orne)”, based on some differences in body shape, the reduced external tooth of the anterior margin of the labrum, the slightly different punctuation particularly of the pronotum, and some slight differences in the shape of the aedeagus (COIFFAIT 1939). The author of the species later expressed his doubts regarding the validity of the species stating “mais qui n’est peut être qu’une mutation individuelle” (COIFFAIT 1984). In the Palaearctic catalogue, the taxon is listed as a valid species (SMETANA 2004); it has not been recorded again since its original description (COIFFAIT 1984).

The type locality is situated in northwestern France (Basse-Normandie), where, to my knowledge, endemic animal species are unknown and most unlikely to occur. Moreover, the region has been subject to some collecting activity, so that, if *R. pecticensis* really was a distinct species, it would surely have been recorded again. Finally, the differences in the morphology of the aedeagus are barely noticeable, and individual aberrations are not uncommon in many species of Paederinae. Consequently, all the available evidence suggests that the suspicion expressed by COIFFAIT (1984) is correct and that the holotype of *R. pecticensis* is indeed conspecific with *R. rufipes*; hence the synonymy proposed above.

*Rugilus (Rugilus) rossii* (Zanetti, 1977) and *R. (R.) tauricus* (Rougemont, 1988)

#### Comment

The figures of the male sexual characters of both species in ASSING (2011) are confused. Figures 1–5 refer to *R. tauricus* (not *rossii*) and figures 6–11 to *R. rossii*.

*Rugilus (Rugilus) arabs* (Saulcy, 1865)

*Stilicus arabs* Saulcy, 1865: 651 f.

#### Type material examined

Syntype ♀: “Jerusalem / Syntypus / arabs m. / coll. KRAATZ / DEI Müncheberg Col –01285 / *Rugilus arabs* (Saulcy), det. V. ASSING 2011” (SDEI).

#### Comment

The original description is based on an unspecified number of syntypes, among them at least one male, from “Jérusalem, sous les détritux végétaux” (SAULCY 1865). One of them, a female, was discovered in the KRAATZ collection at the SDEI. It is conspecific with the interpretation of *R. arabs* of previous authors.

*Rugilus (Rugilus) frischii* Assing, 2011

## Material examined

**Azerbaijan:** 1 ♂, Talysh mountains, 1897, leg. KORB (SDEI).

## Comment

This recently described species was previously known only from northwestern Iran. The above specimen represents the first record from Azerbaijan.

*Rugilus (Rugilus) penicillatus* Assing, 2011

## Material examined

**Iran:** 3 ♀♀, Mazandaran, Elburz mts., road Galugah–Yaneh Sar, 36° 39' N, 53° 58' E, 780 m, 21.V.2007, leg. ŠAÚŠA (cSch, cAss).

## Comment

The distribution of this recently described species is confined to the north of Iran (ASSING 2011).

*Rugilus (Rugilus) antoinei* (Peyerimhoff, 1937)

(Figs. 1–5)

*Stilicus antoinei* Peyerimhoff, 1937: 119 f.

## Material examined

1 ♂: “Hoher Atlas, Oukaïmeden, lg. H. FRANZ / Sp 926 [overleaf] / Allotype ♂ / *Stilicus antoinei* Peyer, H. COIFFAIT det. 1973 / Muséum Paris / *Rugilus antoinei* (Peyerimhoff), det. V. ASSING 2009” (MNHN).

## Comment

The original description is based on a single specimen from “Haut Agoundis, vers 2.200 m. d’altitude” collected “en septembre 1929 par M. ANTOINE” (PEYERIMHOFF 1937). The above specimen from the COIFFAIT collection is labelled as an allotype, but has no type status. The species has become known only from Morocco.

The habitus, forebody, and male sexual characters are illustrated in Figs. 1–5. The pro- and mesotarsomeres I–IV are dilated; the male sternite VII lacks distinct modifications.

*Rugilus (Rugilus) similis* (Erichson, 1839)

## Material examined

**Kazakhstan:** 2 ♂♂, 1 ♀ [partly tener], Balkhash, Karatal river, 1.VII.2004, leg. KASTCHEV (cAss).

## Comment

According to SMETANA (2004), *R. similis* is widespread in Europe and Turkey. The above specimens represent the first record from Kazakhstan and Middle Asia.

*Rugilus (Rugilus) korbi* (Fauvel, 1900)

## Type material examined

Syntype ♀: “Kasp. Meer-Geb., Lenkoran, 1897, KORB / FAUVEL vid. / 887 / n. sp. / Syntypus / D. E. I. coll. v. HEYDEN / *Stilicus korbi* Fauv. / DEI Müncheberg Col –01260 / *Rugilus korbi* (Fauvel), det. V. ASSING 2011” (SDEI).

## Additional material examined

**Azerbaijan:** 1 ex., Talysh mountains, 1897, leg. KORB (SDEI); 1 ex., Gamarat [38° 39' N, 48° 35' E], leg. LEDER (SDEI).

## Comment

Five female syntypes from the FAUVEL collection at the IRSNB were examined previously (ASSING 2011).

*Rugilus (Rugilus) ibericus* (Fagel, 1959)

(Figs. 6, 7)

*Stilicus ibericus* Fagel, 1959: 92 ff.

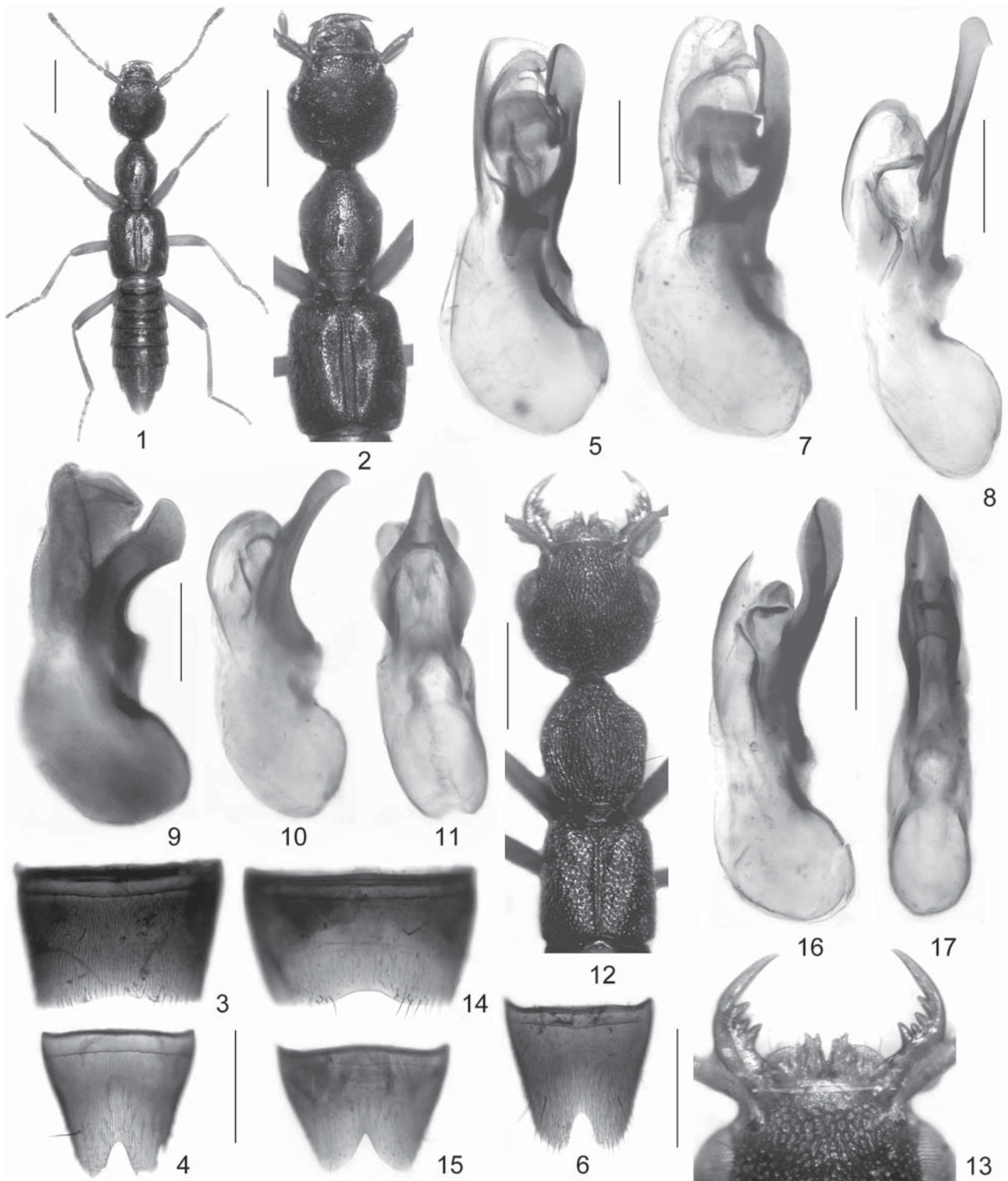
## Type material examined

Holotype ♂: “Espagne: Estremadura, Guadalupe, Mirabel, V-1958, G. FAGEL / Type / G. FAGEL det., *ibericus* n. sp. / *Rugilus ibericus* (Fagel), det. V. ASSING 2011” (IRSNB). Paratypes: 9 exs.: same data as holotype (IRSNB); 8 exs.: “Espagne: Estremadura, Guadalupe, fuente del Trincho, V-1958, G. FAGEL” (IRSNB); 8 exs.: “Espagne: Estremadura, Guadalupe (scierie), Rio Guadalupejo, V-1958, G. FAGEL” (IRSNB); 7 exs.: “Espagne: Estremadura, Guadalupe, arr. del Aguila, V-1958, G. FAGEL” (IRSNB); 4 exs.: “Espagne: Estremadura, Guadalupe (canal scierie), V-1958, G. FAGEL” (IRSNB); 4 exs.: “Espagne: Estremadura, Guadalupe, puente del Cerezo, V-1958, G. FAGEL” (IRSNB).

## Comment

The original description is based on 28 type specimens (holotype and paratypes) from “Estrémadure: Guadalupe, arroyo en contrebas de la Granja de Mirabel, en bois de châtaigniers, dans mousses de ruisseau”, 4 paratypes from the same locality, but “arroyo del Diablo”, and 34 paratypes from the same locality, but “fuente del Trincho” (FAGEL 1959).

An examination of the type material revealed that *R. ibericus* is a valid species closely related to *R. gaditanus* (Peyerimhoff, 1937) from southern Spain. The labrum has one pronounced tooth on either side of the deep median incision. The male primary and secondary sexual characters are illustrated in Figs. 6, 7. The known distribution is confined to Extremadura in western Spain, from where it was only once recorded again (ROUGEMONT 1988).



**Figs. 1–17.** *Rugilus antoinei* (1–5), *R. ibericus* (6–7; 7: holotype), *R. gracilis* (8; lectotype), *R. quadridentatus* (9), *R. gogonensis* (10–11), and *R. nepalensis* (12–17; 16–17: holotype). – 1. Habitus. 2, 12. Forebody. 3, 14. Male sternite VII. 4, 6, 15. Male sternite VIII. 5, 7–10, 16. Aedeagus in lateral view. 11, 17. Aedeagus in ventral view. 13. Anterior portion of head. – Scale bars: 1.0 mm (1–2, 12), 0.5 mm (3–4, 6, 13–15), 0.2 mm (5, 7–11, 16–17).

*Rugilus (Rugilus) orbiculatus* (Paykull, 1789)

## Material examined

**Kazakhstan:** 1 ♂, 1 ♀, Kyrbaltabai, Turgen river, 22.IV.1989, leg. KASTCHEEV (cAss); 2 ♂♂, 1 ♀, Toraigyr mt., Kokpek pass, 13.VI.2004, leg. KASTCHEEV (cAss, cKas); 1 ♂, 1 ♀, Dzhambul, Taraz, Talas river, 4.VII.1989, leg. KASTCHEEV (cAss); 1 ♀, Dzhambul env., Mikhailovka, 29.VI.1989, leg. KASTCHEEV (cAss); 1 ♀, Chimbkent, Lenger, 2.VII.1983, leg. KASTCHEEV (cAss); 1 ex., Taldy Kuvgan Prov., Panfilov Distr., Enbekshi env., 200–400 m, 1.–7.V.1991, leg. TSELIKOV (NHMB); 2 exs., N Dzhungarskiy Alatau, E Lepsinsk, 1100 m, 13.–17.VII.2001, leg. SCHAWALLER (SMNS, cAss); 1 ex., Urdzhar District, S Taskesken, 9 km SW Kosterek, 300 m, 18.–19.VI.2001, leg. SCHAWALLER (SMNS).

**Kyrgyzstan:** 3 exs., Ferganskiy Alatau, Yarodar, 1400–1500 m, 16.–19.V.1993, leg. SCHAWALLER (SMNS).

**Afghanistan:** 1 ex., Kabul, X.2010, leg. REUTER (cAss).

## Comment

This species is widespread and common in the Holarctic region and adventive also in the Australian region, but was previously unknown from Kazakhstan (SMETANA 2004).

*Rugilus (Rugilus) capitalis* (Gemminger & Harold, 1868)

## Material examined

**Kazakhstan:** 2 ♀♀, Ketmen mts., Temirlyk river, 29.VII.1988, leg. KASTCHEEV (cAss); 2 ♀♀, Dzhambul env., Tekes river, 16.VIII.1986, leg. KASTCHEEV (cAss).

**Uzbekistan:** 1 ex., Samarkand, leg. STAUDINGER (SDEI).

**Kyrgyzstan:** 1 ex., Dzhabal-Abad, 15.III.1994, leg. ORCHINIKOV (cSch).

**Afghanistan:** 1 ex., “entre Tchicht et Ichmi [?]”, 25.VIII.1957, leg. LINDBERG (NHMW).

## Comment

This species is widespread from Middle Asia to East Siberia, but was previously unknown from Kazakhstan and Afghanistan. ROUGEMONT (1988) recorded it from China.

*Rugilus (Rugilus) prolongatus* (Solsky, 1874)

## Material examined

**Tajikistan:** 4 exs., Dushanbe env., Romit valley, 18.VII.1984, leg. WRASE (cAss); 1 ex., Pamir Alai, Hissar mts., Warsob env., Adshuk cleft, 1.–3.VII.1990, leg. SCHÜLKE & WRASE (cAss); 1 ex., Hissar, Karatag, Timur estuary, 1700 m, 27.VII.1991, leg. MÜLLER-MOTZFELD (SDEI); 1 ex., Karatag [“Buchara, Karatack”, 38° 37' N, 68° 20' E], leg. STAUDINGER (SDEI).

**Uzbekistan:** 4 exs., Vorukh env., Chichantau mts. [“Ost-Buchara, Tschitschantan”, 39° 51' N, 70° 53' E], 1898, leg. HAUSER (SDEI).

**Afghanistan:** 1 ex., Nuristan, Parun, 35° 19' N, 70° 54' E, 26.VI.2006, 2600 m, leg. REUTER (cFel).

## Comment

The distribution of *R. prolongatus* is confined to Middle Asia (Tajikistan, Kyrgyzstan, Uzbekistan) and Pakistan (SMETANA 2004); the above specimen from Afghanistan represents a new country record. For additional localities see ROUGEMONT (1988).

*Rugilus (Rugilus) gracilis* (Eppelsheim, 1895)  
(Fig. 8)

*Stilicus gracilis* Eppelsheim, 1895: 63 f.

*Stilicus praelongus* Cameron 1924: 182 f.

## Type material examined

*S. gracilis*: Lectotype ♂, present designation: “♂ / Himalaya, Simla / 32 / *gracilis* Epp. / c. EPPLSH. STEIND. d. / Typus / *gracilis* Epp. Himalaya / Lectotypus ♂ *Stilicus gracilis* Eppelsheim, desig. V. ASSING 2011 / *Rugilus gracilis* (Eppelsheim), det. V. ASSING 2011” (NHMW).

*S. praelongus*: Holotype ♀: “Type H. T. / Narkanda 9230, Simla Hills. Dr. CAMERON. 11.IX.1921. / *Stilicus praelongus* Cam. / *S. gracilis* Epp. / M. CAMERON Bequest. B. M. 1955-147 / Holotype *Stilicus praelongus* Cameron, 1924.182, det. R. G. BOOTH 2011 / *Rugilus gracilis* (Eppelsheim), det. V. ASSING 2011” (BMNH).

## Additional material examined

**Pakistan:** 1 ♂ [previously misidentified as *R. caporiaccoi*], Karakorum, Haramosh range, Satil, spring moss sifted, leg. PIFFL (cAss).

**India:** 1 ♂, Himachal Pradesh, Kullu valley, Kalath, 10 km S Manali, 1700–1800 m, 2.X.1996, leg. SCHULZ & VOCK (cAss); 1 ♂, 17 ♀♀, Himachal Pradesh, Rohtang pass, S-slope, 2500–3500 m, leg. FRANZ (NHMW); 1 ♂, Himachal Pradesh, Katrain env., near Kulu, leg. FRANZ (cAss); 3 ♀♀, Jammu & Kashmir, Aru, X.1977, leg. FRANZ (NHMW); 3 ♂♂, 1 ♀ [partly teneral], Jammu & Kashmir, Pahalgam, X.1977, leg. FRANZ (NHMW, cAss).

## Comment

The original description is based on two syntypes, among them at least one male, from “Simla im Himalaya” (EPPELSHEIM 1895). One of the syntypes, a male, was located in the EPPELSHEIM collection at the NHMW; it is designated as the lectotype. Its aedeagus is illustrated in Fig. 8. *Stilicus praelongus* was described from a “single ♀ example” from “Simla District; Narkanda” (CAMERON 1924). The holotype was examined and the previously established synonymy with *R. gracilis* is confirmed.

The distribution of *R. gracilis* ranges across the southern slopes of the Himalaya from Pakistan to West Bengal. For additional records see COIFFAIT (1982) and ROUGEMONT (1998).

In the material examined, some variation was observed in the morphology of the ventral process of the aedeagus. More material is required to clarify if the observed differ-



ences are an expression of intra- or interspecific variation. The aedeagus of the lectotype is illustrated in Fig. 8.

*Rugilus (Rugilus) caporiaccoi* (Bernhauer, 1934)

Material examined

**Pakistan:** 1 ♂ [dissected prior to present study; aedeagus somewhat damaged], Karakorum, Haramosh range, Iskere, “Wallmauer-Fugen, im Sande”, leg. PIFFL (NHMW); 2 ♀♀ [identification uncertain], Karakorum, Haramosh range, Satil, spring moss sifted, leg. PIFFL (NHMW).

**Afghanistan:** 1 ♂, 25 km NW Kabul, Paghman, 2450 m, 15.VII.1960, leg. LINDBERG (cAss).

Comment

This species was previously known from Kashmir and Pakistan; the above specimen from Afghanistan represents a new country record. For additional records see ROUGEMONT (1988). The anterior margin of the labrum has one long tooth on either side of the median incision.

*Rugilus (Rugilus) quadridentatus* (Coiffait, 1975)  
(Fig. 9)

*Stilicus quadridentatus* Coiffait, 1975: 174.

Type material examined

Holotype ♂ [dissected prior to present study; aedeagus and abdominal apex missing]: “Umg. Goropani, W Pokhara / P-112 [overleaf] / Zentral-Nepal, Sept.–Okt. 1971, lg. H. FRANZ / Holotype / *Stilicus quadridentatus* H. Coiffait 1971 / *Rugilus quadridentatus* (Coiffait), det. V. ASSING 2011” (NHMW). Paratype ♀: same data as holotype (NHMW).

Additional material examined

**Nepal:** 1 ♂, Parbat District, between Deorali and Chitre, 2700 m, 1.–2.V.1995, leg. MARTENS & SCHAWALLER (cAss).

Comment

The original description is based on a male holotype and three female paratypes from “Environs de Goropani [= Ghorepani] à l’Ouest de Pokhara [recte: Pokhara], Népal central” (COIFFAIT 1975). The holotype and one paratype were located at the NHMW; the former is considerably damaged (aedeagus, abdominal apex, most of antennae, and both hind legs missing). This species is probably endemic to the Annapurna range. Additional localities were reported by ROUGEMONT (1998). The aedeagus of the male from Parbat District is illustrated in Fig. 9.

*Rugilus (Rugilus) dorjulensis* (Coiffait, 1978)

*Stilicus (Stilidentus) dorjulensis* Coiffait, 1978: 130 f.

Type material examined

Holotype ♂ [abdominal apex dissected prior to present study; aedeagus missing]: “Dorjula, 6.VI., 3100 m / Nat.-Hist. Museum Basel – Bhutan Expedition 1972 / Holotype / *Stilicus (Stilidentus) dorjulensis* H. Coiffait 19 [sic] / *Rugilus dorjulensis* (Coiffait), det. V. ASSING 2011” (NHMB).

Comment

This species was described from a male holotype and a female paratype from “Dorjula, 3100 m” in Bhutan (COIFFAIT 1978). The holotype had been dissected prior to the present study. The aedeagus is illustrated by ROUGEMONT (1987).

*Rugilus (Rugilus) gogonensis* (Coiffait, 1978)  
(Figs. 10, 11)

*Stilicus (Stilidentus) gogonensis* Coiffait, 1978: 131.

Type material examined

Holotype ♂ [aedeagus dissected prior to present study]: “Gogona, 3100 m, 10.–12.VI. / Nat.-Hist. Museum Basel – Bhutan Expedition 1972 / Holotype / *Stilicus (Stilidentus) gogonus* [sic] H. Coiffait 1977 / *Rugilus gogonensis* (Coiffait), det. V. ASSING 2011” (NHMB).

Additional material examined

**Nepal:** 8 ♂♂, 7 ♀♀, Rolwaling valley, Dugong Kharka, 2700–2800 m, 17.V.2000, leg. KLEEGERG (cKle, cAss); 3 ♂♂, 7 ♀♀, Rolwaling Himal, W Daldung L pass, 3300 m, 30.V.2000, leg. KLEEGERG (cKle); 3 ♀♀, Rolwaling Himal, above Simigaon, 28.V.2000, leg. SCHMIDT (cKle); 1 ♂, Rolwaling Himal, bank of Rolwaling, between Simigaon and Nyimare, 2700 m, 17.V.2000, leg. KLEEGERG (cAss); 1 ♂, 3 ♀♀, Taplejung district, “Grat Lasse Dhara und Lassetham”, 3000–3300 m, *Abies* & *Rhododendron*, 6.–7.IX.1983, leg. MARTENS & DAAMS (SMNS); 1 ♂, 5 ♀♀, Taplejung district, upper Simbua Khola valley, near Tseram, 3250–3350 m, mature *Abies-Rhododendron* forest, 10.–15.V.1988, leg. MARTENS & SCHAWALLER (SMNS); 2 ♀♀, Taplejung district, pasture Lassetham NW Yamputhin, 3300–3500 m, mature *Abies-Rhododendron* forest, 6.–9.V.1988, leg. MARTENS & SCHAWALLER (SMNS); 2 ♀♀, Taplejung district, upper Simbua Khola, ascent to Lassetham, 3000–3150 m, mature mixed *Tsuga-Rhododendron*-broadleaved forest, 15.V.1988, leg. MARTENS & SCHAWALLER (SMNS, cAss); 1 ♂, 9 ♀♀, Sankhua Sabha district, Thudam, 3550–3650 m, mainly birch and rhododendron, 25.–27.V.1988, leg. MARTENS & SCHAWALLER (SMNS, cAss); 1 ♂ [dissected prior to present study and identified as *R. bhotius*], Solukhumbu, Goyom above Sete, 3100 m, 10.V.1997, leg. SCHAWALLER (SMNS).

Comment

The original description is based on a single male from “Gogona, 3100 m” (COIFFAIT 1978). The aedeagus of the holotype is illustrated in Figs. 10, 11. The species was subsequently also reported from West Bengal and eastern Ne-

pal (ROUGEMONT 1987, 1998). The sex ratio in the above material is almost balanced (12 ♂♂ : 18 ♀♀).

*Rugilus (Rugilus) nepalensis* (Scheerpeltz, 1976)  
(Figs. 12–17)

*Stilicus (Tetragnathostilicus) nepalensis* Scheerpeltz, 1976: 118 ff.

Type material examined

Holotype ♂ [dissected prior to present study]: “♀ / Nepal, Prov. Nr. 2, Thodung 3200 m / 14.–21.IV.1964, leg. W. DIERL / Typus *Stilicus nepalensis* O. Scheerpeltz / *Stilicus nepalensis* nov. spec., det. SCHEERPELTZ, 1966 / Holotypus / *Stilicus nepalensis* Schp.” (ZSM).

Additional material examined

1 ♂, Nepal, Chordung range, Jiri, 2900 m, III.1973, leg. MARTENS (SMNS).

Comment

The original description is based on a single specimen from “Nepal, Prov. Nr. 2 East, Thodung”, which SCHEERPELTZ (1976) erroneously believed to be a female (“ein einziges Weibchen”). The holotype was located in the ZSM. Its aedeagus is illustrated in Figs. 16, 17.

Redescription

Body length 5.8–6.2 mm. Forebody as in Fig. 12.

Coloration: head blackish with reddish frons; pronotum blackish; elytra dark-brown with bronze hue; abdomen blackish with reddish-brown apex; legs and antennae reddish.

Head 1.05 times as wide as long; punctuation dense, very coarse, and largely longitudinally confluent, not sparser in median dorsal portion than elsewhere; interstices reduced to narrow, mostly longitudinal ridges. Eyes bulging, approximately 0.7 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two relatively short and basally fused teeth on either side of the median excision (Fig. 13).

Pronotum approximately 1.15 times as long as broad and 0.75 times as wide as head, strongly convex in cross-section; midline without impunctate shiny band; punctuation similar to that of head, also extensively confluent.

Elytra short, approximately 0.8 times as long as pronotum; lateral margins weakly diverging posteriad in dorsal view; punctuation coarse and partly confluent; surface glossy; interstices without microsculpture. Hind wings completely reduced. Metatarsomere I slightly longer than the combined length of II and III.

Abdomen broader than elytra; tergites III–V with relatively shallow and coarsely punctate impressions; tergite VI with very shallow and less coarsely punctate anterior impression; punctuation of remaining tergal surfaces fine

and moderately dense; interstices with shallow microsculpture and moderately shiny; posterior margin of tergite VII membranous, without palisade fringe.

♂: posterior margin of sternite VII distinctly concave in the middle (Fig. 14); sternite VIII with sharply V-shaped posterior incision (Fig. 15); aedeagus with ventral process of distinctive shape, apically sharp and laterally compressed (Figs. 16, 17).

Comparative notes

This species is distinguished from the similar and geographically close *R. kleebergi* particularly by the shapes of the male sternites VII and VIII, as well as by the morphology of the aedeagus.

Distribution and natural history

The species is known only from two localities, one near Thodung (27° 35.5' N, 86° 21' E) and one near Jiri (27° 37' N, 86° 14' E) in the Chordung Range, eastern Nepal. The record from central Nepal (Khandbari district) by ROUGEMONT (1998) is based exclusively on females and highly doubtful in view of the restricted distributions of the Himalayan species of the subgenus *Rugilus* and considering the external similarity of these species. The examined specimens were collected at 2900 and 3200 m.

*Rugilus (Rugilus) kleebergi* n. sp.  
(Figs. 18–24)

Type material

Holotype ♂: “Ost-Nepal, Rolwaling Himal / oberh. Simigaon, 2700–2800 m, 31.V.2000, leg. A. KLEEGERG / Holotypus ♂ *Rugilus kleebergi* sp. n. det. V. ASSING 2011” (cAss).

Paratypes: 1 ♂, 3 ♀♀: same data as holotype (cKle); 2 ♂♂, 6 ♀♀: same data as holotype, but “01.VI.2000” (cKle, cAss).

Etymology

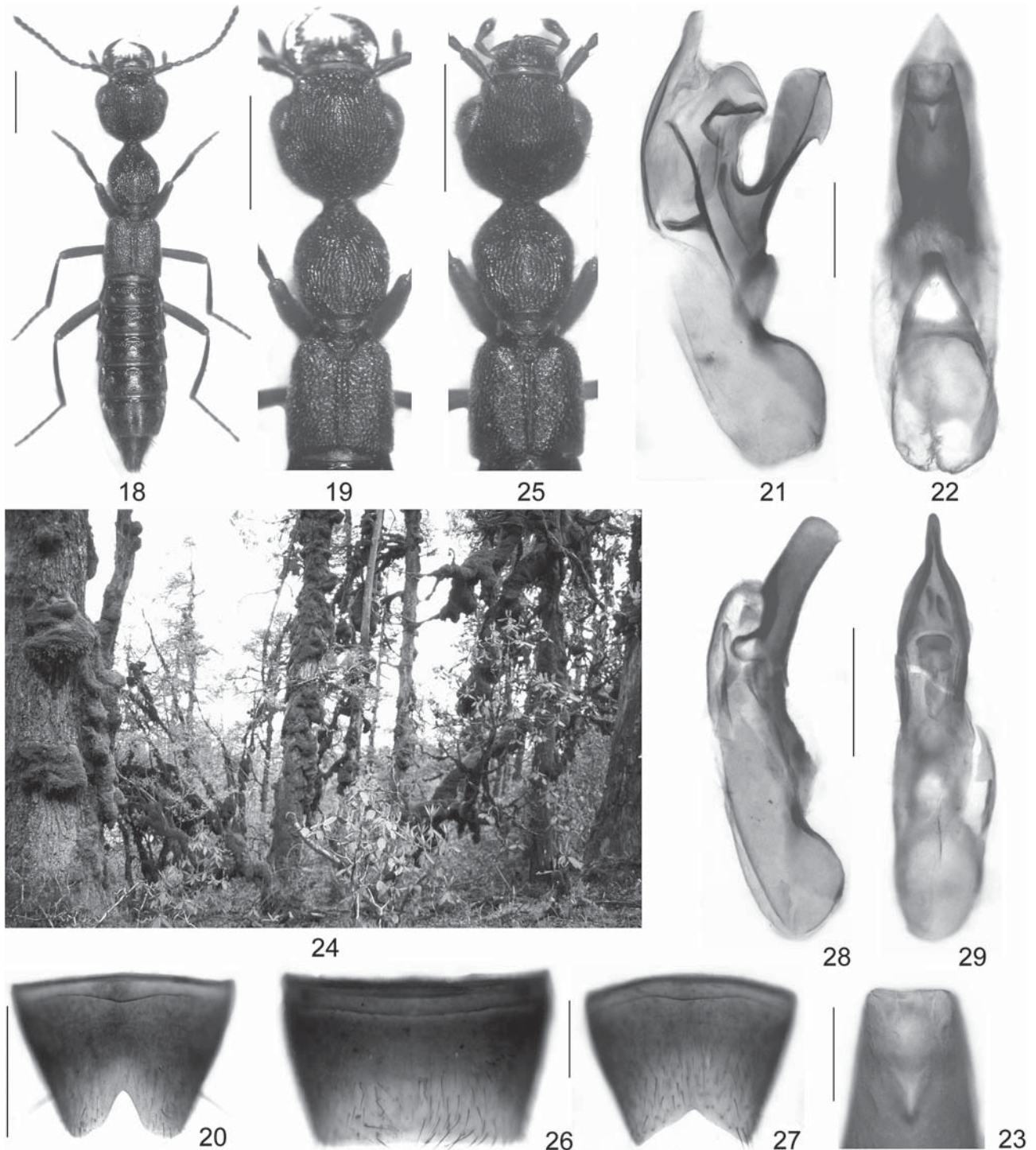
The species is dedicated to ANDREAS KLEEGERG, Berlin, who discovered this species on one of his field trips to Nepal.

Description

Relatively large species; body length 6.2–7.2 mm. Habitus as in Fig. 18.

Coloration: head, pronotum, and abdomen blackish; elytra dark-brown to blackish-brown; legs dark-brown with paler tarsi; antennae reddish.

Head (Fig. 19) approximately as broad as long; punctuation dense, very coarse, and largely longitudinally confluent, not sparser in median dorsal portion than elsewhere; interstices reduced to narrow, mostly longitudinal ridges. Eyes bulging, approximately 0.6 times as long as distance from posterior margin of eye to posterior constriction,



**Figs. 18–29.** *Rugilus kleebergi* (19–24) and *R. truncatus* (25–29). – 18. Habitus. 19, 25. Forebody. 20, 27. Male sternite VIII. 21–22, 28–29. Aedeagus in lateral and in ventral view. 23. Apex of ventral process of aedeagus in ventral view. 24. Type locality (photo: A. KLEEGERG). 26. Male sternite VII. – Scale bars: 1.0 mm (18–19, 25), 0.5 mm (20), 0.2 mm (21–22, 26–29), 0.1 mm (23).

rarely slightly longer. Anterior margin of labrum with two relatively long and basally fused teeth on either side of the median excision.

Pronotum (Fig. 19) approximately 1.15 times as long as broad and 0.70–0.75 times as wide as head, strongly convex in cross-section; lateral margins convex in dorsal view;

midline without impunctate shiny band; punctation similar to that of head, also largely confluent.

Elytra without sexual dimorphism, short, 0.75–0.80 times as long as pronotum; lateral margins weakly diverging posteriad in dorsal view; punctation coarse, very dense, and – particularly on either side of suture – largely confluent; interstices without microsculpture; surface much more shiny than that of head and pronotum. Hind wings completely reduced. Metatarsomere I slightly longer than the combined length of II and III.

Abdomen approximately 1.15 times as wide as elytra; tergites III–V with relatively shallow and coarsely punctate impressions; tergite VI with very shallow and less coarsely punctate anterior impression; punctation of remaining tergal surfaces fine and dense; interstices with shallow microsculpture and moderately shiny; posterior margin of tergite VII without palisade fringe.

♂: posterior margin of sternite VII not distinctly modified; sternite VIII with moderately deep, V-shaped posterior incision (Fig. 20); aedeagus approximately 0.85 mm long; ventral process of distinctive shape, apically carinate and subapically hooked in lateral view, truncate in ventral view (Figs. 21–23); internal structure long, distinctly sclerotized, lamellate, with two dorsal and two ventral processes.

#### Comparative notes

This species is distinguished from all its congeners particularly by the shape of the ventral process of the aedeagus. It is additionally separated from the sympatric – and apparently also syntopic – *R. gogonensis* by distinctly larger body size, the broader head, the much more coarser punctation of the whole forebody, the shorter elytra, and the absence of a palisade fringe at the posterior margin of tergite VII (present in *R. gogonensis*).

#### Distribution and natural history

The absence of previous records from other regions in Nepal, as well as the adaptive reductions of the wings and the palisade fringe suggest that the species is probably endemic to the Rolwaling Himal, where the type specimens were collected at an altitude of 2700–2800 m, together with *R. gogonensis*. They were sifted from leaf litter in a permanently moist cloud forest composed of oak and rhododendron with abundant dead wood (Fig. 24) (KLEEBERG, pers. comm.).

#### *Rugilus (Rugilus) truncatus* n. sp. (Figs. 25–29)

#### Type material

Holotype ♂: “523 Nepal: Solukhumbu Distr., E Pangkongma La, 3000 m, 17.V.1997, leg. W. SCHAWALLER / *Rugilus*

*gogonensis* Coiff., Det. 1998, G. DE ROUGE MONT / Holotypus ♂ *Rugilus truncatus* sp. n. det. V. ASSING 2011” (SMNS).

Paratypes: 2 ♀♀: same data as holotype (SMNS, cAss); 2 ♀♀: “522 Nepal: Solukhumbu Distr., above Pangum, 2900–3000 m, 16.V.1997, leg. W. SCHAWALLER” (cAss); 2 ♀♀: “526 Nepal: Solukhumbu Distr., Nashing Dingma W Surkie La, 2700 m, 20.V.1997, leg. W. SCHAWALLER” (SMNS); 2 ♀♀: “535 Nepal: Bhojpur Distr., E Salpa Pass, 3000–2800 m, 24.V.1997, leg. W. SCHAWALLER” (SMNS).

#### Etymology

The specific epithet (Latin, adjective) refers to the apically truncate ventral process of the aedeagus.

#### Description

Body length 4.7–5.8 mm.

Coloration: head, pronotum, and abdomen blackish; elytra dark-brown with bronze hue; legs and antennae reddish.

Head (Fig. 25) approximately 1.05 times as wide as long; punctation dense, very coarse, and largely longitudinally confluent, not sparser in median dorsal portion than elsewhere; interstices reduced to narrow, mostly longitudinal ridges. Eyes bulging, approximately 0.7 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two moderately long and basally fused teeth on either side of the median excision.

Pronotum (Fig. 25) approximately 1.15 times as long as broad and 0.75 times as wide as head, strongly convex in cross-section; midline without impunctate shiny band; punctation similar to that of head, also extensively confluent.

Elytra short, approximately 0.75 times as long as pronotum (Fig. 25); lateral margins weakly diverging posteriad in dorsal view; punctation dense and moderately coarse; surface glossy; interstices without microsculpture. Hind wings completely reduced. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen broader than elytra; tergites III–V with relatively shallow and moderately coarsely punctate impressions; tergite VI with very shallow and finely punctate anterior impression; punctation of remaining tergal surfaces fine and moderately dense; interstices with shallow microsculpture and moderately shiny; posterior margin of tergite VII with or without fine rudiment of a palisade fringe.

♂: sternite VII without distinct modifications (Fig. 26); sternite VIII with broadly V-shaped posterior incision (Fig. 27); aedeagus with ventral process of distinctive shape, laterally compressed, weakly curved, apically truncate in lateral view (Figs. 28, 29).

#### Comparative notes

This species is distinguished from the similar and geographically close *R. kleebergi* and *R. nepalensis* by the

shape of the posterior excision of the male sternite VIII and particularly by the characteristic shape of the ventral process of the aedeagus.

#### Distribution and natural history

The species was found in several localities in Solukhumbu District near the Mount Everest range in eastern Nepal at altitudes of 2700–3000 m.

#### *Rugilus (Rugilus) morvani* (Rougemont, 1987)

##### Material examined

**Nepal:** 2 ♂♂, 3 ♀♀, Dhaulagiri, Baglung Lekh, 10 km W Baglung, 2500 m, 10.V.2004, leg. KLEEGERG (cKle, cAss); 1 ♂, Dhaulagiri, Baglung Lekh, upper Tara Khola, 2600 m, 18.V.2004, leg. KLEEGERG (cKle); 1 ♂, 3 ♀♀, Dhaulagiri, Baglung Lekh, 30 km W Baglung, N Tara Khola, 2700–2900 m, 20.V.2004, leg. KLEEGERG (cKle, cAss); 5 ♀♀, Dhaulagiri, Baglung Lekh, ca. 30 km W Baglung, northern Tara Khola, 2800 m, 20.V.2004, leg. KLEEGERG (cKle, cAss); 1 ♂, 7 ♀♀, Dhaulagiri, W Pokhara, Baglung Lekh, 10–15 km NW Baglung, 2350–2550 m, 10.–12.V.2004, leg. KLEEGERG (cKle, cAss); 2 ♂♂, 1 ♀, Dhaulagiri, Baglung Lekh, W Baglung, 28° 18' N, 83° 31' E, 2500 m, 10.V.2004, leg. KLEEGERG (cKle); 1 ♂, Dhaulagiri, Baglung Lekh, W Baglung, 28° 19' N, 83° 31' E, 2400 m, 12.V.2004, leg. KLEEGERG (cKle); 2 ♂♂, 6 ♀♀, Dhaulagiri, Baglung Lekh, 25 km W Baglung, 2700–2900 m, 15.V.2004, leg. KLEEGERG (cKle, cAss); 1 ♀, Dhaulagiri, Parbat region, near Chitre, 2400–2600 m, leaf litter, 27.V.2004, leg. KLEEGERG (cAss); 1 ♀, Dhaulagiri, Parbat region, near Chitre, Ghar Khola valley, ca. 2400 m, 24.V.2004, leg. KLEEGERG (cKle); 2 ♂♂, Dhaulagiri, Baglung Lekh, 20 km W Baglung, Puwaduni Khola source region, 2500 m, 14.V.2004, leg. SCHMIDT (cKle, cAss); 11 exs., Dhaulagiri, SE-slope, upper Rahunat Khola, N Dwari village, 2500 m, 13.–15.V.2002, leg. SCHMIDT (NME, cAss); 1 ex., Dhaulagiri, SE-slope, SW-slope of Lete pass, 2700–3000 m, 13.V.2002, leg. SCHMIDT (cAss); 2 ♀♀, Kali Gandaki valley, “upper” [probably correct: above] Lete, 2800 m, 19.V.2002, leg. SCHMIDT (NME).

##### Comment

*Rugilus morvani* was originally described from the southern Dhaulagiri range and subsequently also reported from Taplejung district in eastern Nepal (ROUGEMONT 1987, 1998). The above material from the NME had been misidentified as *R. smetanai*. Based on the revised material, it appears that *R. morvani* is distributed in the Dhaulagiri range west of the Kali Gandaki Khola (the valley between the Dhaulagiri and the Annapurna ranges) and *R. smetanai* east of this valley (Annapurna and Manaslu ranges). Therefore, the record of *R. morvani* from Taplejung in eastern Nepal by ROUGEMONT (1998), who does not indicate if he examined males, is most astonishing and requires confirmation.

According to ROUGEMONT (1998), the bicoloured elytra are an easily seen character, distinguishing this species and

*R. smetanai* from other *Rugilus* species. However, some of the above specimens, especially those from higher altitudes, have the elytra completely black. As in many other species, the sex ratio is strongly biased. The material collected by ANDREAS KLEEGERG is composed of 10 ♂♂ and 27 ♀♀.

#### *Rugilus (Rugilus) smetanai* Rougemont, 1998

##### Material examined

**Nepal:** 4 exs., Manaslu, Dudh Pokhari Lekh, upper Dordi Khola, 2300–2600 m, 15.–17.IV.2003, leg. SCHMIDT (NME); 1 ex., Manaslu, Bara Pokhari Lekh, Chhandi Khola, 2000–2200 m, 11.–12.IV.2003, leg. SCHMIDT (NME); 5 exs., Manaslu, S Bara Pokhari, 2000 m, 7.–8.IV.2003, leg. SCHMIDT (NME, cAss); 1 ♀, Annapurna, above Temang, 28° 32' N, 94° 19' E, 2550 m, 5.V.2007, leg. SCHMIDT (NME); 6 exs., Annapurna, Sikles range, Nyauli Kharka S Sikles, 2400 m, 21.–24.IV.1996, leg. SCHMIDT (SDEI, cAss); 6 exs., Annapurna, N Pokhara, Sikles range, upper Kyojo Kharka N Sikles, 2600 m, 1.V.1996, leg. SCHMIDT (SDEI, cAss); 1 ex., Annapurna, Sikles range, Dhara Kharka N Sikles, 2150 m, 27.IV.1996, leg. SCHMIDT (SDEI); 1 ex., Annapurna, Kraba Danda, 2500 m, 30.V.1997, leg. SCHMIDT (SDEI); 1 ex., Annapurna, S Lamjun Himal, W-slope Taunja Danda, 2400 m, 6.VIII.1995, leg. SCHMIDT (SDEI); 4 exs., Annapurna, N Pokhara, Sikles range, Hogo Kharka N Sikles, 1850 m, 4.V.1996, leg. SCHMIDT (SDEI); 1 ♀ [elytra completely black], Annapurna, Nar-Uhola region, N Chame, 2000–3000 m, 10.VI.1994, leg. SCHMIDT (SDEI).

##### Comment

This species was originally described from material collected in several localities in Manang and Mustang districts (ROUGEMONT 1998). It is probably endemic to the Annapurna and Manaslu ranges.

#### *Rugilus (Rugilus) bagmaticolus* Rougemont, 1998 (Fig. 36)

##### Material examined

**Nepal:** 1 ♂, Dolakha District, E Ting Sang La, 3100 m, 12.–13.VI.2000, leg. SCHAWALLER (SMNS); 2 exs., Annapurna, Sikles range, Nyauli Kharka S Sikles, 2400 m, 21.–24.IV.1996, leg. SCHMIDT (SDEI, cAss).

##### Comment

The original description is based on material from several localities in Bagmati District (ROUGEMONT 1998). The aedeagus of a male from Nyauli Kharka is illustrated in Fig. 36.

*Rugilus (Rugilus) manasluensis* n. sp.  
(Figs. 30–35)

Type material

Holotype ♂: “Nepal, W-Manaslu Himal, Ngadi Khola-Gebiet unterh. Bara Pokh. Lekh, 2800 m NN, N28° 21' 36", E84° 30' 04", 12./13.V.2005, leg. O. JÄGER / Holotypus ♂ *Rugilus manasluensis* sp. n. det. V. ASSING 2010” (SNSD).

Paratypes: 5 ♀♀: same data as holotype (SNSD, cAss).

Etymology

The specific epithet (adjective) is derived from Manaslu, the mountain range where the type locality is situated.

Description

Body length 5.1–6.0 mm. Habitus as in Fig. 30.

Coloration: body blackish; legs dark-brown; antennae reddish to reddish-brown.

Head (Fig. 31) weakly transverse, 1.03–1.08 times as broad as long; dorsal surface between dorsal margins of eyes with a shallow transverse impression; punctuation dense, coarse and areolate; interstices without microsculpture, reduced to narrow ridges, sometimes except for a small, narrow, oblong region in the middle of the dorsal surface, where they may be narrowly shiny. Eyes bulging, somewhat shorter than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum usually with two relatively long and basally somewhat fused teeth on either side of the median excision.

Pronotum (Fig. 31) approximately 1.2 times as long as broad and 0.70–0.75 times as wide as head; lateral margins convex in dorsal view; midline with moderately broad, anteriorly and posteriorly obsolete, impunctate shiny band; punctuation similar to that of head.

Elytra without sexual dimorphism, short, 0.75–0.80 times as long as pronotum (Fig. 31); lateral margins diverging posteriad in dorsal view; punctuation coarse, defined, but not areolate; interstices without microsculpture; surface much more shiny than that of head and pronotum. Hind wings completely reduced. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen approximately 1.2 times as wide as elytra; tergites III–VI with rather deep, broad, and coarsely punctate impressions; punctuation of remaining tergal surfaces fine and moderately dense; interstices with shallow microsculpture and moderately shiny; posterior margin of tergite VII without palisade fringe.

♂: posterior margin of sternite VII very shallowly concave (Fig. 32); sternite VIII with rather broad and deep V-shaped posterior incision (Fig. 33); aedeagus with ventral process of distinctive shape (Figs. 34, 35).

Comparative notes

This species is distinguished from all its congeners particularly by the shape of the ventral process of the aedeagus, which is most similar to that of *R. smetanai* Rougemont, 1998, which too was recorded from the Manaslu range. In the new species, however, the apex of the ventral process is distinctly longer. For an illustration of the aedeagus of *R. smetanai* see ROUGEMONT (1998).

Distribution and natural history

The species is probably endemic to the western parts of the Manaslu range, where the type specimens were collected at an altitude of 2800 m.

*Rugilus (Rugilus) bhotius* (Rougemont, 1987)  
(Fig. 37)

*Stilicis (Tetragnathostilicis) bhotius* Rougemont, 1987: 216 f.

Type material examined

Holotype ♂: “Bhutan Paro, 2900 m, X.1980, ROUGEMONT / Holotype / *Stilicis bhotius* n. sp., det. 1986, G. DE ROUGEMONT / *Rugilus bhotius* (Rougemont), det. V. ASSING 2011” (cRou).

Comment

The original description is based on a male holotype and a female paratype from “Bhutan, near Paro, 2900 m” and a female paratype from “Sikkim, Lachen 9000 ft.” (ROUGEMONT 1987). The species was subsequently erroneously recorded also from Sichuan (SMETANA 2004). These records refer to *Rugilus confluens* n. sp. The aedeagus of the holotype of *R. bhotius* is illustrated in Fig. 37.

*Rugilus (Rugilus) emeiensis* n. sp.  
(Figs. 38–42)

Type material

Holotype ♂: “P. R. China, Sichuan, Emei Shan, N29° 33.6', E103° 20.6' E, 27.vi.–5.vii.2009, 1800–2400 m, siftings 11–17, V. GREBENNIKOV / Holotypus ♂ *Rugilus emeiensis* sp. n. det. V. ASSING 2010” (CAS).

Paratypes: 1 ♂, 30 ♀♀: same data as holotype (CAS, CNC, SMNS, cAss); 7 ♀♀: “China Sichuan, Emei Shan, Leidongping, 2500 m, 18.VII.1996, 29° 32' N, 103° 21' E C65 / collected by A. SMETANA, J. FARKAČ and P. KABÁTEK” (cSme, cAss).

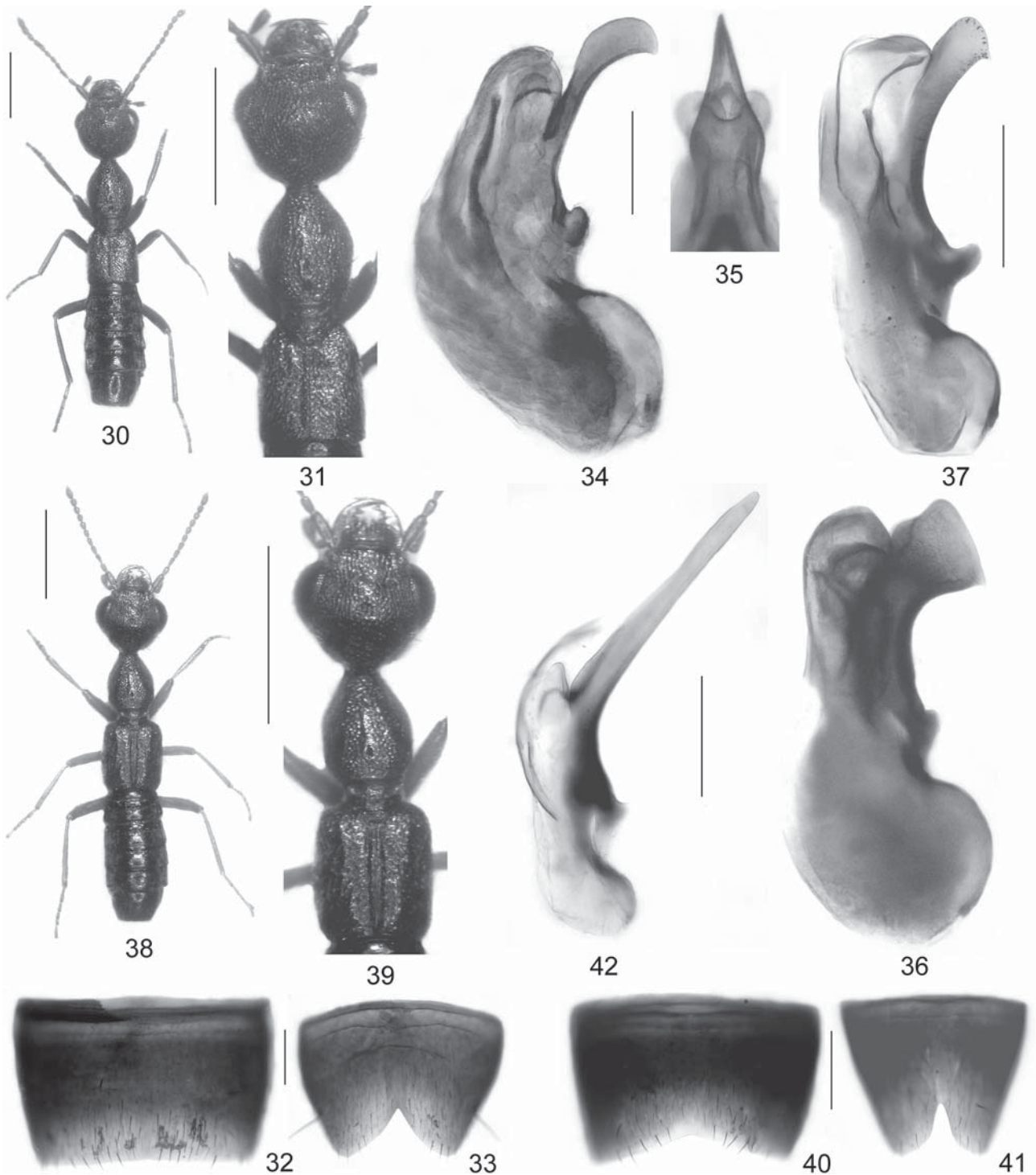
Etymology

The specific epithet (adjective) is derived from the name of the mountain where the types were collected.

Description

Body length 4.1–5.2 mm. Male habitus as in Fig. 38.

Coloration: head blackish-brown to black; pronotum dark-brown to blackish-brown; elytra brown to dark-brown; abdomen black; legs and antennae reddish.



**Figs. 30–42.** *Rugilus manasluensis* (30–35), *R. bagmaticolus* (36), *R. bhotius* (37; holotype), and *R. emeiensis* (38–42). – 30, 38. Male habitus. 31, 39. Male forebody. 32, 40. Male sternite VII. 33, 41. Male sternite VIII. 34, 36–37, 42. Aedeagus in lateral view. 35. Ventral process of aedeagus in ventral view. – Scale bars: 1.0 mm (30–31, 38–39), 0.2 mm (32–37, 40–42).

Head (Fig. 39) distinctly transverse, 1.15–1.20 times as broad as long; punctation coarse and areolate, of very variable density, very dense or even confluent with the inter-

stices reduced to narrow ridges in anterior, lateral, and posterior dorsal portions, usually (but not always) sparser with shiny interstices in median dorsal portion; interstices with-

out microsculpture. Eyes conspicuously large and bulging, distinctly longer than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum usually with two short and basally separated teeth on either side of the median excision; occasionally the external tooth may be reduced.

Pronotum (Fig. 39) 1.15–1.20 times as long as broad and approximately 0.65 times as wide as head; lateral margins subparallel in median portion; midline with relatively broad, but anteriorly and posteriorly obsolete impunctate and shiny band; punctuation similar to that of head.

Elytra and hind wings sexually dimorphic; punctuation shallow and ill-defined. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen approximately as broad as (♂) or noticeably broader than (♀) elytra; tergites III–V anteriorly with rather narrow and not very deep impressions, these impressions with rather coarse, but not very dense punctuation; tergite VI with very shallow, sparsely and finely punctate impression; punctuation of remaining tergal surfaces fine and moderately dense; interstices with distinct microsculpture and only subdued shine; tergite VII with sexual dimorphism.

♂: elytra approximately as long as pronotum and with pronounced humeral angles (Fig. 39); lateral margins subparallel in dorsal view; hind wings apparently present; posterior margin of tergite VII with pronounced palisade fringe; posterior margin of sternite VII broadly concave (Fig. 40); sternite VIII with narrow, apically acute, and rather deep posterior incision (Fig. 41); aedeagus with conspicuously long and straight ventral process (Fig. 42).

♀: elytra distinctly (0.75–0.80 ×) shorter than pronotum; humeral angles weakly pronounced; lateral margins diverging in dorsal view; hind wings completely reduced; posterior margin of tergite VII without palisade fringe.

#### Comment

The females from Leidongping have somewhat smaller eyes than the specimens from the type locality. Thus, the possibility that they are not conspecific with the holotype cannot be ruled out with certainty. Males would be required to clarify if this difference is an expression of inter- or intraspecific variation.

#### Comparative notes

This species is distinguished from all its congeners particularly by the conspicuous shape of the ventral process of the aedeagus, from most species additionally by the shapes of the male sternites VII and VIII and the large eyes.

#### Distribution and natural history

As can be inferred from the restricted distributions of many other species of the subgenus, the reduced wings and

palisade fringe in the females, and the absence of records from other regions, *R. emeiensis* is probably endemic to the Emei Shan in Sichuan, China. The specimens were collected at altitudes of 1800–2500 m. Remarkably, only two out of a total of 39 specimens are males, suggesting that they either have a different phenology or that they leave the studied habitats on the wing after the emergence from the pupa.

#### *Rugilus (Rugilus) gansuensis* Rougemont, 1998 (Figs. 43–52)

*Rugilus (Tetragnathostilicus) gansuensis* Rougemont, 1998: 580 f.

#### Type material examined

Holotype ♂ [teneral]: “China: Gansu, Maijishan, :VIII:1986, ROUGEMONT / Holotype / *Stilicus gansuensis* n. sp., det. 1987, G. DE ROUGEMONT / Coll. ROUGEMONT / *Rugilus gansuensis* Rougemont, det. V. ASSING 2011” (cRou). Paratype ♀: same data as holotype (cRou).

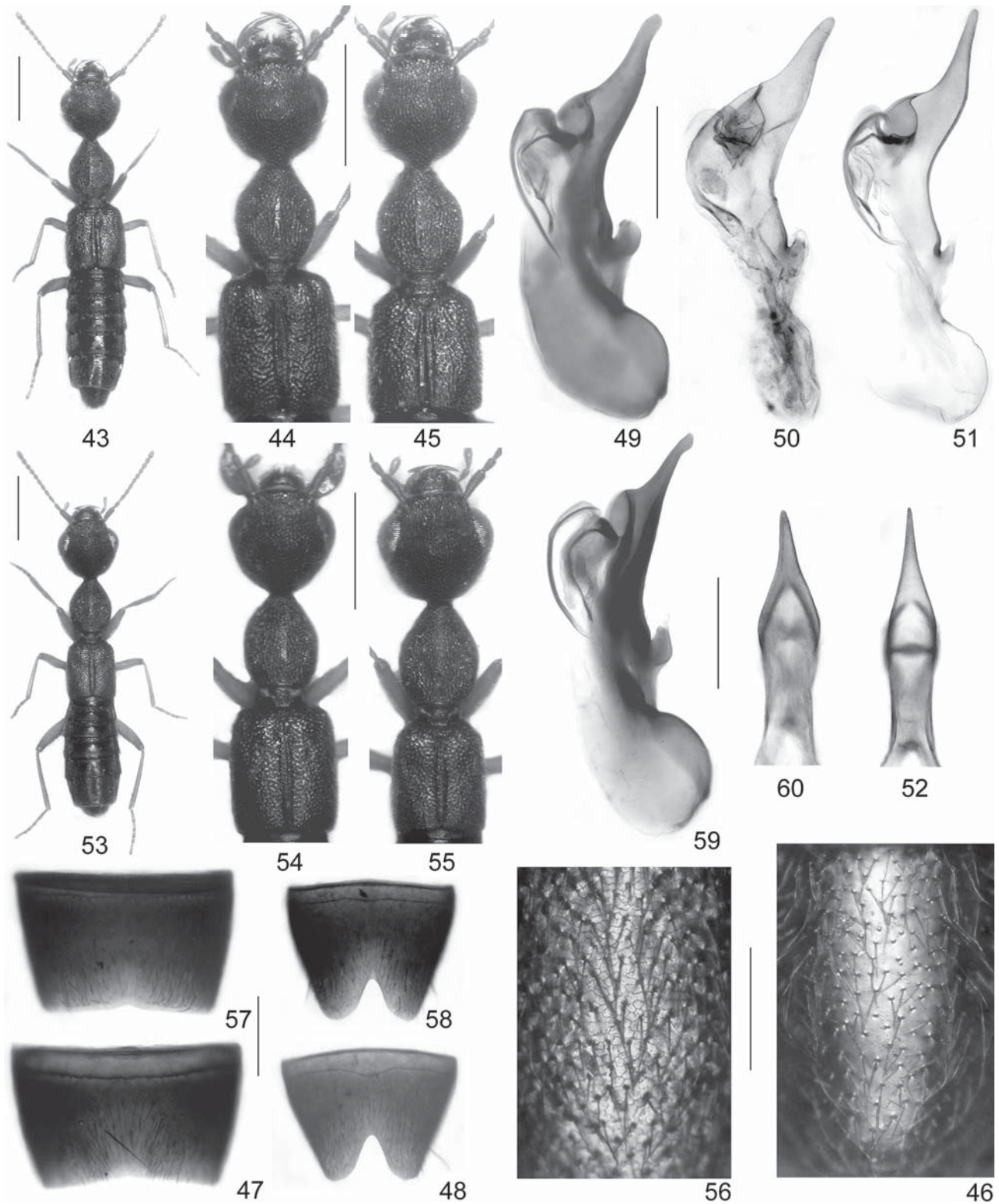
#### Additional material examined

**China:** 1 ♂, 20 ♀♀, S-Shaanxi, Qinling Shan, pass on road Zhouzhi–Foping, 105 km SW Xi’an, 33° 44’ N, 107° 59’ E, 1990 m, N-slope, small creek valley, mixed deciduous forest with bamboo, small meadows, 2. & 4.VII.2001, leg. SCHÜLKE & WRASE (cSch, cAss); 3 ♀♀, S-Shaanxi, Qinling Shan, pass on road Zhouzhi–Foping, 105 km SW Xi’an, 33° 46’ N, 107° 58’ E, 1700 m, N-slope, small creek valley, mixed deciduous forest, 3.VII.2001, leg. SCHÜLKE (cSch); 1 ♂, 3 ♀♀, S-Shaanxi, Qinling Shan, pass on road Zhouzhi–Foping, 105 km SW Xi’an, 33° 44’ N, 107° 58’ E, 1880 m, N-slope, moist shady rockwall base, 4.VII.2001, leg. SCHÜLKE (cSch, cAss); 1 ♂, 13 ♀♀, S-Shaanxi, Qinling Shan, river bank above Houzhenzi, 115 km WSW Xi’an, 33° 50’ N, 107° 47’ E, 1450 m, mixed deciduous forest, 5.VII.2001, leg. SCHÜLKE (cSch, cAss); 7 ♂♂ [3 teneral], 21 ♀♀ [4 teneral], Shaanxi, Qinling Shan, autoroute km 93 S Zhouzhi, 108 km SW Xi’an, 107° 56’ E, 33° 45’ N, 1650 m, mountain forest, 1.–2.IX.1995, leg. PÜTZ, SCHÜLKE, WRASE (cPüt, cSch, cRou, cAss); 1 ♀, S-Shaanxi, 15 km SW Dongjiangkou, 1700 m, 14.–17.VII.1998, leg. BOLM (NHMB); 2 ♀♀, Shaanxi, Taibai Shan, above Houshenzi, 1700–2600 m, 9.VI.–3.VII.1998, leg. JÄGER & MARTENS (SMNS); 1 ♀, same data, but 1300–1700 m (cAss); 1 ♀: S-Shaanxi, Daba Shan, NW pass 25 km NW Zhenping, 32° 01’ N, 109° 19’ E, 2150 m, creek valley, young coniferous forest, moss sifted, 21.VII.2001, leg. WRASE (cAss).

#### Comment

The original description is based on a male holotype and a female paratype collected in “S-Gansu Province, Maijishan, ca. 1500 m, sifted leaf litter under shrubs by stream. VIII.1986” (ROUGEMONT 1998). The species was subsequently, but erroneously (misidentification) also reported from Sichuan (SMETANA 2004).





**Figs. 43–60.** *Rugilus gansuensis* (43–52; 50: holotype) and *R. reticulatus* (53–60). – 43, 53. Female habitus. 44, 54. Male forebody. 45, 55. Female forebody. 46, 56. Median portion of abdominal tergite VII. 47, 57. Male sternite VII. 48, 58. Male sternite VIII. 49–51, 59. Aedeagus in lateral view. 52, 60. Ventral process of aedeagus in ventral view. – Scale bars: 1.0 mm (43–45, 53–55), 0.2 mm (46–52, 56–60).

### Redescription

Body length 4.8–5.8 mm. Habitus as in Fig. 43.

Coloration: head, pronotum, and abdomen blackish; elytra brown with bronze hue; legs and antennae reddish-yellow to reddish, often with the apices of the meso- and metafemora weakly infuscate.

Head (Figs. 44, 45) approximately as wide as long; punctation coarse, areolate, and partly confluent, not sparser in median dorsal portion than elsewhere. Eyes of moderate size and strongly bulging, as long as, or slightly shorter than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two moderately long and basally separated teeth on either side of the median excision.

Pronotum (Figs. 44, 45) approximately 1.15 times as long as broad and 0.75–0.85 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline usually with relatively broad, but anteriorly and posteriorly obsolete, impunctate and shiny band of variable length, often present only in posterior half; punctation slightly coarser, more defined, and less confluent than that of head.

Elytra and hind wings sexually dimorphic; punctation defined and coarse; interstices narrow, but distinctly glossy. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly narrower than (♂) or approximately as broad as (♀) elytra; tergites III–V anteriorly with rather narrow and not very deep impressions, these impressions with coarse and dense punctation; tergite VI with shallower, less densely and more finely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; interstices without microsculpture and glossy (Fig. 46); tergite VII with palisade fringe in both sexes.

♂: elytra (Fig. 44) approximately 1.2 times as long as pronotum and with pronounced humeral angles; lateral margins subparallel in dorsal view; hind wings apparently present; sternite VII in posterior median portion with impression, this impression without pubescence and limited by weakly pronounced elevations on either side, posterior margin broadly and weakly concave (Fig. 47); sternite VIII with deep and V-shaped posterior incision (Fig. 48); aedeagus 0.70–0.75 mm long and with ventral process of distinctive shape (Figs. 49–51).

♀: elytra (Fig. 45) 0.90–0.95 times as long as pronotum; humeral angles less pronounced; lateral margins very weakly diverging posteriad in dorsal view; hind wings completely reduced.

### Comparative notes

This species is distinguished from all its congeners particularly by the conspicuous shape of the ventral pro-

cess of the aedeagus. From *R. emeiensis*, it is additionally separated by numerous characters, e. g., the much smaller eyes, smaller average body size, the differently shaped pronotum, the more pronounced and defined punctation of the elytra, the longer elytra, the absence of microsculpture on the abdomen, the presence of a palisade fringe at the posterior margin of the female tergite VII, and the different shape and chaetotaxy of the male sternites VII and VIII. For characters distinguishing *R. gansuensis* from the sympatric *R. reticulatus* see the comparative notes in the following section.

### Distribution and natural history

*Rugilus gansuensis* is currently known from the Maijishan, the Qinling Shan, the Daba Shan, and the Taibaishan in southern Gansu and in Shaanxi province, respectively. As in *R. emeiensis*, the development of the elytra and the hind wings (but not of the palisade fringe) is subject to a pronounced sexual dimorphism and males are extremely rare in the material, accounting for only 17% of the specimens. The species was sifted from forest litter at altitudes of 1450–2150 m (only specimens with labels specifying exact altitudes considered) during the period from July through September. Several specimens collected in August and in the beginning of September are teneral.

### *Rugilus (Rugilus) reticulatus* n. sp. (Figs. 53–60)

#### Type material

**Holotype** ♂ [teneral]: “China: Shaanxi, Qin Ling Shan, 107.56 E, 33.45 N, Autoroute 93 km S of Zhouzhi, 108 km SW Xian, Mountain Forrest [sic], sifted, 1650 m, 1.–2.IX.1995, leg. M. SCHÜLKE / G.B. *Rugilus gansuensis* Rgmt., det. 1996, ROUGEMONT / Holotypus ♂ *Rugilus reticulatus* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♂ [teneral], 1 ♀: same data as holotype (cSch, cAss); 1 ♂ [teneral]: same data as holotype, but “leg. A. PÜTZ” (cAss); 1 ♀: “China (Shaanxi) Qin Ling Shan, 107.56 E, 33.45 N, autoroute 93 km S Zhouzhi, 108 km SW Xian, mount. forest, 1650 m, 1.–2.IX.95 WRASE” (cAss); 1 ♂ [teneral], 10 ♀♀: “China: Shaanxi, Qin Ling Shan, 110.06 E, 34.25 N, Hua Shan Mt., S.-top, 1950–2000 m, forrest [sic], sifted, 19.VIII.1995, leg. M. SCHÜLKE” (cSch, cRou, cAss); 3 ♂♂ [teneral], 4 ♀♀ [2 teneral]: same data, but leg. A. PÜTZ (cPüt, cSch); 1 ♂ [slightly teneral], 5 ♀♀: “China (Shaanxi) Qin Ling Shan 110.06 E, 34.25 N, Hua Shan, 118 km E Xian, S. top, 1950–2000 m, mix. wood, 19.VIII.1995 WRASE” (cSch, cRou, cAss); 1 ♂, 1 ♀: “China: W-Henan, 15.V.–2.VI., Funiu Shan, Baotianman, 33.5° N 111.9° E, pitfall traps, 2005, leg. J. TURNA” (NHMW, cAss).

### Etymology

The specific epithet (Latin, adjective) alludes to the presence of microreticulation on the abdomen, one of the characters distinguishing this species from *R. gansuensis*.

## Description

Body length 4.7–5.8 mm. Habitus as in Fig. 53.

Coloration: head, pronotum, and abdomen blackish; elytra brown with a bronze hue; legs reddish-yellow, often with the apices of the meso- and metafemora weakly infuscate; antennae reddish.

Head (Figs. 54, 55) as wide as long or very weakly transverse; punctation coarse, areolate, and largely confluent, not sparser in median dorsal portion than elsewhere; dorsal surface matt. Eyes of moderate size and strongly bulging, as long as, or slightly shorter than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two moderately long and basally separated teeth on either side of the median excision.

Pronotum (Figs. 54, 55) approximately 1.2 times as long as broad and 0.85 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline at most with short and narrow impunctate shiny portion in posterior half; punctation similar to that of head, largely confluent.

Elytra and hind wings sexually dimorphic; punctation defined, dense, and coarse; interstices narrow and moderately glossy. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly narrower (♂) or broader (♀) than elytra; tergites III–V anteriorly with rather narrow and not very deep impressions, these impressions with coarse and dense punctation; tergite VI with or without shallow, finely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; interstices with microreticulation (Fig. 56); tergite VII with palisade fringe in both sexes.

♂: elytra (Fig. 54) approximately 1.15 times as long as pronotum and with pronounced humeral angles; lateral margins subparallel in dorsal view; hind wings apparently present; sternite VII in posterior median portion not impressed and with pubescence; posterior margin weakly concave (Fig. 57); sternite VIII with deep, apically rounded posterior incision (Fig. 58); aedeagus approximately 0.7 mm long and with ventral process of distinctive shape (Figs. 59–60).

♀: elytra approximately 0.9 times as long as pronotum; humeral angles less pronounced; lateral margins subparallel in dorsal view; hind wings completely reduced.

## Comparative notes

*Rugilus reticulatus* is distinguished from all its congeners particularly by the conspicuous shape of the ventral process of the aedeagus. It is additionally separated from the similar, sympatric and syntopic *R. gansuensis* by the (on average) more oblong pronotum, the strongly reduced impunctate portion of the pronotal midline, the (on average) narrower elytra, the presence of microsculpture on the

abdomen, and by the absence of an impression in the posterior median portion of the male sternite VII.

## Distribution and natural history

The species is currently known only from the Qinling Shan in Shaanxi and from the Funiu Shan in the adjacent west of Henan province. The species is subject to a pronounced sexual dimorphism of the elytra and the hind wings, but not of the palisade fringe at the posterior margin of the abdominal tergite VII. Males are rarer in the material than females and account for 29% of the specimens. Moreover, all the males from Shaanxi are teneral, whereas the majority of the females is mature. The specimens were sifted from leaf litter in forests at altitudes of 1650–2000 m.

*Rugilus (Rugilus) daxuensis* n. sp.

(Figs. 61–68)

## Type material

Holotype ♂: “China: W-Sichuan (9), Daxue Shan, E Tsheto-La Pass, W Kangding, 3500 m, 30.00.42 N, 101.51.47 E, 25.V.1997, M. SCHÜLKE / *Rugilus gansuensis* Rgmt. det. 1998, G. DE ROUGEMONT / Holotypus ♂ *Rugilus daxuensis* sp. n. det. V. ASSING 2011” (cAss).

Paratypes: 5 ♀♀: same data as holotype (cSch, cAss); 1 ♂, 16 ♀♀: “China: W-Sichuan (6), Daxue Shan, Paoma-Shan b. Kangding, 30.02.56 N, 101.58.05 E, 2700–2900 m, 22.V.1997, M. SCHÜLKE” (cSch, cAss); 1 ♂, 2 ♀♀: “China: W-Sichuan (4), Daxue Shan, 2500–2800 m, Bachtal 5 km E Kangding, 30.03.28 N, 102.00.15 E, 20.V.1997, M. SCHÜLKE” (cSch, cAss); 4 ♀♀: same data, but “23.V.1997” (cSch); 1 ♂: “China (W-Sichuan) (4) Daxue Shan, river valley 5 km E Kanding [sic], 2500–2800 m, 30.03 N, 102.00 E, 20. & 23.V.1997 WRASE” (cAss); 4 ♀♀: “China: Sichuan, Ganzi pref., Daxue Shan, 102.00 E, 30.03 N, 5 km E Kangding, river valley, ca. 3000 m, 20. & 23.V.1997, leg. A. PÜTZ” (cPüt); 1 ♀: “China: W-Sichuan (5), Daxue Shan, Mu Ge Cuo NW Kangding, 30.10.57 N, 101.52.09 E, 3200–3400 m, 21.V.1997, M. SCHÜLKE” (cSch); 1 ♀: “China: Sichuan, Ganzi pref., Daxue Shan, 101.52 E, 30.11 N, Mugecuo ca. 26 km NW Kangding, 3200–3400 m, 21.V.1997, leg. A. PÜTZ / *Rugilus gansuensis* Rgmt. ♀♀, det. 1998, G. DE ROUGEMONT” (cPüt); 7 ♀♀: “China: W-Sichuan (15), Daxue Shan, Hailuogou Glacier Park, Camp 2, 2550–2700 m, 29.35.16 N, 102.01.53 E, 30.–31.V.1997, M. SCHÜLKE” (cSch); 3 ♀♀: same data, but leg. WRASE (cSch); 2 ♀♀: “China: W-Sichuan (13), Daxue Shan, Hailuogou Glacier Park, Camp 1, 2100 m, 29.36.00 N, 102.03.35 E, 27.–31.V.1997, M. SCHÜLKE” (cSch); 6 ♀♀: “China: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Kangding Co., Daxue Shan, Mu Ge Cou, 2 km oberhalb unt. See, 30° 11 N, 101,52 E [sic], Laub, Pilze, Bambus, 3500 m, 5.VII., leg. M. SCHÜLKE” (cSch, cAss); 1 ♀: same data, but “Rinde, Pilze ... 27.VI.” (cSch); 1 ♀: “China: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Kangding Co., Daxue Shan, 10 km S Kangding, 29.59 N, 101.55 E, 3150 m, Flußtal, Gesiebe, Felsniesen [sic], 26.VI., leg. M. SCHÜLKE” (cSch); 5 ♀♀: “China: Sichuan, Ganzi pref., Daxue Shan, 101.52 E, 30.01 N, ca. 10 km W Kangding, 3500–3600 m, 25.V.1997, sifted, leg. A. PÜTZ / *Rugilus gansuensis* Rgmt. ♀♀, det. 1998, G. DE ROUGEMONT” (cPüt);

3 ♀♀: “China: W Sichuan, 15 km W Kangding, Rte. 138, 3250 m, 29° 57' N, 102° 54' E, 19.VII.98 A. SMETANA [C86]” (cSme, cAss);  
1 ♀: “China: W Sichuan, Kangding, 2800 m, 30° 04' N, 101° 58' E, 21.VII.1998 A. SMETANA [C88]” (cSme).

#### Etymology

The specific epithet (adjective) is derived from the name of the mountain range where this species was discovered.

#### Description

Body length 4.4–5.3 mm. Female habitus as in Fig. 61.

Coloration: body blackish, elytra often dark-brown and/or with a slight bronze hue; legs and antennae reddish.

Head (Figs. 62, 63) transverse, approximately 1.1 times as wide as long; punctation coarse, areolate, and largely confluent, median dorsal portion sometimes with small glossy area without – or with sparse – punctation. Eyes large, at least as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with a moderately long internal and a very short external tooth on either side of the median excision (Fig. 64).

Pronotum (Figs. 62, 63) usually 1.15–1.20 times as long as broad and approximately 0.7 times as wide as head; lateral margins convexly converging posteriorly from point of maximal width; midline usually with short impunctate shiny portion posteriorly, more rarely with longer impunctate band; punctation slightly coarser than that of head, largely confluent.

Elytra and hind wings sexually dimorphic; punctation dense and rather weakly defined, interstices narrowly glossy. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly narrower (♂) or broader (♀) than elytra; tergites III–V anteriorly with rather narrow and shallow impressions, these impressions with moderately coarse and moderately dense punctation; tergite VI with very shallow, finely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; interstices with microreticulation; tergite VII with palisade fringe in both sexes.

♂: elytra (Fig. 62) approximately 1.2 times as long as pronotum and with pronounced humeral angles; lateral margins weakly convex in dorsal view; hind wings apparently present; sternite VII in posterior median portion not impressed and with pubescence, posterior margin weakly concave (Fig. 65); sternite VIII with rather shallow and very broadly V-shaped posterior incision (Fig. 66); aedeagus small, approximately 0.55 mm long and with ventral process of distinctive shape (Figs. 67, 68).

♀: elytra (Fig. 63) approximately 0.9 times as long as pronotum; humeral angles less pronounced; lateral margins weakly diverging in dorsal view; hind wings completely reduced.

#### Comparative notes

*Rugilus daxuensis* is distinguished from all its congeners particularly by the conspicuous shape of the ventral process of the aedeagus, which is most similar to that of *R. gansuensis*.

#### Distribution and natural history

The species has been found only in the Daxue Shan in western Sichuan province, where it is probably endemic. Only four out of a total of 66 type specimens (6%) are males. The material was sifted from forest litter at altitudes of 2100–3500 m.

#### *Rugilus (Rugilus) gonggaicus* n. sp. (Figs. 69–74)

#### Type material

Holotype ♂: “China Sichuan, Gongga Shan, Hailuogou, above Camp 3, 3000 m 6.VII.96, 29° 35' N 102° 00' E C53 / collected by A. SMETANA, J. FARKAČ and P. KABÁTEK / Holotypus ♂ *Rugilus gonggaicus* sp. n. det. V. ASSING 2011” (cSme).

Paratypes: 4 ♂♂, 4 ♀♀: same data as holotype (cSme, cAss); 1 ♂, 18 ♀♀: “China, Sichuan, Gongga Shan, Hailuogou, above Camp 3, 3050 m, 22.VII.1994, A. SMETANA [C18]” (cSme, cAss); 3 ♂♂, 4 ♀♀ [6 teneral]: “China, Sichuan, Gongga Shan, Lake abv. Camp 2, 2750 m, 25.VII.1994, A. SMETANA [C23]” (cSme, cAss); 1 ♀: “China, Sichuan, Gongga Shan, Lake abv. Camp 2, 2750 m, 24.VII.1994, A. SMETANA [C20]” (cSme); 1 ♀: “China, Sichuan, Gongga Shan, above Camp 2, 2800 m, 25.VII.1994, A. SMETANA [C21]” (cSme); 6 ♀♀: “China, Sichuan, Gongga Shan, above Camp 2, 2850 m, 26.VII.1994, A. SMETANA [C24]” (cSme, cAss); 1 ♀: “China, Sichuan, Gongga Shan, above Camp 2, 2800 m, 26.VII.1994, A. SMETANA [C26]” (cSme); 1 ♀: “China, Sichuan, Gongga Shan, Lake abv. Camp 2, 2750 m, 27.VII.1994, A. SMETANA [C27]” (cSme); 6 ♀♀: “China: Sichuan Gongga Shan, Hailuogou, Lake above Camp 2, 2750 m, 29° 35' N 102° 00' E, 4.VII.1998, A. SMETANA [C74] / 1998 China Expedition J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA” (cSme, cAss); 5 ♀♀: “China: Sichuan Gongga Shan, Hailuogou, for. above Camp 2, 2800 m, 29° 35' N 102° 00' E, 5.VII.1998, A. SMETANA [C75] / 1998 China Expedition J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA” (cSme, cAss).

#### Etymology

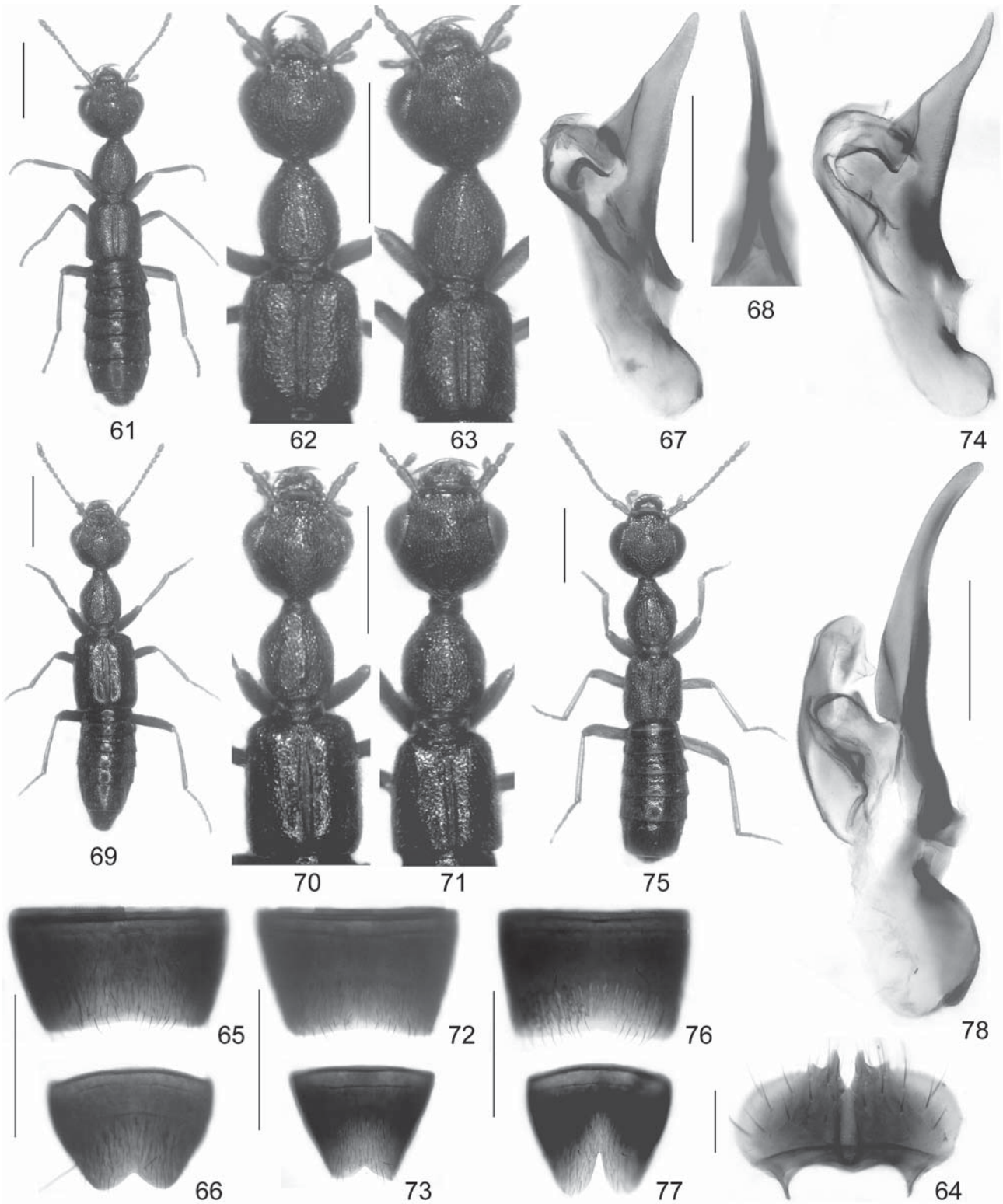
The specific epithet (adjective) is derived from the name of the mountain range where this species was discovered.

#### Description

Body length 4.2–5.0 mm. Male habitus as in Fig. 69.

Coloration: body blackish, elytra sometimes dark-brown and/or with a slight bronze hue; legs dark-reddish to dark-brown, sometimes with somewhat infuscate femoral apices; antennae reddish.

Head (Figs. 70, 71) transverse, approximately 1.1 times as wide as long; punctation coarse and confluent, median



**Figs. 61–78.** *Rugilus daxuensis* (61–68), *R. gonggaicus* (69–74), and *R. dabaicus* (75–78). – 61, 75. Female habitus. 62, 70. Male forebody. 63, 71. Female forebody. 64. Labrum. 65, 72, 76. Male sternite VII. 66, 73, 77. Male sternite VIII. 67, 74, 78. Aedeagus in lateral view. 68. Ventral process of aedeagus in ventral view. 69. Male habitus. – Scale bars: 1.0 mm (61–63, 69–71, 75), 0.5 mm (65–66, 72–73, 76–77), 0.2 mm (67–68, 74, 78), 0.1 mm (64).

dorsal portion often with very small glossy patch without – or with sparser – punctation. Eyes large, at least as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with a moderately long internal and a short external tooth on either side of the median excision.

Pronotum (Figs. 70, 71) usually 1.10–1.15 times as long as broad and approximately 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with distinct and long impunctate shiny band usually not quite reaching anterior and posterior margins; punctation similar to that of head, but often slightly coarser and less distinctly longitudinally confluent.

Elytra and hind wings sexually dimorphic; punctation moderately dense and rather shallow, interstices glossy. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen distinctly narrower (♂) or broader (♀) than elytra; tergites III–V anteriorly with rather narrow and shallow impressions, these impressions with moderately coarse and moderately dense punctation; tergite VI with very shallow, finely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; interstices with distinct microreticulation; tergite VII with palisade fringe in both sexes.

♂: elytra (Fig. 70) large and long, 1.2–1.3 times as long as pronotum and with pronounced humeral angles, lateral margins weakly convex in dorsal view; hind wings fully developed; sternite VII in posterior median portion weakly impressed and with pubescence, posterior margin weakly concave (Fig. 72); sternite VIII with rather shallow and very broadly V-shaped posterior incision (Fig. 73); aedeagus small, 0.55–0.60 mm long and with ventral process of distinctive shape (Fig. 74).

♀: elytra (Fig. 71) approximately 0.9 times as long as pronotum; humeral angles less pronounced; lateral margins weakly diverging in dorsal view; hind wings completely reduced.

#### Comparative notes

Based on external characters (head shape, eye size, sexual pterodimorphism), the shapes of the male sternites VII–VIII, and particularly the shape of the ventral process of the aedeagus, *R. gonggaicus* is closely allied to *R. daxuensis*. It is distinguished from this species particularly by the apically longer and more acute ventral process of the aedeagus.

#### Distribution and natural history

The known distribution is confined to the Gongga Shan in Sichuan. The type specimens were collected from forest litter at altitudes of 2750–3000 m. As is the case with several other endemic congeners known from China, the

sex ratio is strongly biased: only nine in a total of 56 specimens (14%) are males. Several beetles collected in July are teneral.

#### *Rugilus (Rugilus) dabaicus* n. sp. (Figs. 75–80)

##### Type material

**Holotype** ♂: “China: W-Hubei (Daba Shan), creek valley 8 km NW Muyuping, 31° 29' N, 110° 22' E, 1550–1650 m, 18.VII.2001, leg. M. SCHÜLKE [C01-16A] / creek valley, deciduous forest, moss (sifted) [C01-16A] / *Rugilus (Tetragnathostilicus)* n. sp. B, det 2002, G. DE ROUGEMONT / Holotypus ♂ *Rugilus dabaicus* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♂ [teneral, damaged, aedeagus and part of abdominal apex missing], 4 ♀♀ [1 ♀ teneral]: same data as holotype (cSch, cAss); 1 ♀: “China (W-Hubei) Daba Shan, creek vall. 8 km NW Muyuping, 31° 29' N, 110° 22' E, 1540 m (edge of small creek), 18.VII.2001 WRASE [16]” (cSch); 5 ♀♀: “W-Hubei (Daba Shan), creek valley 11 km NW Muyuping, 31° 30' N, 110° 22' E, 1960 m, 18.VII.2001, leg. M. SCHÜLKE [C01-17] / creek valley, mixed deciduous forest (sifted) [C01-17]” (cSch, cAss); 1 ♂: “China, W Hubei prov., Dashennongjia Nat. Res., Muyu, E slope, 2000 m, 12–15 Jun 1997, BOLM lgt.” (NHMB); 1 ♀: “China, NW Hubei, Shennongjia Nat. Res., 1.–5. Jul 1998, 1700–2500 m, BOLM lgt.” (cAss); 2 ♀♀: “China, W-Hubei 2002, Dashennongjia mts., 2100–2900 m, 10.–14.VI., 31.5 N 110.3 E, leg. J. TURNA / *Rugilus (Tetragnathostilicus)* sp. ♀, det. 2005 G. DE ROUGEMONT” (NHMW).

##### Etymology

The specific epithet (adjective) is derived from the name of the mountain range where this species was discovered.

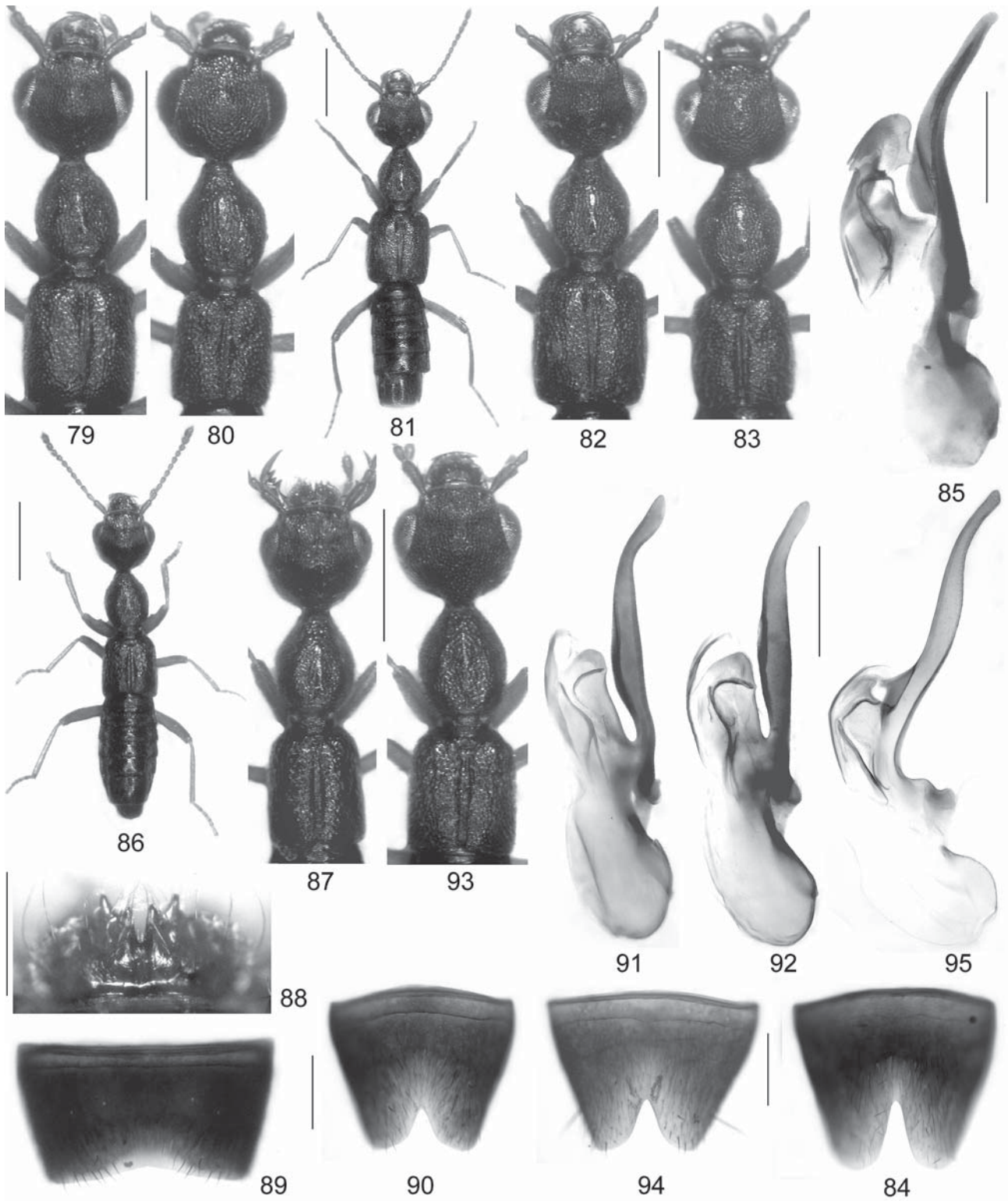
##### Description

Small species; body length 4.2–5.0 mm. Female habitus as in Fig. 75.

**Coloration**: body blackish, elytra often dark-brown and/or with a slight bronze hue; legs and antennae reddish-yellow to reddish.

**Head** (Figs. 79, 80) strongly transverse, 1.1–1.2 times as wide as long; punctation coarse, areolate, and largely confluent, median dorsal portion sometimes with small glossy area without – or with sparse – punctation. Eyes of very large, distinctly longer than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short teeth on either side of the median excision.

**Pronotum** (Figs. 79, 80) rather weakly oblong, usually 1.10–1.15 times as long as broad and approximately 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with usually rather narrow, anteriorly and posteriorly obsolete impunctate shiny portion of variable length; punctation similar to that of head, but less dense, interstices more shiny.



**Figs. 79–95.** *Rugilus dabaicus* (79–80), *R. fodens* (81–85), *R. aequabilis* (86–92), and *R. pungens* (93–95). – 79, 82, 87, 93. Male forebody. 80, 83. Female forebody. 81, 86. Male habitus. 84, 90, 94. Male sternite VIII. 85, 91–92, 95. Aedeagus in lateral view. 88. Labrum. 89. Male sternite VII. – Scale bars: 1.0 mm (79–83, 86–87, 93), 0.2 mm (84–85, 88–92, 94–95).

Elytra and hind wings sexually dimorphic; punctuation moderately dense, coarse, and well-defined; interstices glossy. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly narrower (♂) or broader (♀) than elytra; tergites III–V anteriorly with not very deep impressions, these impressions with coarse and dense punctuation; tergite VI with very shallow, finely punctate impression; punctuation of remaining tergal surfaces fine and moderately dense; interstices with microreticulation; tergite VII with palisade fringe in both sexes.

♂: elytra (Fig. 79) approximately 1.15 times as long as pronotum and with pronounced humeral angles, dorsal surface convex in cross-section, lateral margins weakly convex in dorsal view; hind wings apparently present; sternite VII in posterior median portion not distinctly impressed, posterior margin weakly concave (Fig. 76); sternite VIII with very narrow and very deep posterior incision; rather shallow and very broadly V-shaped posterior incision (Fig. 77); aedeagus 0.77 mm long and with long and slender ventral process (Fig. 78).

♀: elytra (Fig. 80) approximately 0.85 times as long as pronotum, dorsal surface usually shallowly impressed slightly before middle, humeral angles less pronounced, lateral margins usually weakly diverging in dorsal view; hind wings completely reduced.

#### Intraspecific variation

The aedeagus of the male from the NHMB is apically slightly more slender and more distinctly curved in lateral view than that of the holotype, but otherwise no evidence was found suggesting that this difference is an expression of interspecific variation.

#### Comparative notes

*Rugilus dabaicus* is separated from all its congeners by the distinctive shape of the ventral process of the aedeagus. It is additionally characterized by the small average size, the large eyes, and the absence of microsculpture on the abdomen. In this respect, the species is similar to *R. emeiensis*, from which it is additionally distinguished by the broader pronotum, the noticeably coarser punctuation of the forebody and the abdomen, the longer female elytra, and the absence of microsculpture on the abdomen.

#### Distribution and natural history

The species was discovered in the Daba Shan in western Hubei province, China. Only three out of a total of sixteen type specimens (19%) are males. The material was sifted from litter and moss in mixed deciduous forests at altitudes of 1540–2500 m in June and July. Two of the specimens are teneral.

### *Rugilus (Rugilus) fodens* n. sp. (Figs. 81–85, 96–98)

#### Type material

**Holotype** ♂: “China: Border Shaanxi–Sichuan (Daba Shan), pass 20 km SSE Zhenping, 1700–1800 m, 31° 44' N, 109° 35' E, 9.VII.2001, leg. M. SCHÜLKE [CH01-07] / young dry mixed forest, field edge, small creek valley, moss (sifted) [CH01-07] / *Rugilus (Tetragnathostilicus)* n. sp. A det. 2002, G. DE ROUGEMONT / Holotypus ♂ *Rugilus fodens* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♀: same data as holotype (cSch); 1 ♀: “China (W-Hubei) Daba Shan, creek vall. 11 km NW Muyuping, 31° 30' N, 110° 22' E, 1960 m (creek vall., mix. decid. for., moss, leaves-sift.), 18.VII.2001 WRASE [17]” (cSch); 1 ♂, 3 ♀♀: “China: N-Sichuan, 5.VI.–9.VII., Micang Shan, Daba, 27.9° N 117.85° E [longitude evidently erroneous], 1385 m, 2007, leg. J. TURNA” (NHMW); 1 ♂: “China: N-Sichuan, Micang Shan, Liping For. Park, 32.47° N, 106.40° E, 1500–1700 m, 18.V.–13.VI.2007, leg. J. TURNA” (cAss).

#### Etymology

The specific epithet (Latin, present participle of fodere: to sting) alludes to the long sting-shaped ventral process of the aedeagus.

#### Description

Relatively small species; body length 4.8–5.3 mm. Habitus as in Fig. 81.

Coloration: head, pronotum, and abdomen blackish; elytra dark-brown with slight bronze hue; legs yellowish-red to reddish; antennae reddish.

Head (Figs. 82, 83) distinctly transverse, 1.10–1.18 times as wide as long; punctuation coarse, areolate, and partly confluent; dorsal surface (Fig. 96) almost matt, median dorsal portion without small glossy area. Eyes large and bulging, longer than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short teeth on either side of the median excision.

Pronotum (Figs. 82, 83) 1.15–1.20 times as long as broad and 0.65–0.70 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with distinct impunctate shiny band of variable length and width; punctuation similar to that of head or slightly coarser (Fig. 97).

Elytra (Figs. 82, 83) with pronounced sexual dimorphism; punctuation dense, coarse, and rather defined, interstices glossy. Hind wings evidently sexually dimorphic. Metatarsomere I slightly longer than the combined length of II and III.

Abdomen finely and densely punctate; tergites III–V anteriorly with moderately deep and defined impressions, these impressions with coarse and dense punctuation; tergite VI with shallower and less coarsely punctate impression; interstices without microsculpture; tergite VII with palisade fringe in both sexes.



♂: elytra (Fig. 82) conspicuously long, 1.10–1.15 times as long as pronotum, convex in cross-section, and with pronounced humeral angles; hind wings present and apparently fully developed; sternite VII posteriorly weakly concave in the middle; sternite VIII with narrowly V-shaped and rather deep posterior incision (Fig. 84); aedeagus approximately 0.85 mm long, with conspicuously long and slender ventral process of distinctive shape (Figs. 85, 98).

♀: elytra (Fig. 83) approximately 0.9 times as long as pronotum, with shallowly transverse impressions in the middle; humeral angles less pronounced; lateral margins weakly diverging in dorsal view; hind wings completely reduced.

#### Comparative notes

Among its congeners, *Rugilus fodens* is readily identified by the conspicuous shape of the ventral process of the aedeagus.

#### Distribution and natural history

The species was found in four localities in the Daba Shan, one in western Hubei, two in Sichuan (Micang Shan), and one at the border between the Chinese provinces Sichuan and Shaanxi. Three of the five specimens are males. The material was sifted from litter and moss at altitudes of 1385–1960 m during the period from May to July.

#### *Rugilus (Rugilus) aequabilis* n. sp. (Figs. 86–92)

##### Type material

**Holotype** ♂: “China: N-Yunnan [C2005-16], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, sidevalley, 3000–3050 m, 27° 47.90' N, 98° 30.19' E / conif. forest with *Rhododendron*, broad leaved bushes, litter, moss, dead wood sifted along creek and snowfields, 21.VI.2005, M. SCHÜLKE [C2005-16] / Holotypus ♂ *Rugilus aequabilis* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 4 ♂♂, 13 ♀♀: same data as holotype (cSch, cAss); 1 ♂, 1 ♀: “China: Yunnan [CH07-22], Nujiang Lisu Aut. Pref., Gaoligong Shan, valley 21 km W Gongshan, 3320 m, 27° 47' 03" N, 98° 27' 39" E, moss, alder, bamboo, *Rhodod.* sifted, 6.VI.2007, M. SCHÜLKE” (cSch); 3 ♀♀: same data, but “leg. A. PÜTZ” (cPüt, cAss); 1 ♂, 7 ♀♀: “China: Yunnan [CH07-24], Nujiang Lisu Aut. Pref., Gaoligong Shan, valley 18 km W Gongshan, 3020 m, 27° 47' 54" N, 98° 30' 13" E, mixed forest, litter, moss, wood sifted, 7.VI.2007, M. SCHÜLKE” (cSch, cAss); 5 ♀♀: same data, but “leg. A. PÜTZ” (cPüt, cAss); 1 ♂, 12 ♀♀: “China (Yunnan), Nujiang Lisu Aut. Pref., Gaoligong Shan, valley 18 km W Gongshan, 3020 m, 27° 47' 54" N, 98° 30' 13" E (mixed forest, litter, moss, wood sifted) 7.VI.2007 D. W. WRASE [24]” (cSch); 1 ♂ [without aedeagus], 10 ♀♀: “P. R. China, Yunnan, E slope N Gaoligong Shan, N 27° 46.8', E 098° 33.1', 12–15.vi.2009, 200–3000 m [sic], sifting 1–7, V. GREBENNIKOV” (CAS, CNC, cAss); 1 ♂: “China: Yunnan [CH07-28], Nujiang

Lisu Aut. Pref., Gaoligong Shan, side valley 19 km NW Liuku, 25° 59' 02" N, 98° 42' 23" E, 2730 m, devast. prim. forest, litter sifted, 9.VI.2007, M. SCHÜLKE” (cAss); 2 ♀♀: same data, but “[CH07-28A] ... 10.VI.2007” (cSch, cAss); 1 ♀: same data as holotype, but “leg. A. PÜTZ” (cPüt); 1 ♀: “China (Yunnan), Nujiang Lisu Aut. Pref., Gaoligong Shan, creek valley 20 km NW Liuku, 3000 m, 25° 58' 49" N, 98° 41' 48" E (bamboo, shrubs, litter sifted) 9.VI.2007 D. W. WRASE [27]” (cSch); 3 ♀♀: “China: Yunnan [CH07-27], Nujiang Lisu Aut. Pref., Gaoligong Shan, creek valley 20 km NW Liuku, 25° 58' 49" N, 98° 41' 48" E, 3000 m, bamboo, shrubs, litter sifted, 9.VI.2007, M. SCHÜLKE” (cSch, cAss); 1 ♀: “China: Yunnan [CH07-26], Nujiang Lisu Aut. Pref., Gaoligong Shan, pass 21 km NW Liuku, 3150 m, 25° 58' 22" N, 98° 41' 00" E, bamboo with shrubs, litter sifted, 9.VI.2007, M. SCHÜLKE” (cSch); 3 ♀♀: “China (Yunnan), Nujiang Lisu Aut. Pref., Gaoligong Shan, E pass 20 km NW Liuku 3000 m (creek valley with devast. prim. forest, ferns, litter, moss sift.) 3.IX.2009 D. W. WRASE [25]” (cSch, cAss).

#### Etymology

The specific epithet (Latin, adjective: uniform) alludes to the fact that, unlike the species allied to *R. emeiensis*, *R. aequabilis* is not subject to a pronounced sexual dimorphism of the wings.

#### Description

Small species; body length 4.1–5.0 mm. Habitus as in Fig. 86.

Coloration variable: forebody brown to blackish-brown, often with slight bronze hue; legs and antennae reddish.

Head (Fig. 87) weakly to moderately transverse, 1.05–1.12 times as wide as long; punctuation moderately coarse, areolate, and partly confluent; dorsal surface matt, median dorsal portion and frons usually with small, more or less glossy area with somewhat sparser punctuation. Eyes large, usually slightly shorter than, rarely almost as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two teeth on either side of the median excision, the external tooth distinctly longer than the internal one (Fig. 88).

Pronotum (Fig. 87) approximately 1.15–1.20 times as long as broad and 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline usually with rather broad and distinct impunctate shiny band of variable length; punctuation similar to that of head, but usually not confluent.

Elytra (Fig. 87) without sexual dimorphism, of variable length, 0.8–1.0 times as long as pronotum; humeral angles moderately pronounced; lateral margins usually weakly diverging posteriad in dorsal view; punctuation variable, dense, shallow and weakly defined, or deeper and moderately defined, interstices glossy. Hind wings reduced. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen slightly to distinctly narrower than elytra; tergites III–V anteriorly with moderately deep and defined

impressions, these impressions with coarse and dense punctation; tergite VI with shallower and less coarsely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; interstices with shallow microreticulation (best visible on tergite VII); tergite VII with palisade fringe in both sexes.

♂: sternite VII strongly transverse, in posterior median portion shallowly impressed, posterior margin weakly concave (Fig. 89); sternite VIII with narrowly V-shaped, not very deep posterior incision (Fig. 90); aedeagus approximately 0.8 mm long, with long, slender, and subapically bent ventral process of distinctive shape (Figs. 91, 92).

#### Intraspecific variation

The shape of the aedeagus (Fig. 92) of the single male from the southern Gaoligong Shan (25° 59' 02" N, 98° 42' 23" E) is slightly different from that of the specimens collected in the northern portion of the same mountain range (Fig. 91). This difference is interpreted as an expression of intra- rather than interspecific variation until additional material suggesting otherwise becomes available.

#### Comparative notes

*Rugilus aequabilis* is characterized particularly by the conspicuous shape of the ventral process of the aedeagus and additionally by the following character combination: small body size, forebody often dark-brown, absence of a sexual dimorphism of the elytra and hind wings, anterior margin of the labrum with the external teeth much longer than the internal ones.

#### Distribution and natural history

The species was discovered in several localities in the Gaoligong Shan in the Chinese province Yunnan, close to the border with Myanmar. The specimens with exact data specified on the labels were sifted from leaf litter and moss in forests and shrubland at altitudes of 2730–3320 m in June and September. Like in the preceding species, the sex ratio is strongly biased; only ten out of a total of 72 specimens (14 %) are males.

#### *Rugilus (Rugilus) pungens* n. sp. (Figs. 93–95)

##### Type material

Holotype ♂ [slightly teneral]: "China: N-Yunnan [C2005-12], Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligong Shan, 2500 m, 27° 45.404' N, 98° 35.749' E, litter & debries [sic] at snowfield sifted during rain, 19.VI.2005, M. SCHÜLKE / Holotypus ♂ *Rugilus pungens* sp. n. det. V. ASSING 2011" (cAss).

Paratypes: 1 ♂ [slightly teneral], 1 ♀: same data as holotype (cSch).

#### Etymology

The specific epithet (Latin, present participle of *pungere*: to sting) alludes to the long sting-shaped ventral process of the aedeagus.

#### Description

Small species; body length 4.2–5.0 mm.

Coloration: head blackish; pronotum dark-brown to blackish, with the posterior margin slightly paler; elytra brown to dark-brown with slight bronze hue; abdomen blackish; legs dark-yellowish; antennae reddish.

Head (Fig. 93) weakly to moderately transverse, 1.05–1.10 times as wide as long; punctation moderately coarse, areolate, and partly confluent; dorsal surface matt, median dorsal portion with or without small glossy area. Eyes large, slightly shorter than, or as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short teeth on either side of the median excision.

Pronotum (Fig. 93) approximately 1.15–1.20 times as long as broad and 0.65–0.70 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with rather broad and distinct impunctate shiny band of variable length; punctation similar to that of head.

Elytra (Fig. 93) with weakly pronounced sexual dimorphism, 0.8–0.9 times as long as pronotum; humeral angles moderately pronounced; lateral margins weakly diverging posteriad in dorsal view; punctation dense, rather shallow, and rather weakly defined, interstices glossy. Hind wings reduced in both sexes. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen slightly to distinctly narrower than elytra; tergites III–V anteriorly with moderately deep and defined impressions, these impressions with coarse and dense punctation; tergite VI with shallower and less coarsely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; shallow traces of microsculpture present only near posterior margin of tergite VII; tergite VII with narrow rudiment of a palisade fringe in both sexes.

♂: sternite VII with posterior median portion shallowly impressed, posterior margin weakly concave; sternite VIII with narrowly V-shaped and rather deep posterior incision (Fig. 94); aedeagus approximately 0.85 mm long, with conspicuously long and slender ventral process of distinctive shape (Fig. 95).

#### Comparative notes

Among its congeners, *Rugilus pungens* is readily identified by the conspicuous shape of the ventral process of the aedeagus. It is additionally distinguished from the highly similar and sympatric *R. aequabilis* by the less extensively

microsculptured abdominal tergite VII (*R. aequabilis*: microsculpture present on whole tergite).

#### Distribution and natural history

The type locality is situated in the Gaoligong Shan, northwestern Yunnan, China. The specimens were sifted from leaf litter and debris at the edge of a snowfield at an altitude of 2500 m. The two males are slightly teneral.

#### *Rugilus (Rugilus) dalaoticus* n. sp. (Figs. 99–105)

##### Type material

**Holotype** ♂: “China, W-Hubei, 9.–10.VI., Dalaoshan forest park, 31.05° N, 110.95° E, JAROSLAV TURNA leg., 2004 / *Rugilus gansuensis* Rgmt., det. 2005 G. DE ROUGEMONT / Holotypus ♂ *Rugilus dalaoticus* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♂, 1 ♀: “China, W-Hubei, 9.–15.VI., Dalaoshan forest park, pitfall traps, 31.05 N 110.95 E, JAROSLAV TURNA leg., 2004 / *Rugilus gansuensis* Rgmt., det. 2005 G. DE ROUGEMONT” (NHMW, cAss).

##### Etymology

The specific epithet (adjective) is derived from the name of the mountain range where the type locality is situated.

##### Description

Small species; body length 4.9–5.3 mm. Male habitus as in Fig. 99.

Coloration: head, pronotum, and abdomen blackish; elytra dark-brown with slight bronze hue; legs and antennae reddish-yellow.

Head (Figs. 100, 101) distinctly transverse, approximately 1.15 times as wide as long; punctuation moderately coarse, areolate, and partly confluent; dorsal surface matt. Eyes very large, distinctly longer than distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short teeth on either side of the median excision, the external tooth slightly shorter than the internal one.

Pronotum (Figs. 100, 101) approximately 1.15 times as long as broad and about 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with rather broad and distinct impunctate shiny band not reaching anterior and posterior margins; punctuation similar to that of head.

Elytra (Figs. 100, 101) with pronounced sexual dimorphism; punctuation dense, coarse, and defined; interstices glossy. Metatarsomere I slightly longer than the combined length of II and III.

Abdomen narrower (♂) or broader (♀) than elytra; tergites III–V anteriorly with rather shallow impressions, these impressions with moderately coarse and dense punctation;

tergite VI with very shallow and less coarsely punctate impression; punctuation of remaining tergal surfaces fine and moderately dense; interstices without microreticulation; tergite VII with palisade fringe in both sexes.

♂: elytra (Fig. 100) long, more than 1.1 times as long as, and much broader than pronotum; humeral angles pronounced; lateral margins subparallel in dorsal view; sternite VII distinctly transverse, posterior margin weakly concave (Fig. 102); sternite VIII with narrow, acute, and moderately deep posterior incision (Fig. 103); aedeagus 0.73 mm long, with rather long, slender, smoothly bent, and apically acute ventral process (Figs. 104, 105).

♀: elytra (Fig. 101) approximately 0.85 times as long as pronotum, humeral angles weakly marked; hind wings apparently reduced.

##### Comparative notes

Among other small-sized *Rugilus* species distributed in China, *R. dalaoticus* is characterized particularly by the shape of the aedeagus, the strongly transverse head, the large eyes, and the absence of microsculpture on the abdomen.

#### Distribution and natural history

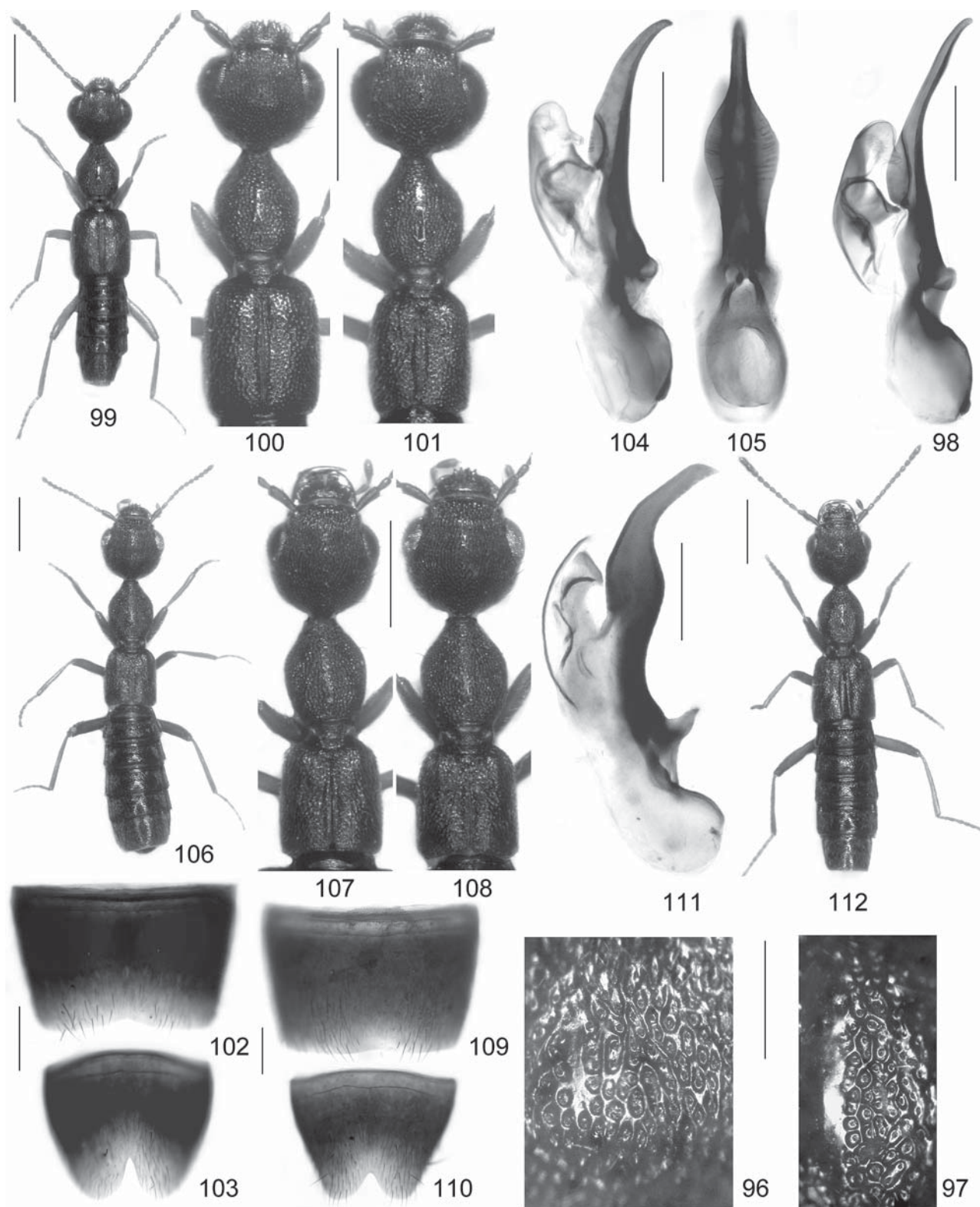
The species is known only from the type locality in the Dalaoshan in western Hubei province, China. The types were collected with pitfall traps in June.

#### *Rugilus (Rugilus) schuelkei* n. sp. (Figs. 106–111)

##### Type material

**Holotype** ♂: “China: N-Yunnan [C03-04B], Zhongdian Co., 51 km SSE Zhongdian, 27° 25.3' N, 99° 56.5' E, 2970 m, creek valley, dead wood, mushrooms, 19.VIII.2003, leg. M. SCHÜLKE / Holotypus ♂ *Rugilus schuelkei* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♀: “China (N-Yunnan) Zhongdian Co., 51 km SSE Zhongdian, 2970 m, 27° 25.3' N, 99° 56.5' E (creek valley, mixed conif. forest with shrubby veget., bamboo, vinegar trap) 16.–19.VIII.2003 WRASE [4B]” (cSch); 1 ♂ [teneral]: “China (N-Yunnan), Zhongdian Co., 51 km SSE Zhongdian, 2970 m, 27° 25.3' N, 99° 56.5' E, (creek valley, mixed conif. forest with shrubby veget., bamboo) 16.VIII.2003 WRASE [04]” (cSch); 3 ♂♂ [teneral], 1 ♀: “China: N-Yunnan [C03-05], Zhongdian Co., 46 km SSE Zhongdian, 27° 27.0' N, 99° 54.7' E, 3050–3100 m, creek valley, secondary mixed forest, bamboo, mushrooms, 17.VIII.2003, leg. M. SCHÜLKE” (cSch, cAss); 1 ♂ [teneral]: “China (N-Yunnan), Zhongdian Co., 46 km SSE Zhongdian, 3050–3100 m, 27° 27.0' N, 99° 54.7' E (creek valley, secondary mixed forest, bamboo, mushrooms) 17.VIII.2003 WRASE [05]” (cSch); 2 ♂♂ [teneral, 1 ♂ without aedeagus], 6 ♀♀ [2 teneral]: “China: N-Yunnan [C03-11], Zhongdian Co., 48 km N Zhongdian, 28° 16.6' N, 99° 45.7' E, 3220 m, creek valley, devastated primary forest, dead wood, moss, mushrooms, 21.VIII.2003, leg.



**Figs. 96–112.** *Rugilus fodens* from Micang Shan (96–98), *R. dalaoicus* (99–105), *R. schuelkei* (106–111), and *R. parvinctus* (112). – 96. Median dorsal portion of head. 97. Medio-lateral portion of pronotum. 98, 104, 111. Aedeagus in lateral view. 99, 112. Male habitus. 100, 107. Male forebody. 101, 108. Female forebody. 102, 109. Male sternite VII. 103, 110. Male sternite VIII. 105. Aedeagus in ventral view. 106. Female habitus. – Scale bars: 1.0 mm (99–101, 106–108, 112), 0.2 mm (96–98, 102–105, 109–111).

M. SCHÜLKE" (cSch, cAss); 1 ♂ [teneral]: "China (N-Yunnan) Zhongdian Co., 48 km N Zhongdian, 28° 16.6' N, 99° 45.7' E, 3220 m (creek valley with devastated primary forest, field edge) 21.VIII.2003 WRASE [11A]" (cAss); 1 ♀: "China: NW-Yunnan, mts. E Zhongdian, 3400–3700 m, 5.–14.VI.2006, S. MURZIN & I. SHOKHIN" (cSch); 2 ♀♀: "China: Yunnan prov., 2 km S of Haba, 17.–20.VI.2007, Haba Xueshan Mts., 27° 21.9' N, 100° 08.3' E, 2870 m, J. HÁJEK & J. RŮŽIČKA leg. [Ch33] / sifted deep, humid detritus, leaves and mosses, sparse mixed forest (with dominant *Pinus*) near the brook" (cSch); 1 ♀: "China: Yunnan province, 3 km SW of Haba, 19.VI.2007, Haba Xueshan Mts., 27° 22.3' N, 100° 06.5' E, 3200 m, J. HÁJEK & J. RŮŽIČKA leg. [Ch38] / sifted detritus, leaves and mosses in more humid depressions, margin of sparse mixed forest (with dominant *Pinus*, *Abies*, *Quercus*)" (cSch).

#### Etymology

The species is dedicated to my dear friend and colleague MICHAEL SCHÜLKE, who collected not only the types of *R. schuelkei*, but also those of numerous other species described in the present paper.

#### Description

Body length 5.4–6.3 mm. Habitus as in Fig. 106.

Coloration: head, pronotum, and abdomen blackish; elytra brown with slight bronze hue; legs dark-yellowish to dark-reddish; antennae reddish.

Head (Figs. 107, 108) 1.00–1.05 times as wide as long; punctation dense, moderately coarse, areolate, and more or less extensively longitudinally confluent; dorsal surface matt, except for the narrow interstices and sometimes for a small impunctate or sparsely punctate glossy area. Eyes distinctly bulging, of moderate, but variable size (on average somewhat larger in ♀ than in ♂), 0.6–0.8 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two rather long, basally fused teeth on either side of the median excision.

Pronotum (Figs. 107, 108) approximately 1.15 times as long as broad and 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with relatively short impunctate shiny band posteriorly; punctation similar to that of head, but not distinctly confluent.

Elytra (Figs. 107, 108) without sexual dimorphism, short, usually 0.8–0.9 times as long as pronotum; humeral angles weakly pronounced; dorsal surface somewhat depressed; lateral margins weakly diverging posteriad in dorsal view; punctation dense, rather shallow, and not very defined; interstices glossy. Hind wings completely reduced. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen slightly broader than elytra; tergites III–V anteriorly with rather shallow impressions, these impressions with moderately coarse and dense punctation; tergite VI with indistinct, finely punctate impression; punctation

of remaining tergal surfaces fine and moderately dense; interstices on anterior tergites sometimes without, on tergite VII at most with indistinct traces of microreticulation; posterior margin of tergite VII with palisade fringe.

♂: sternite VII in posterior median portion weakly impressed, posterior margin weakly concave in the middle (Fig. 109); sternite VIII with relatively small V-shaped posterior incision (Fig. 110); aedeagus approximately 0.85 mm long, with ventral process of distinctive shape (Fig. 111).

#### Comparative notes

*Rugilus schuelkei* is characterized particularly by the shape of the aedeagus. In external characters, it is highly similar to *R. parvincisus*, from which it is reliably distinguished only based on the male primary and secondary sexual characters.

#### Distribution and natural history

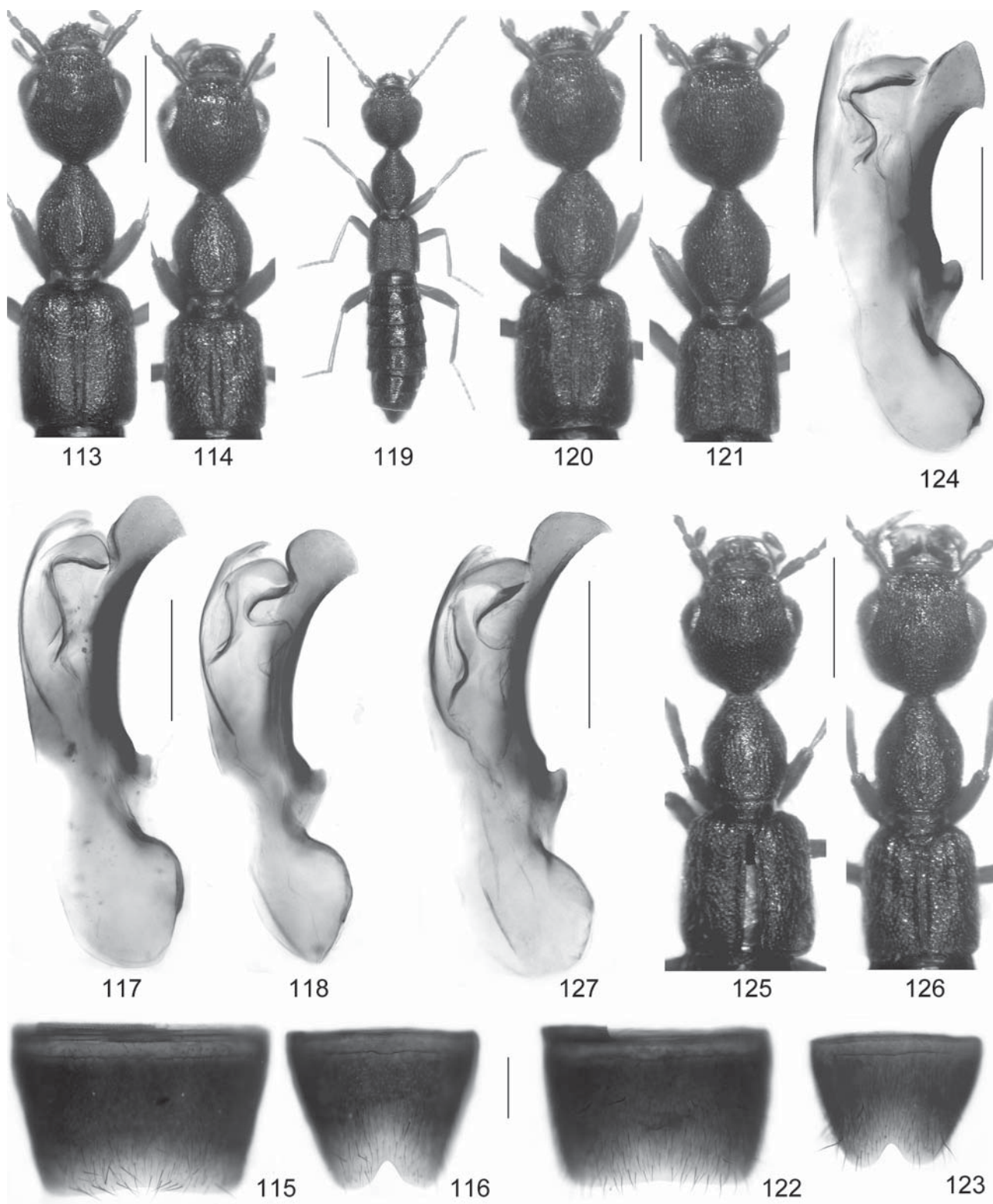
The species was found in several localities in Zhongdian County by sifting leaf litter and dead wood in forests and creek valleys at altitudes from 2870 m to more than 3400 m in June and August. Several specimens collected in August are teneral. The sex ratio is almost balanced (9 ♂♂ : 12 ♀♀).

#### *Rugilus (Rugilus) parvincisus* n. sp. (Figs. 112–118)

##### Type material

**Holotype** ♂ [brachypterous]: "China: N-Yunnan [C03-01], Lijiang Naxi Aut. Co., E Yulongxue Shan, 30 km N Lijiang, 27° 09.0' N, 100° 14.9' E, 2800–2900 m, creek valley, secondary mixed forest, 13.VIII.2003, M. SCHÜLKE / Holotypus ♂ *Rugilus parvincisus* sp. n. det. V. ASSING 2011" (cAss).

**Paratypes**: 4 ♂♂ [2 macropterous, 2 slightly teneral], 7 ♀♀ [1 teneral]: same data as holotype (cSch, cAss); 3 ♂♂ [1 macropterous and teneral], 3 ♀♀: "China (N-Yunnan) Lijiang Naxi Aut. Co., E Yulongxue Shan, 30 km N Lijiang, 2800–2900 m, 27° 09.0' N, 100° 14.9' E (creek valley, secondary mixed forest) 13.VIII.2003 WRASE [01]" (cSch); 1 ♂ [slightly teneral], 2 ♀♀: "China (Yunnan) Dali Bai Auton. Pref., Diancang Shan W Dali, 25° 41' 09" N, 100° 06' 32" E, 3000–3200 m (creek cleft in mixed forest, slope with moss) 27.V.2007 D.W. WRASE [01B]" (cSch, cAss); 1 ♀: "China: Yunnan [CH07-01], Diancang Shan W Dali, 25° 41' 09" N, 100° 06' 32" E, 3000–3200 m, cleft in mixed forest, litter, debris sifted, 27.V.2007, M. SCHÜLKE" (cAss); 3 ♀♀: same data, but "leg. A. PÜTZ" (cPüt, cAss); 1 ♀: "China (Yunnan) Dali Bai Auton. Pref., Diancang Shan W Dali, 25° 41' 20" N, 100° 06' 12" E, 3160 m (small creek valley, litter and debris sifted) 27.V.2007 D.W. WRASE [02]" (cSch); 1 ♂ [macropterous], 3 ♀♀: "China: Yunnan [CH07-02], Diancang Shan W Dali, 25° 41' 20" N, 100° 06' 12" E, 3160 m, small creek valley, litter and debris sifted, 27.V.2007, M. SCHÜLKE" (cSch, cAss); 2 ♀♀:



**Figs. 113–127.** *Rugilus parvincisus* (113–118), *R. biformis* (119–124), and *R. meilixuensis* (125–127). – **113, 120, 125.** Forebody of macropterous male. **114, 121.** Forebody of micropterous male. **115, 122.** Male sternite VII. **116, 123.** Male sternite VIII. **117–118, 124, 127.** Aedeagus in lateral view. **119.** Habitus of macropterous male. **126.** Female forebody. – Scale bars: 1.0 mm (113–114, 119–121, 125–126), 0.2 mm (115–118, 122–124, 127).

“China-Yunnan, 24.–29.VI.1993, 50 km N Lijiang, Yulongshan Nat. Res., E. JENDEK & O. ŠAUŠA leg.” (NHMW, cAss).

#### Etymology

The specific epithet is composed of the Latin adjectives *parvus* (small) and *incisus* (incised). It refers to the small posterior excision of the male sternite VIII.

#### Description

Body length 5.2–6.4 mm. Habitus of micropterous morph as in Fig. 112.

Coloration: head, pronotum, and abdomen blackish; elytra blackish-brown with slight bronze hue; legs dark-reddish to reddish-brown, with the apices of the femora weakly infuscate; antennae reddish.

Head (Figs. 113, 114) weakly transverse, approximately 1.05 times as wide as long; punctation dense, coarse, areolate, and partly confluent; dorsal surface matt, median dorsal portion with small, mostly oblong, impunctate or sparsely punctate glossy area. Eyes distinctly bulging, of moderate size, approximately 0.6–0.7 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two rather long, basally fused teeth on either side of the median excision.

Pronotum (Figs. 113, 114) approximately 1.15 times as long as broad and 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width; midline with narrow and relatively short impunctate shiny band posteriorly; punctation similar to that of head.

Elytra (Figs. 113, 114) with sexual dimorphism; punctation dense, rather shallow, and weakly to moderately defined; interstices glossy. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen approximately as broad as elytra; tergites III–V anteriorly with rather shallow impressions, these impressions with moderately coarse and dense punctation; tergite VI with indistinct, finely punctate impression; punctation of remaining tergal surfaces fine and moderately dense; microsculpture usually visible only on tergite VII, sometimes only in posterior portion of tergite VII; posterior margin of tergite VII with palisade fringe.

♂: elytra and hind wings dimorphic; in the macropterous morph (Fig. 113) elytra approximately 1.2 times as long as, and much broader than pronotum, distinctly convex in cross-section, with pronounced humeral angles, and with subparallel lateral margins in dorsal view, hind wings fully developed; in micropterous morph (Fig. 114) elytra approximately as long as, and slightly broader than pronotum, somewhat flattened, with moderately pronounced humeral angles, and with posteriorly weakly diverging lateral margins in dorsal view, hind wings completely reduced; sternite VII in posterior median portion not distinctly impressed and with pubescence, posterior margin weakly concave (Fig. 115); sternite VIII with small V-shaped pos-

terior incision (Fig. 116); aedeagus 0.7–0.8 mm long, with ventral process of distinctive shape, but apex somewhat variable (Figs. 117, 118).

♀: elytra monomorphic, shorter and somewhat broader than in micropterous ♂, usually 0.85–0.95 times as long as pronotum; hind wings completely reduced.

#### Comparative notes

*Rugilus parvincisus* is distinguished from its congeners particularly by the shape of the aedeagus, and from most other Chinese representatives of the subgenus additionally by the following character combination: moderately large size, eyes not conspicuously large, males wing-dimorphic, male sternite VIII with small posterior excision.

#### Distribution and natural history

The species was discovered in the Diancang Shan and the Yulongxue Shan in the Chinese province Yunnan. The specimens were sifted from forest litter in stream valleys at altitudes of 2800–3200 m in May, June, and August. In one locality the species was collected together with *R. glabripennis*. Several specimens collected in May and August are teneral. The sex ratio is moderately biased (9 ♂♂ : 22 ♀♀).

#### *Rugilus (Rugilus) biformis* n. sp. (Figs. 119–124)

#### Type material

**Holotype** ♂ [macropterous]: “China (N-Yunnan) Zhongdian Co., 33 km ESE Zhongdian, 3200 m, 27° 41.5' N, 100° 00.7' E (creek valley with old mixed forest, dead wood, bamboo, leaf litter) 24.VIII.2003 WRASE [14A] / Holotypus ♂ *Rugilus biformis* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♂ [micropterous]: same data as holotype (cSch); 1 ♂ [micropterous]: “China (N-Yunnan) Diqing Tibet. Aut. Pref., Zhongdian Co., Bitai Hai Lake area, 29 km ESE Zhongdian, 3540 m, 27° 43.65' N, 99° 58.97' E (creek vall., dev-ast. mixed forest, bamboo), 1.VI.2005 D. W. WRASE [01]” (cSch).

#### Etymology

The specific epithet (Latin, adjective) refers to the pronounced wing-dimorphism of the male.

#### Description

Body length 5.0–5.8 mm. Habitus of micropterous male as in Fig. 119.

Coloration, punctation, microsculpture, and proportions as in *R. parvincisus*, except as follows:

Elytra with variable, but on average shallower and less dense punctation.

♂: elytra and hind wings dimorphic; in the macropterous morph (Fig. 120) elytra only slightly (1.05 ×) longer and distinctly broader than pronotum, distinctly convex in

cross-section, with pronounced humeral angles, and with subparallel lateral margins in dorsal view, hind wings fully developed; in micropterous morph (Fig. 121) elytra approximately 0.8 times as long as, and slightly broader than pronotum, with moderately pronounced humeral angles, and with posteriorly weakly diverging lateral margins in dorsal view, hind wings completely reduced; sternite VII in posterior median portion not distinctly impressed and with pubescence, posterior margin weakly concave (Fig. 122); sternite VIII with small and almost V-shaped posterior incision (Fig. 123); aedeagus small, 0.55–0.62 mm long, with ventral process apically obliquely truncate in lateral view (Fig. 124).

♀: unknown.

#### Comparative notes

*Rugilus biformis* is distinguished from the otherwise similar *R. parvincisus* particularly by the smaller and more slender body, the sparser and shallower punctation of the elytra, the shorter elytra in both the macropterous and the micropterous morph, and by the significantly smaller and differently shaped aedeagus.

#### Distribution and natural history

The species was found in two localities near Zhongding in the north of the Chinese province Yunnan. The types were sifted in mixed forests at altitudes of 3200–3540 m, in one locality together with a female of *R. schuelkei*. Remarkably, no females were found.

#### *Rugilus (Rugilus) meilixuensis* n. sp.

(Figs. 125–127)

#### Type material

**Holotype** ♂ [macropterous]: “China (N-Yunnan) Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28° 25.30' N, 98° 48.47' E, creek valley (mixed forest with bamboo (under wood, stones, in litter, soil) 9. & 13. VI.2005, D. W. WRASE [07] / Holotypus ♂ *Rugilus meilixuensis* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 2 ♀♀: “China: N-Yunnan [C2005-07], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28° 25.30' N, 98° 48.47' E / small creek valley, mixed forest with bamboo, leaf litter, moss, dead wood, sifted, 9.VI.2005, leg. M. SCHÜLKE [C2005-07]” (cSch); 4 ♀♀: “China: N-Yunnan [C2005-07A], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28° 25.30' N, 98° 48.47' E / small creek valley, mixed forest with bamboo, leaf litter, moss, dead wood, sifted, 13.VI.2005, leg. M. SCHÜLKE [C2005-07A]” (cSch, cAss); 1 ♀: “China (N-Yunnan) Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28° 25.30' N, 98° 48.47' E, creek valley (mixed forest with bamboo (under wood, stones, in litter, soil) 9. & 13. VI.2005, D. W. WRASE [07]” (cSch).

#### Etymology

The specific epithet (adjective) is derived from the name of the mountain range where the species was discovered.

#### Description

Body length 5.2–6.3 mm. External characters as in *R. parvincisus*, except for the slightly narrower and more depressed female elytra.

♂: elytra (Fig. 125) approximately 1.1 times as long as, and much broader than pronotum, distinctly convex in cross-section, with pronounced humeral angles, and with subparallel lateral margins in dorsal view, hind wings fully developed; sternites VII and VIII as in *R. parvincisus*; aedeagus 0.65 mm long, of similar general morphology as in *R. parvincisus*, but with ventral process apically more slender and acute (Fig. 127).

♀: elytra (Fig. 126) usually 0.90–0.95 times as long as pronotum, rather slender, mostly shallowly and more or less extensively transversely impressed in the middle; humeral angles weakly pronounced; hind wings completely reduced.

#### Comment

The only male available is macropterous. However, since this species is undoubtedly closely related to *R. parvincisus* and *R. biformis*, it does not seem unlikely that the males are wing-dimorphic in *R. meilixuensis*, too.

#### Comparative notes

*Rugilus meilixuensis* is reliably distinguished from *R. parvincisus* only by the smaller and differently shaped aedeagus.

#### Distribution and natural history

The type locality is situated in the Meili Xue Shan, northern Yunnan province, where the specimens were sifted in a mixed forest at an altitude of 2890 m in June, together with *R. glabripennis*. Only one out of a total of eight specimens is a male.

#### *Rugilus (Rugilus) confluens* n. sp.

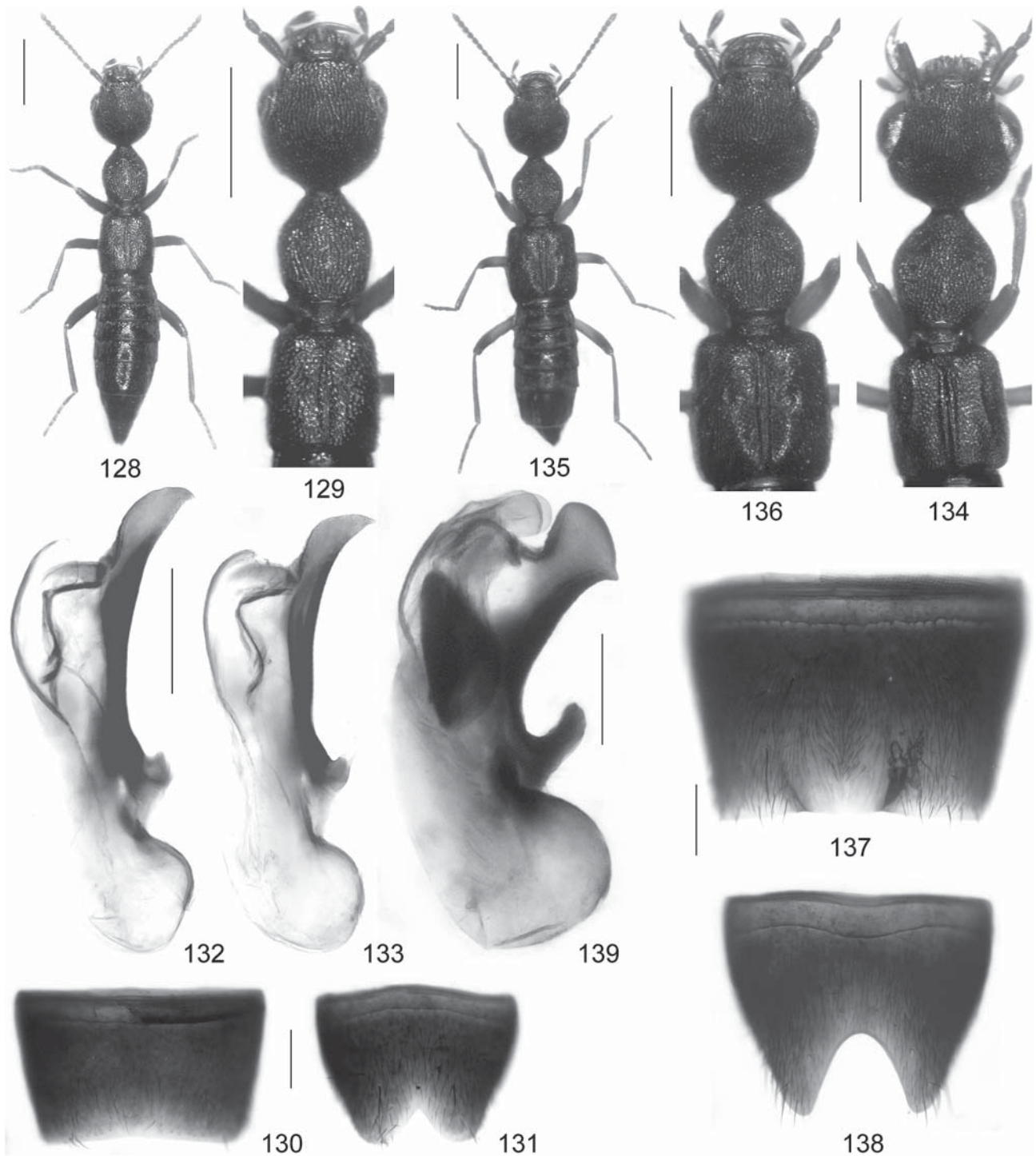
(Figs. 128–133)

#### Type material

**Holotype** ♂: “China – W Sichuan, Qionglai Shan, Mou Pi Shan mount, 3100–3750 m, Barkam, 15 km S of Zhuokeji, mixed and relict coniferous forest, 10–30.VI.2004, leg. R. FABBRI / Holotypus ♂ *Rugilus confluens* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 1 ♂, 1 ♀: “China – NW Sichuan, 20 km W of Luhua, 2750–3200 m, mixed forest, 8–28.VI.2004, leg. R. FABBRI” (cSch); 1 ♀: “China – W Sichuan, Barkam, pass SE Barkam, pass between Zhuokeji–Lianghekou, 4100 m, alpine zone, 10–30.VI.2004, leg. R. FABBRI” (cSch); 1 ♀: “China – NW





**Figs. 128–139.** *Rugilus confluens* (128–133), *R. nuicus* (134), and *R. glabripennis* (135–139). – 128, 135. Habitus. 129, 134, 136. Forebody. 130, 137. Male sternite VII. 131, 138. Male sternite VIII. 132–133, 139. Aedeagus in lateral view. – Scale bars: 1.0 mm (128–129, 134–136), 0.2 mm (130–133, 137–139).

Sichuan, 3500 m, between Sanggarmai–Sanggarpar, relict coniferous forest, 8–29.VI.2004, leg. R. FABBRI” (cSch); 1 ♀: “China – W Sichuan, 3300–3500 m, Kangding pref., Xinduyiao, grassland with shrubs near river, 12–21.VI.2004, leg. R. FABBRI” (cSch);

1 ♀: “China – W Sichuan, 2950–3200 m, Kangding pref., mixed forest between Cuilai–Wuouana, 13–21.VI.2004, leg. R. FABBRI” (cSch); 1 ♂, 1 ♀: “China – W Sichuan, 3550–3650 m, Jiajin Shan, Jintang, 18 km E, primary coniferous forest, 11–24.VI.2004, leg.

R. FABBRI" (cSch, cAss); 1 ♀: "China, W Sichuan, 3800 m, road Luhuo–Sertar, 20 km N Luhuo, 31° 32' N, 100° 42' E, mixed forest, 21.VII.1997, JAROSLAV TURNA leg. / *Rugilus bhotius* Rgmt. det. 1998 G. DE ROUGEMONT" (cAss); 1 ♂, 4 ♀♀: "China W. Sichuan (Ganzi Tibet. Aut. Pref., Litang Co.) Shalui Shan, 25 km NW Litang, 4200 m, 30° 08' N, 100° 04' E, 1.–3.VII.1999 D. W. WRASE / *Rugilus bhotius* Rgmt. det. G. DE ROUGEMONT 1999" (cSch, cRou, cAss); 1 ♂, 2 ♀♀: "China, Prov. Sichuan, Ganzi Tibetan Auton. Pref., Batang Co., Shaluli [sic] Shan, *Abies*-Forest, 55 km NE Batang, 30.07.68 N, 100.03.77 E, 4200 m, 3.VII.1999, leg. A. PÜTZ" (cPüt, cAss); 1 ♀: "China, Prov. Sichuan, Ganzi Tibetan Auton. Pref., Yajiang Co., Shaluli [sic] Shan, 32 km WNW Yajiang, 4300 m, 30.08.07 N, 100.42.36 E, 2.VII.1999, leg. A. PÜTZ" (cPüt); 2 ♀♀: "China, Prov. Sichuan, Ganzi Tibetan Auton. Pref., Yajiang Co., Shaluli [sic] Shan, E Pass, 15 km W Yajiang, 4300 m, *Rhododendron* sif, 30.00.24 N, 100.51.63 E, 2.VII.1999, leg. A. PÜTZ" (cPüt, cAss); 1 ♀: "China: W-Sichuan (12), Daxue Shan, 12 km W Tsheto-La Pass, 3700 m, 30.03.17 N, 101.43.19 E, 26.V.1997, M. SCHÜLKE / *Rugilus bhotius* Rgmt. det. 1998, G. DE ROUGEMONT" (cSch); 2 ♀♀: "China: W-Sichuan (11), Daxue Shan, 5 km W Tsheto-La Pass, 3900–4000 m, 30.IV.20 N, 101.46.39 E, 26.V.1997, M. SCHÜLKE / *Rugilus bhotius* Rgmt. det. 1998, G. DE ROUGEMONT" (cSch, Rou); 1 ♀: "China: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Kangding Co., Daxue Shan, W Tsheto-La Pass, 3900–4000 m, 18 km W Kangding, 30° 04' N, 101° 47' E, 25.VI., leg. M. SCHÜLKE" (cSch); 1 ♂: "China: Sichuan, Ganzi pref., Daxue Shan, 101.47 E, 30.04 N, ca. 21 km W Kangding, km 2884, 3970 m, 26.V.1997, leg. A. PÜTZ / *Rugilus bhotius* Rgmt. det. 1998, G. DE ROUGEMONT" (cPüt); 5 ♀♀: "China: W Sichuan, 20 km N Sabdê, 3200 m, 29° 35' N, 102° 23' E, 13.VII.1998, A. SMETANA [C80] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme, cAss); 1 ♀: "China: W Sichuan, 20 km N Sabdê, 3200 m, 29° 35' N, 102° 23' E, 15.VII.1998, A. SMETANA [C83] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme); 2 ♂♂, 6 ♀♀: "China: W Sichuan, 20 km N Sabdê, 3300 m, 29° 35' N, 102° 23' E, 14.VII.1998, A. SMETANA [C82] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme, cAss); 1 ♀: "China: W Sichuan, 20 km N Sabdê, 3200 m, 29° 35' N, 102° 23' E, 11.VII.1998, A. SMETANA [C77] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme); 3 ♂♂: "China: W Sichuan, 20 km N Sabdê, 3200 m, 29° 35' N, 102° 23' E, 14.VII.1998, A. SMETANA [C80] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme, cAss); 2 ♀♀: "China: W Sichuan, Pass Zheduo Shankou, W Kangding, E slope, 3850 m, 29° 58' N, 101° 23' E, 18.VII.1998, A. SMETANA [C85] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme); 2 ♀♀: "China: Sichuan, Gongga Shan, Hailuogou, for. above Camp 2, 2800 m, 29° 35' N, 102° 00' E, 29° 35' N, 102° 23' E, 6.VII.1998, A. SMETANA [C75] / 1998 China Expedition, J. FARKAČ, D. KRÁL, J. SCHNEIDER & A. SMETANA" (cSme, cAss); 1 ♀: "China N Yunnan Xue Shan nr. Zhongdian, 3800 m, 26.VI.1996, 27° 49' N, 99° 34' E, C43 / collected by A. SMETANA, J. FARKAČ and P. KABÁTEK" (cSme); 2 ♂♂: "China, Prov. Sichuan, Str. v. Jiuzhaigou n. Songpan, Gonggaling-Pass, Südseite, 3270–3380 m, 1. A. PUCHNER, 31.V.–7.VI.2006" (NHMW, cAss).

#### Etymology

The specific epithet (Latin, present participle of *confluere*) refers to the largely confluent punctation of the head and pronotum.

#### Description

Species of intermediate size; body length 5.0–5.9 mm. Habitus as in Fig. 128.

Coloration: head, pronotum, and abdomen blackish; elytra usually with slight bronze hue, dark-brown to blackish; legs brown to dark-brown; antennae reddish, mostly with antennomere I weakly to distinctly infuscate.

Head (Fig. 129) weakly oblong, 1.0–1.07 times as long as broad; punctation dense, very coarse, areolate, and largely longitudinally confluent; median dorsal portion sometimes with small oblong glossy spot. Eyes relatively small, distinctly shorter than postocular portion, their length 0.6–0.8 times as long as the distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two remarkably long and basally fused teeth on either side of the median excision.

Pronotum (Fig. 129) approximately 1.15–1.20 times as long as broad and 0.70–0.75 times as wide as head; lateral margins convexly converging posteriad from point of maximal width, posterior angles obsolete; punctation similar to that of head, extensively and longitudinally confluent; midline without glossy band, but sometimes with a small shiny spot posteriorly.

Elytra (Fig. 129) without sexual dimorphism, 0.8–0.9 times as long as pronotum; humeral angles moderately pronounced; dorsal surface mostly somewhat depressed or shallowly impressed; lateral margins weakly diverging posteriad in dorsal view; punctation dense, coarse, and rather defined. Hind wings completely reduced. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen somewhat broader than elytra; tergites III–V anteriorly with defined impressions, these impressions with coarse and dense punctation; tergite VI with very shallow, less coarsely punctate impression; punctation of remaining tergal surfaces fine, but distinct, and moderately dense; interstices on tergites III–VI without, on tergite VII with shallow microsculpture; posterior margin of tergite VII with fine rudiment of a palisade fringe.

♂: sternite VII in posterior median portion somewhat depressed, otherwise unmodified (Fig. 130); sternite VIII moderately deep and with distinctly V-shaped posterior incision (Fig. 131); aedeagus usually 0.70–0.75 mm long, ventral process subapically curved and apically acute in lateral view (Figs. 132, 133).

#### Comparative notes

*Rugilus confluens* is characterized particularly by the morphology of the aedeagus. Among the *Rugilus* species recorded from China, it is additionally identified based on the combination of the following external characters: head weakly oblong (in all other species transverse, except for the conspicuous *R. glabripennis*); head and pronotum with extensively longitudinally confluent and coarse punctation;

legs of dark coloration; antennomere I often infusate. The shape of the aedeagus most resembles that of – the externally completely different – *R. meilixuensis*.

#### Distribution and natural history

The species was found in several localities in western and northern Sichuan province, China; one female was found in northern Yunnan. The type material was sifted in various biotopes (forests, grassland, alpine vegetation) at altitudes of 2750–4300 m during the period from April through July. The sex ratio is biased (13 ♂♂ : 38 ♀♀).

#### *Rugilus (Rugilus) nuicus* n. sp. (Fig. 134)

##### Type material

**Holotype** ♀: “China: Yunnan [CH07-30], Nujiang Lisu Aut. Pref., Nu Shan, 7 km NNW Coajian, 25° 43' 29" N, 99° 07' 57" E, 2420 m, second. pine forest with shrubs, litter, bark sifted, 11.VI.2007, leg. A. PÜTZ / Holotypus ♀ *Rugilus nuicus* sp. n. det. V. ASSING 2011” (cPüt).

**Paratype** ♀: same data as holotype (cAss).

##### Etymology

The specific epithet (adjective) is derived from the name of the mountain where the type locality is situated.

##### Description

Species of relatively large size; body length 6.0–6.6 mm.

Coloration: head, pronotum, and abdomen blackish; elytra brown; legs reddish; antennae dark-reddish.

Head (Fig. 134) transverse, 1.10–1.15 times as broad as long; punctuation dense, very coarse, areolate, and extensively longitudinally confluent. Eyes large, approximately as long as distance from posterior margin of eye to posterior constriction in dorsal view, or nearly so. Anterior margin of labrum with two relatively short teeth on either side of the median excision.

Pronotum (Fig. 134) 1.10–1.15 times as long as broad and approximately 0.7 times as wide as head; lateral margins convexly converging posteriad from point of maximal width, posterior angles obsolete; punctuation similar to that of head, extensively and longitudinally confluent; midline without glossy band.

Elytra (Fig. 134) approximately 0.85 times as long as pronotum and with distinctive fold extending from the humeral angles to the posterior third of the elytra; humeral angles moderately pronounced; maximal width behind middle, but at some distance from posterior margin; punctuation weakly defined and irregular; interstices without distinct microsculpture. Hind wings completely reduced. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen somewhat broader than elytra; tergites III–V anteriorly with shallow impressions, these impressions with coarse, dense, and somewhat irregular punctuation; tergite VI with very shallow and finely punctate impression; punctuation of remaining tergal surfaces very fine and dense, barely noticeable in the microsculpture; interstices with distinct microreticulation composed of small isodiametric meshes on all tergites; posterior margin of tergite VII with palisade fringe.

♂: unknown.

#### Comment

This species is readily distinguished from all its congeners based on external characters alone, particularly the conspicuous folds on the elytra, so that a description is justifiable, even though the male sexual characters are unknown. It is unclear if the elytra and hind wings are subject to a sexual dimorphism. The presence of a palisade fringe at the posterior margin of tergite VII suggests that the male may be fully winged.

#### Comparative notes

*Rugilus nuicus* is characterized particularly by the conspicuous folds on the elytra and additionally distinguished from other Chinese congeners by large body size in combination with the dense and extensively confluent punctuation of the head and pronotum.

#### Distribution and natural history

The type locality is situated in the Nu Shan in the northwest of Yunnan province, China. The specimens were sifted from leaf litter in a secondary pine forest at an altitude of approximately 2400 m in June.

#### *Rugilus (Rugilus) glabripennis* n. sp. (Figs. 135–139)

##### Type material

**Holotype** ♂: “China: N-Yunnan [C2005-07], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28° 25.30' N, 98° 48.47' E, / small creek valley, mixed forest with bamboo, leaf litter, moss, dead wood, sifted, 9.VI.2005, leg. M. SCHÜLKE [C2005-07] / Holotypus ♂ *Rugilus glabripennis* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 2 ♀♀: same data as holotype (cSch, cAss); 3 ♀♀: “China (N-Yunnan) Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 12 km SW Deqin, 2890 m, 28° 25.30' N, 98° 48.47' E, creek valley (mixed forest with bamboo (under wood, stones, in litter, soil) 9. & 13.VI.2005, D. W. WRASE [07]” (cSch); 2 ♀♀: “China: N-Yunnan [C2005-09], Diqing Tibet. Aut. Pref., Deqin Co., Meili Xue Shan, E-side, 14 km W Deqin, 2580 m / 28° 27.47' N, 98° 46.35' E, creek valley below glacier, mixed forest, leaf litter, moss, dead wood, sifted, 11.VI.2005, M. SCHÜLKE [C2005-09]” (cSch, cAss); 1 ♀: “China: N-Yunnan

[C2005-04], Diqing Tibet. Aut. Pref., Deqin Co., small cleft W Yangtze river, 33 km WNW Zhongdian, / 27° 56.75' N, 99° 24.42' E, 2220–2300 m, litter, moss, gravel, dead wood sifted near water, 4.VI.2005, M. SCHÜLKE [C2005-04]" (cSch); 1 ♂, 1 ♀: "China (N-Yunnan), Diqing Tibet. Aut. Pref., Zhongdian Co., small cleft W Yangtze Kiang, 33 km WNW Zhongdian, 2220–2300 m, 27° 56.75' N, 99° 24.42' E (creek bank, under gravel, in soil) 4.VI.2005 D. W. WRASE [04]" (cSch); 3 ♂♂, 3 ♀♀: "China: Yunnan, Lijiang, Yushuizhai ca. 2600 m, 14.IV.2003, stream moss, G. DE ROUGEMONT leg. [1 ♀ with additional label: *Rugilus (Tetragnathostilicus) sarsos* n. sp., det. 2002 [sic], G. DE ROUGEMONT]" (cRou, cAss); 2 ♂♂, 1 ♀: same data, but "2500 m" (cRou).

#### Etymology

The specific epithet (Latin, adjective) refers to the smooth, finely punctate elytra.

#### Description

Rather large species; body length 6.0–7.2 mm. Habitus as in Fig. 135.

Coloration: head, pronotum, and abdomen blackish; elytra with slight bronze hue, blackish-brown to blackish; legs yellowish, with the apices of the femora rather extensively and distinctly infuscate; antennae reddish.

Head (Fig. 136) approximately as wide as long or even weakly oblong; punctuation dense, moderately coarse, areolate, and largely longitudinally confluent; dorsal surface, including the median dorsal portion, completely matt, except for the narrow interstices. Eyes relatively small, their length at most approximately half the distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two rather long and basally fused teeth on either side of the median excision.

Pronotum (Fig. 136) approximately 1.1 times as long as broad and 0.75–0.80 times as wide as head; lateral margins convexly converging posteriad from point of maximal width, posterior angles obsolete; punctuation similar to that of head, often extensively and longitudinally confluent in median portion; midline without glossy band.

Elytra (Fig. 136) without sexual dimorphism, 1.05–1.10 times as long as, and much broader than pronotum; humeral angles pronounced; lateral margins weakly convex in dorsal view; punctuation conspicuously fine, dense, and shallow. Hind wings apparently fully developed. Metatarsomere I approximately as long as, or slightly shorter than the combined length of II and III.

Abdomen approximately as broad as elytra; tergites III–V anteriorly with rather shallow impressions, these impressions with moderately coarse and dense punctuation; tergite VI with indistinct, less coarsely punctate impression; punctuation of remaining tergal surfaces fine and dense; interstices at least on posterior tergites with shallow microreticulation; posterior margin of tergite VII with palisade fringe.

♂: sternite VII in median portion with pronounced oval impression, this impression laterally delimited by pronounced folds and in the middle with pubescence directed diagonally postero-mediad (Fig. 137); sternite VIII with large and deep posterior incision (Fig. 138); aedeagus 0.80–0.85 mm long, with ventral process of distinctive shape and with a pair of large, distinctly sclerotized internal structures (Fig. 139).

#### Comparative notes

*Rugilus glabripennis* is characterized particularly by the morphology of the aedeagus, the modifications of the male sternites VII and VIII, the glabrous appearance of the elytra, the relatively small eyes, the pale-coloured legs with distinctly infuscate apices of the femora, and the shape of the head. The shape of the ventral process of the aedeagus somewhat resembles that of – the externally completely different – *R. parvincisus*.

#### Distribution and natural history

The species was discovered in three localities in Deqin County, northern Yunnan, where the specimens were collected from litter and moss in forests and from wet moss near streams at altitudes of 2220–2890 m in April and June. The sex ratio is moderately biased (7 ♂♂ : 13 ♀♀).

#### *Rugilus (Rugilus) desectus* n. sp. (Figs. 140–146)

#### Type material

Holotype ♂: "China: Yunnan [CH07-19], Dehong Dai Aut. Pref., mountain range 31 km E Luxi, 2280 m, 24° 29' 31" N, 98° 52' 58" E, secnd. pine forest with old decid. trees, litter sifted, 3.VI.2007, M. SCHÜLKE / Holotypus ♂ *Rugilus desectus* sp. n. det. V. ASSING 2011" (cAss).

#### Etymology

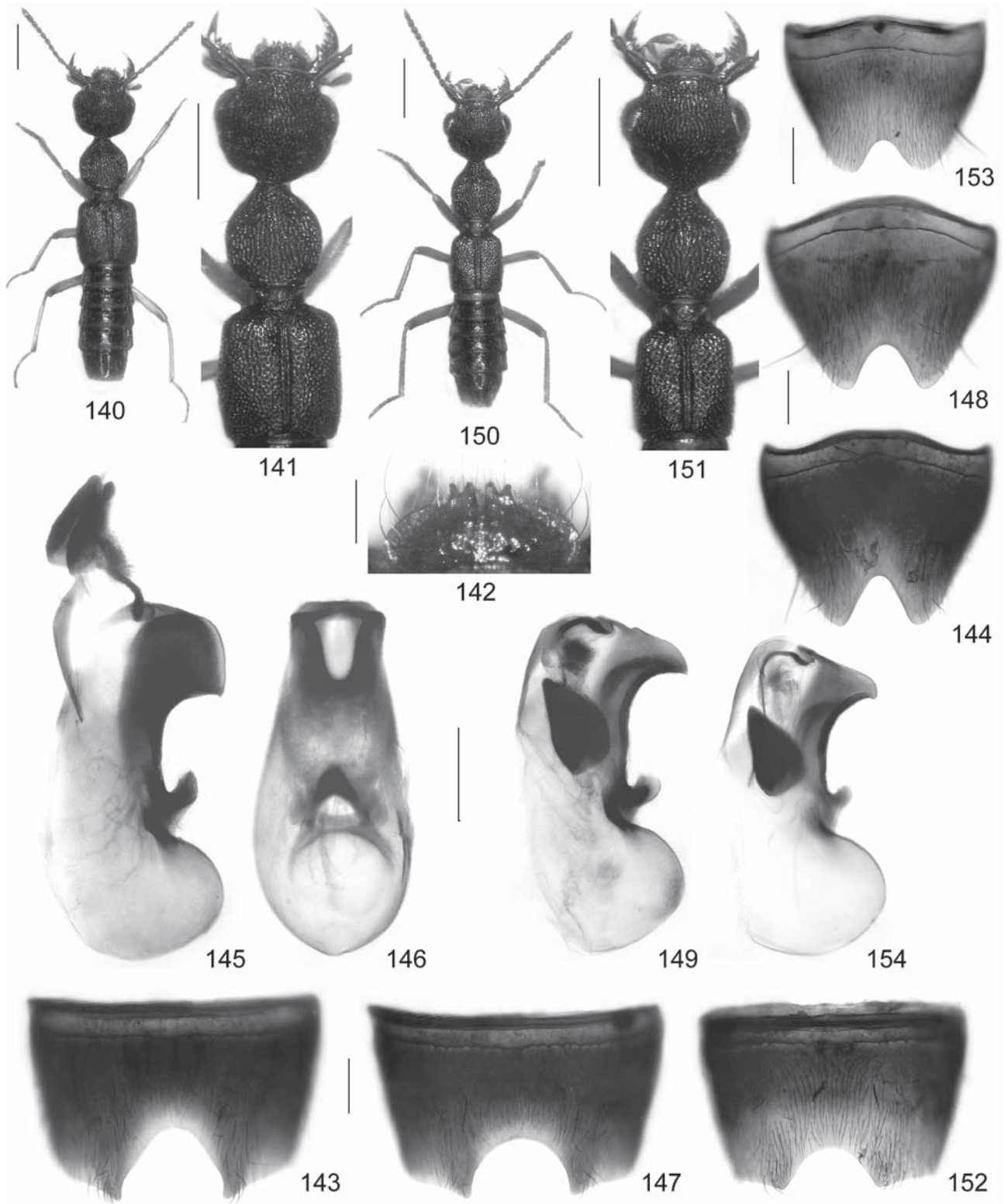
The specific epithet (Latin, adjective: cut off) refers to the conspicuous shape of the apex of the aedeagal ventral process.

#### Description

Body length 6.9 mm. Habitus as in Fig. 140.

Coloration: head, pronotum, and abdomen blackish; elytra blackish-brown with slight bronze hue; legs yellowish, with the apices of the femora weakly infuscate; antennae reddish.

Head (Fig. 141) moderately transverse, 1.1 times as wide as long; punctuation dense, coarse, areolate, and largely confluent, not sparser in median dorsal portion than elsewhere; interstices shiny. Eyes distinctly bulging, of moderate size, approximately 0.7 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short and basally fused teeth on either side of the median excision (Fig. 142).



**Figs. 140–154.** *Rugilus desectus* (140–146), *R. malaisei* (147–149), and *R. wuyicus* (150–154). – 140, 150. Habitus. 141, 151. Fore-body. 142. Labrum. 143, 147, 152. Male sternite VII. 144, 148, 153. Male sternite VIII. 145, 149, 154. Aedeagus in lateral view. 146. Aedeagus in ventral view. – Scale bars: 1.0 mm (140–141, 150–151), 0.2 mm (142–149, 152–154).

Pronotum (Fig. 141) indistinctly oblong, 1.03 times as long as wide and 0.78 times as wide as head; posterior angles weakly marked; punctation largely confluent and extensively arranged in longitudinal rugae particularly in median dorsal portion; midline without glossy band.

Elytra (Fig. 141) slightly ( $1.03\times$ ) longer and much broader than pronotum; humeral angles pronounced; punctation dense, coarse, and well-defined; interstices shiny. Hind wings probably present. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced impressions, these impressions with coarse and dense punctation; tergite VI with very shallow, more finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices without microreticulation; tergite VII with palisade fringe.

♂: sternite VII with pronounced, deep and broad posterior excision, on either side of this excision with short, densely pubescent process, anterior to the excision impressed (Fig. 143); sternite VIII with rather deep, apically rounded, almost V-shaped posterior incision (Fig. 144); aedeagus (Figs. 145, 146) 0.77 mm long, ventral process very stout, strongly bent, and apically broadly truncate in lateral view; internal sac with a pair of distinctly sclerotized structures.

♀: unknown.

#### Comparative notes

*Rugilus desectus* is characterized particularly by the conspicuous morphology of the aedeagus, its rather large size, a weakly oblong pronotum, the conspicuously coarse and longitudinally confluent punctation of the pronotum, the basally fused short teeth at the anterior margin of the labrum, and the strongly modified shape of the male sternite VII.

#### Distribution and natural history

The type locality is situated in the west of Yunnan province, China, not far from the border with Myanmar. The holotype was sifted from litter in a secondary pine forest with scattered old deciduous trees at an altitude of 2280 m in June.

*Rugilus (Rugilus) malaisei* (Scheerpeltz, 1965)  
(Figs. 147–149)

*Stilicus malaisei* Scheerpeltz, 1965: 176 f.

#### Type material examined

Holotype ♂ [dissected prior to present study]: “N. E. Burma, Kambaiti, 2000 m, 27/3.1934, MALAISE / Typus *Stilicus Malaisei* O. Scheerpeltz / Holotypus / *Stilicus Malaisei* nov. spec.

det. SCHEERPELTZ, 1941 / 33, 86 / Rijksmuseum Stockholm / 3627, E91 + / NHRS-VKBS 000000028” (SMNH). Paratype ♂ [damaged, both hind legs missing]: “♂ / N. E. Burma, Kambaiti 7000 ft., 1.5.1934, R. MALAISE / Schwedische Indien-Burma-Expedition 1934 / ex coll. SCHEERPELTZ / *Cotypus Stilicus Malaisei* O. Scheerpeltz / *Rugilus malaisei* (Scheerpeltz), det. V. ASSING 2011” (NHMW).

#### Comment

The original description is based on a male holotype and a male paratype from “N. E. Burma, Kambaiti, 2000 m” (SCHEERPELTZ 1965). The holotype and the paratype were located in the collections of the SMNH and the NHMW, respectively. The male sexual characters of the paratype are illustrated in Figs. 147–149.

*Rugilus (Rugilus) wuyicus* n. sp.  
(Figs. 150–154)

#### Type material

Holotype ♂: “China: Jiangxi prov., Wuyi Shan Nat. Res., Huangganshan, (1800–2050 m), 5.vi.2001, HLAVÁČ lgt. / *Rugilus malaisei* (Scheerp. [sic], det. 2003, G. DE ROUGEMONT / Holotypus ♂ *Rugilus wuyicus* sp. n. det. V. ASSING 2011” (cAss).

Paratypes: 2 ♂♂, 5 ♀♀: same data as holotype (cAss, cRou); 2 ♂♂: “China: Jiangxi Province, Wuyi Shan, Huangganshan, N27° 83 E117° 76 / ca 2100 m, 5.vi.2001, Mixed forest litter, Leg. J. COOTER + P. HLAVÁČ [sic]” (cRou, cAss).

#### Etymology

The specific epithet (adjective) is derived from the name of the mountain range where the type locality is situated.

#### Description

Large species; body length 6.0–7.0 mm. Habitus as in Fig. 150.

Coloration: head and pronotum blackish, with the anterior portion of the frons reddish; elytra dark-brown to blackish-brown with slight bronze hue; legs and antennae reddish.

Head (Fig. 151) distinctly transverse, 1.10–1.15 times as wide as long; punctation dense, very coarse, areolate, and largely longitudinally confluent, not sparser in median dorsal portion than elsewhere; interstices shiny. Eyes large and distinctly bulging, 0.7–0.9 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short and basally fused teeth on either side of the median excision, the external tooth slightly longer than the internal one.

Pronotum (Fig. 151) weakly oblong, 1.05–1.10 times as long as wide and 0.70–0.75 times as wide as head; lateral margins convexly converging behind point of maxi-

mal width; punctation largely confluent and extensively arranged in longitudinal rugae particularly in median dorsal portion; midline without glossy band.

Elytra (Fig. 151) short, 0.75–0.85 times as long as pronotum, on average slightly shorter in ♀ than in ♂; humeral angles weakly pronounced; punctation dense, coarse, and well-defined; interstices shiny. Hind wings probably absent. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly broader than elytra; tergites III–V anteriorly with moderately pronounced impressions, these impressions with coarse and dense punctation; tergite VI with very shallow, finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices without microreticulation; tergite VII without palisade fringe.

♂: sternite VII with pronounced, deep and broad posterior excision of almost semi-circular shape, on either side of this excision angled, but without short process, anterior to the excision weakly impressed (Fig. 152); sternite VIII with relatively small posterior incision (Fig. 153); aedeagus (Fig. 154) 0.63 mm long, ventral process very stout, strongly bent, and apically weakly hooked in lateral view; internal sac with a pair of large and distinctly sclerotized structures.

#### Comparative notes

*Rugilus wuyicus* is evidently closely allied to the similar *R. malaisei*, as can be inferred from the similarly derived shape and chaetotaxy of the male sternite VII, the morphology of the aedeagus, and the similar external appearance. It is distinguished from *R. malaisei* by the different shape of the head, the much larger and more bulging eyes, the shape of the pronotum (*R. malaisei*: approximately as long as broad), the distinctly shorter and narrower elytra (*R. malaisei*: elytra as long as, and much broader than pronotum), the absence of a palisade fringe at the posterior margin of the abdominal tergite VII, the posteriorly less deeply excised male sternite VII, and the smaller aedeagus with an apically less distinctly curved ventral process in lateral view. Based on external (large size; coarsely confluent punctation of head and pronotum; defined coarse punctation of the elytra) and particularly the male sexual characters (shape of sternite VII; morphology of the aedeagus), *R. wuyicus* is also closely allied to *R. desectus*, from which it is readily distinguished by the much shorter elytra, the absence of a palisade fringe at the posterior margin of the abdominal tergite VII, the absence of distinct processes on either side of the posterior concavity of the male sternite VII, the less pronounced posterior excision of the male sternite VIII, as well as by the different shape of the aedeagus.

#### Distribution and natural history

The type locality is situated in Wuyishan, in the north-east of Jiangxi province, southwestern China. The type material was collected by sifting litter in mixed forests at an altitude of 1800–2050 m in June.

#### *Rugilus (Rugilus) sp. 1*

##### Material examined

**China:** 5 ♀♀: “China: W-Hubei (Daba Shan), pass E of Mt. Da Shennongjia, 12 km NW Muyuping, 31° 30' N, 110° 21' E, 1950 m, 16.VII.2001, leg. M. SCHÜLKE [C01-13] / dry creek valley, mixed deciduous forest, dead wood, mushrooms (sifted) [C01-13]” (cSch, cAss); 2 ♀♀: “China: W-Hubei (Daba Shan), pass E of Mt. Da Shennongjia, 12 km NW Muyuping, 31° 30' N, 110° 21' E, 19.VII.2001, leg. M. SCHÜLKE [C01-13C] / creek valley 1950–2050 m, mixed deciduous forest, moss, dead wood, mushrooms (sifted) [C01-13C]” (cSch, cAss); 4 ♀♀ [1 teneral]: “China: W-Hubei (Daba Shan), pass E of Mt. Da Shennongjia, 12 km NW Muyuping, 31° 30' N, 110° 21' E, 22.VII.2001, leg. M. SCHÜLKE [C01-13E] / creek valley, mixed deciduous forest, dead wood, mushrooms, moss, 1950–2050 m (sifted) [C01-13E]” (cSch); 8 ♀♀: “China (W-Hubei) Daba Shan, pass E of Mt. Da Shennongjia, 12 km NW Muyuping, 31° 30' N, 110° 21' E, 1950 m (dry creek vall., mix. decid. forest) 16.–22.VII.2001 WRASE [13]” (cSch, cAss).

##### Comment

The material was collected close to the localities where *R. dabaicus* was found. Based on the much shallower and finer punctation of the elytra, the denser and finer punctation of the abdomen, and particularly the presence of microsculpture on the abdomen, there is little doubt that the above specimens represent a different species.

#### *Rugilus (Rugilus) sp. 2*

##### Material examined

**China:** 7 ♀♀: “China: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Luding Co., W Erlangshan-Pass, 2600 m, 7 km SSE Luding, 29° 51' N, 102° 15' E, Laubstreu, Pilze, 29.VI., leg. M. SCHÜLKE” (cSch); 8 ♀♀: same data, but “Laub + Nadelstreu, Pilze ... 22.VI.” (cSch); 2 ♀♀: same data, but “Kiefer, Hasel, Blüten ... 21.VI.” (cSch); 5 ♀♀: same data, but “20.–29.VI.1999 D. W. WRASE” (cSch); 3 ♀♀: “China: W-Sichuan, Ya'an Prefecture, Tianquan Co., W Erlang Shan Pass, 2780 m, 29.VI.1999, 29.51.27 N, 102.15.47 E, leg. A. PÜTZ, sifted” (cPüt).

##### Comment

Based on external characters, this species is closely allied to *R. dabaicus* and *R. emeiensis*.

*Rugilus (Rugilus) sp. 3*

## Material examined

**China:** 1 ♀: “China: W-Sichuan 1999, Ya’an Prefecture, Fulin Co., Daxiang Ling, Rd. zw. Hanyuanjie u. Siping, 51 km NNE Shimian, 2300 m, 29° 39’ N, 102° 37’ E, Ufer, Gesiebe, 10.VII., leg. M. SCHÜLKE” (cSch); 1 ♀: “China W. Sichuan (Ya’an Pref., Fulin Co.) Daxiang Ling, road Hanyuanjie-Siping, 51 km NNE Shimian, 2300 m, 29° 39’ N, 102° 37’ E (river bank) 10.VII.1999 D. W. WRASE” (cSch).

## Comment

Based on external characters, this species is closely allied to *R. dabaicus* and *R. emeiensis*.

*Rugilus (Rugilus) sp. 4*

## Material examined

**China:** 1 ♀: “China: W-Sichuan 1999, Aba Tibet. Aut. Pref., Weizhou Co., Qionglai Shan, Wolong Tal, 61 km WSW Dujiangyan, 3500 m, 30° 54’ N, 102° 59’ E, Nadelstreu, 15.VII., leg. M. SCHÜLKE” (cSch); 1 ♀: “China W. Sichuan (Aba Tibet. Aut. Pref., Weizhou Co.) Qionglai Shan, Wolong valley, 69 km WSW Dujiangyan, 3500 m (mix. forest) 15.VII.1999 D. W. WRASE” (cSch).

## Comment

Based on external characters, this species is closely allied to *R. dabaicus* and *R. emeiensis*.

*Rugilus (Rugilus) sp. 5*

## Material examined

**China:** 2 ♀♀: “China: W-Sichuan, Aba Tibetan Aut. Pref., Weizhou Co., Qionglai Shan, Wolong valley, 69 km WSW / Guanxian, 3500 m, 30.53,57 N, 102.58,63 E, 15.VII.1999, leg. A. PÜTZ, mix. forest sifting” (cPüt, cAss).

## Comment

In external appearance (size, eye size, wing length, etc.), this species is similar to *R. emeiensis*.

*Rugilus (Rugilus) sp. 6*

## Material examined

**China:** 2 ♀♀: “China: W-Sichuan 1999, Ganzi Tibet. Aut. Pref., Kangding Co., Daxue Shan, 10 km S Kangding, 29.59 N, 101.55 E, 3150 m, Flußtal, Gesiebe, Felsniesen [sic], 26.VI., leg. M. SCHÜLKE” (cSch); 1 ♀: “China: W-Sichuan, Ganzi Tibetan Auton. Pref., Daxue Shan, 10 km S Kangding, 3150 m, 29.59 N, 101.55 E, 28.VI.1999, leg. A. PÜTZ” (cPüt); 1 ♀: “China: W-Sichuan, Ganzi Tibetan Auton. Pref., Daxue Shan, Mugecuo, 15 km NW Kangding, below the lowest lake, 30.09.18 N, 101.51.16 E, 3300 m, 27.VI.1999, leg. A. PÜTZ” (cPüt).

## Comment

This species is externally similar to *R. gansuensis*.

*Rugilus (Rugilus) sp. 7*

## Material examined

**China:** 4 ♀♀: “China W. Sichuan (Ganzi Tibet. Aut. Pref., Luding Co.) Erlang Shan Pass, Road 318, ca. 3000 m, 8 km SE Luding, 190 km SW Chengdu, 21.–29.VI.1999 D. W. WRASE” (cSch); 3 ♀♀: “China: W. Sichuan, Ya’an Prefecture, Tianquan Co., W Erlang Shan Pass / 2900 m, 21.VI.1999, 29.51.13 N, 102.17.28 E, leg. A. PÜTZ, sifted” (cPüt).

## Comment

This species is externally similar to *R. gansuensis*.

*Rugilus (Rugilus) sp. 8*

## Material examined

**China:** 2 ♀♀: “China: W-Sichuan 1999, Ya’an Prefecture, Tianquan Co., Jiabin Shan, Tal oberh. Labahe N. R. St., 57 km W Ya’an, 30° 06’ N, 102° 25’ E, Streu, Rinde, Pilze, 1800 m, 12.VII., leg. M. SCHÜLKE” (cSch).

## Comment

This species somewhat resembles *R. confluens*, but is distinguished by slightly larger size, a distinctly transverse and larger head, coarser and almost completely longitudinally confluent punctation of the head and pronotum, elytra with coarser punctation, more pronounced humeral angles, and subparallel lateral margins, as well as by the yellowish to reddish-yellow legs.

*Rugilus (Rugilus) sp. 9*

## Material examined

**China:** 1 ♀: “China: Sichuan, Xiangcheng, 2700 m, 29° 00’ N, 99° 46’ E, 29.VI.1996 C46 / collected by A. SMETANA, J. FARKAČ and P. KABÁTEK” (cSme).

## Comment

This species somewhat resembles *R. confluens*, but is distinguished by larger size, much longer and broader elytra, and the coloration of the legs (yellowish brown, with infuscate femoral apices and partly infuscate tibiae).

*Rugilus (Rugilus) sp. 10*

## Material examined

**China:** 2 ♀♀: “China: N-Sichuan, Micang Shan, Liping For. Park, 32.47° N 106.40° E, 1500–1700 m, 18.V.–14.VI.2007, leg. J. TURNA” (NHMW).



## Comment

The above females are similar to *R. gansuensis*, but of somewhat larger body size.

*Rugilus (Eurystilicus) longipennis* (Sharp, 1889)  
(Figs. 155–160)

*Stilicus longipennis* Sharp, 1889: 321.

## Type material examined

Syntypes: 1 ♀: “*Stilicus longipennis*. Type DS. Juns-ai. Japan. LEWIS. [written on mounting label next to the specimen] / Type / Japan. LEWIS. / SHARP Coll 1905-313. / Syntype / *Rugilus longipennis* (Sharp), det. V. ASSING 2011” (BMNH); 1 ♀: “*Stilicus longipennis*. D. S. Nikko. 6./80 [written on mounting label next to the specimen] / Type / Japan. LEWIS. / SHARP Coll 1905-313. / Syntype / *Rugilus longipennis* (Sharp), det. V. ASSING 2011” (BMNH).

## Additional material examined

**Japan:** 1 ex., Honshu, Shiga-ken, Mikunidakeyama, E-slope, 700 m, 12.VII.2002, leg. BOLM (SMNS); 1 ex., Honshu, Gumma Pref., Nikko Distr., Lake Maranuma, 1430–1500 m, 11.–12. VIII.1980, leg. HAMMOND (BMNH).

## Comment

The original description is based on five specimens from “Nikko, Hakodate, Junsai” (SHARP 1889). Two females were available from the SHARP collection at the BMNH.

## Redescription

Body length 4.5–5.2 mm. Habitus as in Fig. 155.

Coloration: head, pronotum, and abdomen blackish; elytra reddish to dark-brown, with the anterior margin and the scutellar region infuscate; legs reddish; antennae dark-reddish.

Head (Fig. 156) as long as wide or very indistinctly transverse, 1.00–1.05 times as wide as long; punctation dense, moderately fine, areolate, not distinctly confluent, and uniform; dorsal surface matt. Eyes moderately large, slightly more than half as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with one short tooth on either side of the median excision. Both mandibles with three molar teeth.

Pronotum (Fig. 156) approximately 1.15 times as long as wide and 0.8 times as wide as head; lateral margins convexly converging behind point of maximal width; punctation similar to that of head; midline finely sulcate, very narrowly and indistinctly impunctate (Fig. 157).

Elytra (Fig. 156) approximately 1.05 times as long, and much broader than pronotum; punctation relatively fine and moderately dense; additional larger non-setiferous punctures absent. Hind wings fully developed. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced, coarsely sculptured and punctate impressions; tergite VI with shallow, finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices with distinct microreticulation; tergite VII with palisade fringe.

♂: sternite VII without distinct modifications, in the middle with a pair of long black setae; sternite VIII with very small and shallow posterior incision (Fig. 158); aedeagus approximately 0.7 mm long, ventral process rather long and apically distinctly bifid in ventral view (Figs. 159, 160).

## Comparative notes

*Rugilus longipennis* is readily distinguished from other species known from Japan and from all Oriental consubgenera by the sulcate midline of the pronotum, the shape of the male sternite VIII, and by the morphology of the aedeagus.

## Distribution and natural history

The species is currently known from several localities in Honshu and one in Hokkaido, suggesting that it is widespread at least in Japan. WATANABE & SHIBATA (1965) recorded it from the Rishiri Islands. The additional specimen was collected at an altitude of 700 m in July.

*Rugilus (Eurystilicus) velutinus* (Fauvel, 1895)  
(Figs. 161–165)

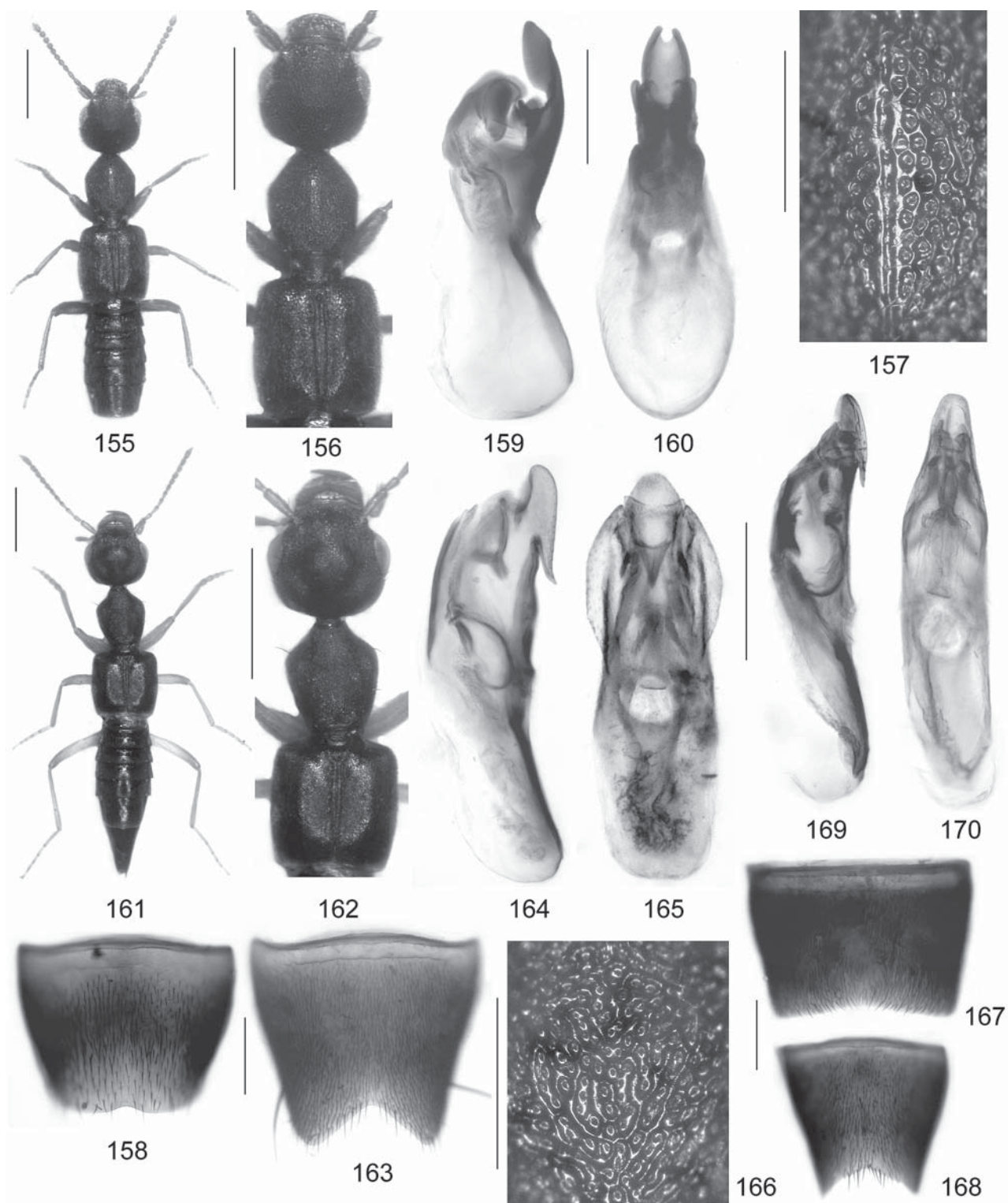
*Stilicus velutinus* Fauvel, 1895: 226.

## Type material examined

Lectotype ♂, present designation: “Carin, Asciiui Cheba, 1200–1300 m. L. FEA. I-88. / *velutinus* FvI. / Ex-Typis / Coll. R. I. Sc. N. B. / Lectotype ♂ *Stilicus velutinus* Fauvel, desig. V. ASSING 2011 / *Rugilus velutinus* (Fauvel), det. V. ASSING 2011” (IRSNB). Paralectotypes: 1 ♀, 1 sex?: “Carin, Asciiui Cheba, 1400–1500 m. L. FEA. III–IV.88. / Ex-Typis / Coll. R. I. Sc. N. B.” (IRSNB); 1 ♀: “Darjeeling, Sikkim / Kouy-tchéou, Rég. de Pinta, Chine mér. / Ex-Typis / Coll. R. I. Sc. N. B.” (IRSNB); 1 ♀: “Carin, Asciiui Cheba, 1400–1500 m. L. FEA. III–IV.88. / Ex-Typis / Coll. R. I. Sc. N. B. / *Rugilus* sp., det. V. ASSING 2011” (IRSNB); 1 ♂: “Charin Cheba, FEA, 1888. / Syntypus / *Stilicus velutinus* FvI. n. sp. / cnll. [sic] KRAATZ / DEI Müncheberg Col –01255” (SDEI).

## Additional material examined

**Nepal:** 4 exs., Kathmandu, Mt. Phulchoki, 1700 m, 21.VI.2000, leg. SCHAWALLER (SMNS, cAss); 1 ex., Dolakha District, lower Khare Khola, 1400 m, 29.V.2000, leg. SCHAWALLER (SMNS); 1 ex., Rolwaling Himal, Tama Koshi valley, Chetchet, 16.V.2000, leg. KLEEGER (cKle); 1 ex., Tama Koshi valley, Jagat → Tshet Tshet, 1000–1300 m, 15.V.2000, leg. SCHMIDT (cKle); 4 exs., Tama Koshi valley, below Simigaon, 1300 m, 3.VI.2000,



**Figs. 155–170.** *Rugilus longipennis* (155–160), *R. velutinus* (161–165), and *R. pruinus* (166–170). – **155, 161.** Habitus. **156, 162.** Forebody. **157, 166.** Median dorsal portion of pronotum. **158, 163, 168.** Male sternite VIII. **159–160, 164–165, 169–170.** Aedeagus in lateral and in ventral view. **167.** Male sternite VII. – Scale bars: 1.0 mm (155–156, 161–162), 0.2 mm (157–160, 163–170).

leg. KLEEBERG (cKle, cAss); 1 ex., Shivalaya env., bank of Kimti Khola, 2.V.1993, leg. KLEEBERG (cKle); 2 exs., Khandbari district, Arun valley at Num main bridge, 1050 m, 20.IV.1984, leg. SMETANA & LÖBL (cSme, cAss); 1 ex., Gorkha District, Buri Gandaki, Nyak to lower Chling Khola, 2450–2870 m, *Pinus excelsa*, 2.VIII.1983, leg. MARTENS & SCHAWALLER (SMNS).

**India:** 1 ♀, W-Bengal, Rimbik-Shirikhola, 10.–14.VI.2003, leg. KUČERA (cFel); 1 ex., Uttaranchal, E Pithoragarh, 29° 34' N, 80° 19' E, river, 27.V.2005, leg. WEIGEL (NME); 1 ex., Uttaranchal, Haldwani District, Kaldhunga, 28.III.1923, leg. CHAMPION (BMNH); 1 ex., Uttaranchal, Chakrata District, Manjgaon, ca. 2000 m, 5.V.1922, leg. CAMERON (SDEI); 1 ex., Chakrata District, Khedar Khud, 2280 m, 7.V.1922, leg. CAMERON (NHMW); 1 ex., Uttaranchal, Mussoorie District, Arni Gad, 28.V.1921, leg. CAMERON (SDEI); 1 ex., Arni Gad, 12.VI.1921, leg. CAMERON (NHMW); 9 exs., Haldwani District, Kumaon, leg. CHAMPION (BMNH, cAss).

**China:** **Guangxi:** 2 exs., Bama, cow dung, I.1988 (BMNH, cAss). – **Shaanxi:** 1 ex., Qinling Shan, river valley 30 km SSW Xi'an, autoroute km 33, 34° 00' N, 108° 49' E, 600 m, sifted, 31.VIII.1995, leg. SCHÜLKE (cSch). – **Shaanxi/Sichuan:** 21 exs., Daba Shan, 20 km SSE Zhenping, 31° 44' N, 109° 35' E, 1700–1800 m, sifted, 9.VII.2001, leg. SCHÜLKE & SMETANA (cSch, cSme, cAss). – **Sichuan:** 1 ex., Qionglai Shan, Baoxing env., 1600 m, 19.–11.VII.2003, leg. MURZIN (cSch); 7 exs., Wenjian Distr., Guanxian Co., 56 km NW Chengdu, Qingcheng Shan, 30° 54' N, 103° 33' E, 975 m, rotting debris, 18.VI.1999, leg. PÜTZ, SCHÜLKE (cPüt, cSch, cAss); 1 ex., same data, but field margin, sifted from straw stacks, 13.VII.1999, leg. SCHÜLKE (cSch); 32 exs. [partly teneral], Guanxian Co., Qingcheng Shan, 30° 54' N, 103° 32' E, 650–700 m, 3.–4.VI.1997, leg. PÜTZ, SCHÜLKE (cPüt, cSch, cAss); 2 exs., Ganzi Tibetan Aut. Pref., Luding Co., 7 km S Luding, tributary of Dadu He, 29° 53' N, 102° 13' E, 1250 m, 23.VI.1999, leg. PÜTZ (cPüt); 1 ex., Ya'an Pref., Shimian Co., Xiaoxiang Ling, side valley above Nanya Cun near Caluo, 11 km S Shimian, 1250 m, 7.VII.1999, leg. PÜTZ (cAss). – **Hubei:** 2 exs., Dashennongjia Nat. Res., Muyu, E-slope, 2000 m, 12.–15.VI.1997, leg. BOLM (NHMB, cAss). – **Fujian:** 1 ex., Wuyi Shan Nat. Res., Sangan env., 900 m, flight interception trap, 30.V.–12.VI.2001, leg. HLAVÁČ & COOTER (cAss); 1 ex., Ziyungdongshan, 25° 46' N, 117° 20' E, 900–1100 m, 13.–14.VII.2007, leg. TURNA (NHMW); 6 exs., Xinqiao, 27° 02' N, 117° 01' E, 10.V.2005, leg. TURNA (NHMW). – **Locality not identified:** 5 exs., “Ginyün b. Bébé, C-China”, “Tempelberg”, 900 m, leg. REITTER (NHMW).

**Taiwan:** 16 exs., Taitung Hsien, Hsinkingshan above Chengkung, 800 m, 26.IV.1995, leg. SMETANA [T167] (cSme, cAss); 3 exs., Taitung Hsien, Hsinkingshan above Chengkung, 800 m, 25.IV.1995, leg. SMETANA [T164] (cSme, cAss); 1 ex., Taitung Hsien, Hsinkingshan above Chengkung, 800 m, 18.IV.1998, leg. SMETANA [T183] (cSme); 2 exs., Nantou Hsien, Highway 14, Fengnan, 700 m, 22.IV.1990, leg. SMETANA [T17] (cSme, cAss); 1 ex., Koshun, Kankau, VII.1909, leg. SAUTER (SDEI); 1 ex., Taihorin, 7.VI.1911, leg. SAUTER (SDEI).

**Myanmar:** 1 ex., N Shan, S Namshan, 1500–1900 m, 18.–28.II.1996, leg. KASANTSEV (MHNG).

**Laos:** 2 exs., Oudomxai, 17 km ENE Oudom Xai, 20° 45' N, 102° 09' E, ca. 1100 m, 1.–9.V.2002, leg. KUBÁŇ (NHMB, cAss).

**Thailand:** 1 ex., Mae Hong Son prov., Soppong, 19° 27' N, 98° 20' E, 1500 m, 7.–12.V.1996, leg. BECVAR (NHMW).

**Vietnam:** 1 ex., Sapa (Lao Cai), 22° 20' N, 103° 50' E, 25.V.–10.VI.1991, leg. JENDEK (NHMW).

## Comment

The original description is based on an unspecified number of syntypes from “Birmanie, Carin Asciiu Cheba, 1200–1300 m”, from the same locality, but “1400–1500 m”, collected by “L. Fea” and from “Sikkim, Darjeeling” collected by “Christie” (FAUVEL 1895). Five syntypes were located in the FAUVEL collection at the IRSNB. A male from “Carin, Asciiu Cheba” is designated as the lectotype; it is conspecific with the interpretation of previous authors. One of the female syntypes from “Carin, Asciiu Cheba” belongs to a different species of unknown identity.

## Redescription

Body length 4.5–5.7 mm. Habitus as in Fig. 161.

Coloration: head, pronotum, and abdomen blackish; elytra blackish-brown to blackish with the posterior margin narrowly bright-yellowish and the humeral angles often indistinctly dark-reddish; legs yellowish, with the femoral apices often indistinctly infusate; antennae yellowish to reddish.

Head (Fig. 162) approximately as wide as long, behind eyes convexly rounded towards posterior constriction, posterior angles obsolete; vertex somewhat elevated; punctation dense, rather fine, and partly confluent; dorsal surface matt. Eyes large, almost (0.8–0.9 times) as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two extremely short and apically rounded teeth in the middle, without distinct median incision.

Pronotum (Fig. 162) distinctly oblong and slender, approximately 1.15 times as long as wide and 0.75 times as wide as head, strongly convex in cross-section; punctation slightly coarser than that of head, partly confluent.

Elytra (Fig. 162) approximately as long as, and much broader than pronotum; suture depressed, particularly so in anterior portion, where the disc is smoothly elevated on either side of suture; punctation fine and dense, without interspersed larger non-setiferous punctures; interstices with or without very shallow microsculpture. Hind wings fully developed. Metatarsomere I long, almost as long as the combined length of II–IV.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with moderately pronounced impressions with coarser, but not very dense punctation; tergite VI with shallow, finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices with shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, posteriorly with row of longer dark submarginal setae, in the middle with a pair of very long black setae; sternite VIII with rather deep, broad, and almost V-shaped posterior excision, near the apex of this excision with long black setae (Fig. 163); aedeagus approximately 0.6 mm

long; ventral process subapically hooked in lateral view (Figs. 164, 165).

#### Comparative notes

This species is readily distinguished from its consubgenera based on external characters alone, particularly the coloration, the median elevation of the head, and the punctuation of the forebody. The aedeagus is similar only to that of *R. pruinosus*, its presumable adelphotaxon.

#### Distribution and natural history

*Rugilus velutinus* is widespread in the south of the East Palaearctic and the Oriental region, from northern India and Nepal in the northwest to Thailand, Laos, Vietnam, and Taiwan in the southeast. For additional records see BERNHAUER (1922a). The examined material with labels specifying details was collected on river banks, in cow dung, rotting debris, and from straw stacks at altitudes of 600 to at least 2450 m during the period from January through August. Teneral adults were taken in June.

#### *Rugilus (Eurystilicus) pruinosus* (Cameron, 1925) (Figs. 166–170)

*Stilicus pruinosus* Cameron, 1925: 182.

#### Type material examined

Syntypes: 2 ♀♀: “Tjibodas, 1400 M, 23.V.1922, DAMM. / Syntypus / *Stilicus pruinosus* Cam / CAMERON det. / DEI Münchenberg Col-01282” (SDEI).

#### Additional material examined

**Indonesia:** 1 ♂, W-Java, 50 km E Bogor, Cibodas, 1400 m, 3.–6.XI.1989, leg. AGOSTI, LÖBL & BURCKHARDT (MHNG); 1 ex., W-Java, Gede-Pangrango National Park, near headquarters, 1550 m, 3.VIII.1994, leg. SCHUH (NHMW); 1 ex., same data, but forest litter, 23.VIII.1994 (NHMW); 1 ex., W-Java, 10 km S Ciwiday, “Ranca Upas”, ca. 1300 m, 9.VIII.1994, leg. SCHUH (NHMW); 1 ex., W-Java, Puncak pass SE Bogor, Telaga Warna, 1400 m, 1.VIII.1994, leg. SCHUH (NHMW); 1 ex., W-Sumatra, 70 km SE Padang, “Gg. Talang”, 1500 m, 1991 [date not specified], leg. SCHILLHAMMER (cAss); 1 ex., Sumatra, “SI-Rambé”, XII.1890–III.1891, leg. MODIGLIANI (NHMW).

#### Comment

The original description is based on “7 examples” from “Tjibodas [= Cibodas; 6° 44' S, 107° 03' E] 1400 m. 23.V.1922 (Dr. DAMMERMAN)” (CAMERON 1925). Two female syntypes were found in the collections of the SDEI; surprisingly, no type material was located in the CAMERON collection at the BMNH (BOOTH, e-mail 25 March 2011).

#### Redescription

Body length 4.3–4.9 mm. Habitus similar to that of *R. velutinus*.

Coloration: body uniformly blackish; legs yellowish, with the apices of the meso- and metafemora infuscate; antennae reddish-yellow.

Head approximately as wide as long, behind eyes convexly rounded towards posterior constriction, posterior angles obsolete; vertex somewhat elevated; punctuation dense, moderately coarse, and partly confluent; dorsal surface matt. Eyes large, almost as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two short teeth in the middle, without distinct median incision.

Pronotum distinctly oblong and slender, approximately 1.15 times as long as wide and 0.75 times as wide as head, strongly convex in cross-section; punctuation slightly coarser than that of head, partly confluent (Fig. 166).

Elytra approximately 0.9 times as long as, and much broader than pronotum; suture depressed, particularly so in anterior portion, where the disc is smoothly elevated on either side of suture; punctuation fine and dense, without interspersed larger non-setiferous punctures; interstices with shallow microsculpture. Hind wings fully developed. Metatarsomere I long, almost as long as the combined length of II–IV.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced impressions with coarser punctuation; tergite VI with shallow, finely punctate impression; punctuation of remaining tergal surfaces very fine and dense; interstices with shallow microreticulation; tergite VII with palisade fringe.

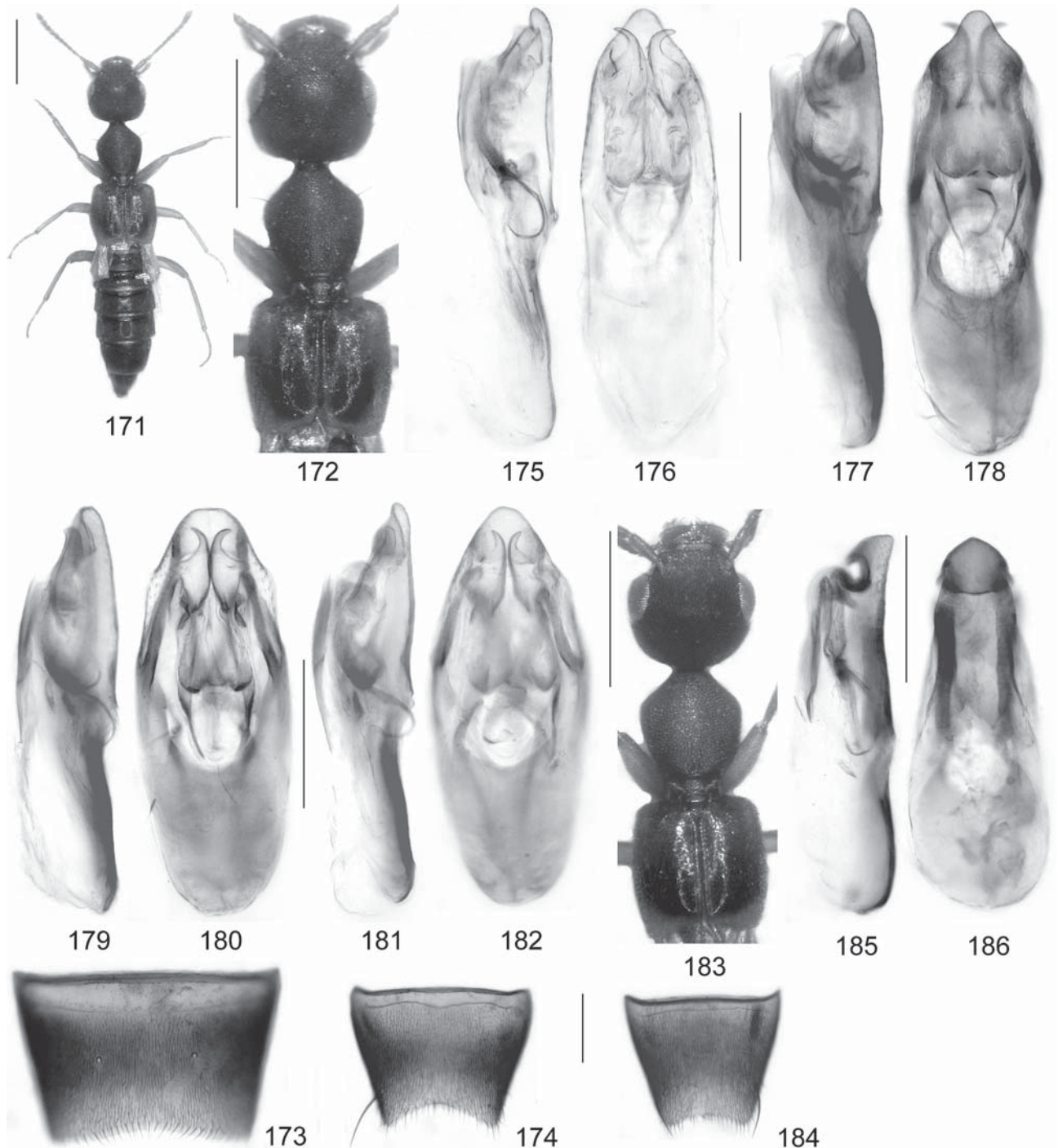
♂: sternite VII with broadly concave posterior margin, posteriorly with row of longer dark submarginal setae, in the middle with a pair of very long black setae (Fig. 167); sternite VIII with rather deep, broad, and almost angular posterior excision, near the apex of this excision with conspicuous long black setae (Fig. 168); aedeagus 0.63 mm long; ventral process subapically hooked in lateral view (Figs. 169, 170).

#### Comparative notes

Based on the similar external morphology (elevated vertex; dense and finely granulose punctuation of the elytra; distinctly oblong pronotum; long and slender legs) and particularly the similarly derived morphology of the aedeagus, *R. pruinosus* is closely related to, and most likely the adelphotaxon of *R. velutinus*, from which it is distinguished by the uniformly dark elytra, slightly smaller size, and by the more slender aedeagus.

#### Distribution and natural history

The species has become known only from Java and Sumatra, Indonesia (see also CAMERON 1930). The examined specimens were collected at altitudes of 1300–1550 m in May, August, and November. One specimen was sifted from forest litter.



**Figs. 171–186.** *Rugilus ocularis* (171–182; 171–172: paralectotype; 175–176: lectotype) and *R. uncatus* (183–186). – 171. Habitus. 172, 183. Forebody. 173. Male sternite VII. 174, 184. Male sternite VIII. 175–182, 185–186. Aedeagus in lateral and in ventral view. – Scale bars: 1.0 mm (171–172, 183), 0.2 mm (173–182, 184–186).

*Rugilus (Eurystilicus) ocularis* (Fauvel, 1895)  
(Figs. 171–182, 204–209)

*Stilicus ocularis* Fauvel, 1895: 226 f.  
*Stilicus kolbei* Bernhauer, 1915: 183; **n. syn.**  
*Rugilus triangulus* Last, 1984: 115 f.; **n. syn.**

Type material examined

*S. ocularis*: Lectotype ♂ [slightly teneral], present designation: “N. O. Sumatra, Tebing tinggi, Dr. SCHULTHEISS / *Stilicus ocularis* Fauv. / coll. KRAATZ / DEI Müncheberg Col –01270 / Lectotypus ♂ *Stilicus ocularis* Fauvel, desig. V. ASSING 2011 /

*Rugilus ocellaris* (Fauvel), det. V. ASSING 2011" (SDEI). Paralecotypes: 1 ♀: "N. O. Sumatra, Tebing tinggi, Dr. SCHULTHEISS / Ex-Typis / Coll. R. I. Sc. N. B." (IRSNB); 2 ♀♀ [one with additional label "Tajakumbo, Sumatra"]: "Sumatra, Ajer Mantcior, Agosto 1878, O. BECCARI / Ex-Typis / Coll. R. I. Sc. N. B." (IRSNB); 1 ♀: "Célèbes / Ex-Typis / Coll. R. I. Sc. N. B." (IRSNB).

*S. kolbei*: Syntype ♀: "Neu-Britannien, Raluin, F. DAHL S. / 1215 / *Kolbei* Brh. Cotypus. / Chicago NHMus M. BERNHAUER Collection / *Rugilus ocellaris* (Fauvel), det. V. ASSING 2011" (FMNH).

*R. triangulus*: Holotype ♂: "Okapa, N. Guinea, .VII.65, R. HORNABROOK / *Rugilus triangulus* sp. n. H. R. LAST det., Holotype / Brit. Mus. 1985-4-01 / Holotype / *Rugilus ocellaris* (Fauvel), det. V. ASSING 2011" (FMNH).

#### Additional material examined

**India:** 1 ex. [teneral], Kerala, Cardamom Hills, 10 km SW Kumily, Vallakadavu, 9° 31' N, 77° 07' E, 1000 m, 24.XII.1993, leg. BOUKAL & KEJVAL (cAss); 2 exs. [1 teneral], Kerala, 35 km NNE Trivandrum, Ponmudi, 8° 46' N, 77° 07' E, 600 m, 2.I.1999, leg. BOUKAL (NHMW).

**Indonesia:** 1 ♂, 1 ♀, Maluku islands, Yamdena Sangliat Krawain, 14.IX.1991, leg. AGOSTI (MHNG, cAss); 1 ♂, 2 ♀♀, Célebes, leg. WALLACE (NHMW); 1 ♂, 2 ♀♀, Ceram, Manusela env., 700–900 m, 16.–18.II.1989, leg. SCHILLHAMMER (NHMW, cAss).

**Malaysia:** 1 ♂, 2 ♀♀, Pahang, Cameron Highlands, Brinchung, rotting cabbages, 19.–23.III.2008, leg. HAMMOND (BMNH, cAss); 1 ♂, 1 ♀, Pahang, 40 km W Rompin, Selendang, 29.IV.–6.V.1993, leg. JENIS (NHMW, cAss); 1 ♂, Pahang, Johor province, Endau Rompin National Park, Salendang, 100 m, 28.II.–12.III.1995, leg. STRBA & HERGOVITS (NHMW); 1 ♀, Johor province, Kota Tinggi–Lombong, 9.V.1993, leg. STRBA (NHMW); 1 ♀, Sabah, Gunung Emas, Crocker Mt., 15.–27.IV.1993, leg. JENIS (NHMW); 2 exs., "Malay Ins." (SDEI, cAss).

**Philippines:** 1 ♂, 1 ♀, Luzon, "Subuagn", leg. BÖTTCHER & STAUDINGER (NHMW, SDEI); 1 ♂, Luzon, Los Banos (cAss); 2 ♀♀, Mindanao, Momungan, leg. BÖTTCHER & STAUDINGER (NHMW); 2 ♂♂, Siargao, Dapa, leg. BÖTTCHER & STAUDINGER (NHMW); 1 ♂, W-Negros, Mambucal, Seven Falls, ca. 900 m, 16.III.1994, leg. SCHÖDL (cAss).

#### Comment

The original description of *Stiliculus ocellaris* is based on an unspecified number of syntypes from "Nord-ouest de Sumatra: Tebing-tinggi (Dr SCHULTHEISS); Ajer Mancior, août (BECCARI)" and from "Célèbes (WALLACE)" (FAUVEL 1895). Four syntypes, all of them females, were located in the FAUVEL collection at the IRSNB. One syntype, a male, was discovered in the KRAATZ collection at the SDEI; it is designated as the lectotype; its aedeagus is illustrated in Figs. 175, 176.

*Stiliculus kolbei* was described from an unspecified number of syntypes collected "an toten Vögeln im Walde" in an article on the Staphylinidae of New Guinea (BERNHAEUER 1915). One female syntype was located in the BERNHAUER collection at the FMNH. Based on external characters, it is indistinguishable from *R. ocellaris* and hence hypothesized to be conspecific with that species.

LAST (1984) described *Rugilus triangulus* from a holotype collected in "Okapa, vii.1965" and 26 paratypes from several localities in New Guinea. An examination of the holotype revealed that it is within the range of intraspecific variation of *R. ocellaris*. It is identical both in external and sexual characters to specimens from Ceram (see notes on intraspecific variation below and Figs. 204–209).

#### Redescription

Body length 4.6–5.5 mm. Habitus as in Fig. 171.

Coloration highly variable: body either uniformly blackish, or forebody brown, elytra bicoloured, yellowish to pale-reddish with a more or less extensive dark spot posteriorly, this spot usually reaching the lateral margins, but not the posterior margins and the suture, rarely elytra dark-brown with yellowish humeral angles and narrowly yellowish posterior margins; abdomen blackish; legs yellowish; antennae dark-yellowish to pale-reddish.

Head (Figs. 172, 204) 1.00–1.05 times as wide as long, behind eyes convexly rounded towards posterior constriction, posterior angles obsolete; punctation dense, moderately fine, mostly not confluent, rarely largely confluent (Fig. 210); dorsal surface matt. Eyes large, approximately 0.8–0.9 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two short teeth in the middle, without distinct median incision.

Pronotum (Figs. 172, 204) distinctly oblong and slender, 1.1–1.2 times as long as wide and 0.75–0.85 times as wide as head, strongly convex in cross-section; punctation similar to that of head, often slightly coarser, sometimes extensively confluent (Fig. 206).

Elytra (Figs. 172, 204) approximately 0.80–0.95 times as long, and much broader than pronotum; suture slightly depressed, particularly so in anterior portion, where the disc is smoothly elevated on either side of suture; punctation fine and dense, without interspersed larger non-setiferous punctures; interstices without microsculpture, glossy. Hind wings fully developed. Metatarsomere I long, approximately as long as the combined length of II–IV.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced impressions with coarser punctation; tergite VI with shallow, finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices with shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with very weakly concave posterior margin, in the middle with a pair of very long black setae (Fig. 173); sternite VIII with broadly concave posterior excision (Figs. 174, 207); aedeagus (Figs. 175–182, 208–209) 0.50–0.66 mm long, dorso-ventrally flattened; ventral process apically of broadly triangular shape in ventral view.

## Intraspecific variation

*Rugilus ocellaris* is apparently subject to considerable variability, more so than many other species of the subgenus (except *R. ceylanensis*). The two specimens from the Maluku islands are distinguished from those from other regions by shorter elytra and by rather different coloration. In the Maluku specimens, the forebody is uniformly blackish, whereas the head and pronotum are usually reddish-brown to brown, and the elytra are bicoloured, yellowish with an extensive dark spot posteriorly. The aedeagus, however, is practically identical. Therefore, until further evidence suggesting otherwise becomes available, the specimens from the Maluku islands are hypothesized to represent a colour morph of *R. ocellaris*. The specimens from Ceram are characterized by large body size, extensively confluent punctation of the head and pronotum (Figs. 205, 206), and dark elytra with yellowish humeral angles and narrowly yellowish posterior margins. Both in external and sexual characters they are identical to the holotype of *R. triangulus*.

Rather pronounced variation was observed for the shape of the apex of the ventral process of the aedeagus. In material from most regions, the apex is of more or less triangular shape (Figs. 175–178), whereas in material from Pahang, Malaysia, it is smoothly convex (Figs. 179, 180). In the male from Negros (Philippines), however, it is of intermediate condition (Figs. 181, 182), suggesting that the observed differences are an expression of intra- rather than interspecific variation. In external characters, the specimens from these regions are identical. The aedeagus of the male from Ceram is of similar shape as that of material from Malaysia, but distinctly larger (Figs. 208, 209).

## Comparative notes

In head shape (posterior angles broadly rounded, obsolete), eye size, coloration, long legs with an elongated metatarsomere I, and other external characters, *R. ocellaris* is highly similar to *R. uncatatus* (see the following section), from which it is reliably distinguished only by the different shape of the ventral process of the aedeagus.

## Distribution and natural history

The species is apparently widespread in the Oriental region, its distribution ranging from southern India to Malaysia, Indonesia, the Philippines, New Guinea, and New Britain. CAMERON (1930) recorded it from Sumatra.

The material with dates and other details indicated on the labels was collected at altitudes of 600–1000 m in January–May, July–September, and December. Three specimens were found in rotting cabbages; the syntype of *S. kolbei* was collected from dead birds.

*Rugilus (Eurystilicus) uncatatus* n. sp.  
(Figs. 183–186)

*Stilicus ceylanensis* Kraatz, 1859: 126; partim.

## Type material

**Holotype** ♂: “Thailand Feb. 1989, 240 km NW Bangkok, 110 m, leg. THIELEN / 25 km nw. Lan-Sak, Lichtfang / Holotypus ♂ *Rugilus uncatatus* sp. n. det. V. ASSING 2011” (NHMW).

**Paratypes**: 1 ♂, 2 ♀♀: same data as holotype, but “Jan. 1989” (NHMW, cAss); 1 ♂, 2 ♀♀: “Ceylon / Syntypus / Coll. KRAATZ / DEI Eberswalde / Paralectotype *Stilicus ceylanensis* Kraatz, Desig. E. R. HOEBEKE 2009 / Paratypus *Rugilus uncatatus* sp. n., det. V. ASSING 2011” (SDEI).

## Etymology

The specific epithet is an adjective derived from the Latin noun uncus (barbed hook) and refers to the shape of the ventral process in lateral view.

## Description

Body length 4.2–4.5 mm.

Coloration: head and pronotum dark-reddish to dark reddish-brown; elytra yellowish-red to reddish, with a large obliquely transverse blackish spot posteriorly, yellowish postero-lateral angles and posterior margins, and often infuscate scutellar region; abdomen dark-brown to blackish-brown; legs yellowish; antennae reddish.

Head (Fig. 183) weakly transverse, approximately 1.05 times as wide as long; posterior angles rounded, obsolete; punctation dense, moderately fine, not confluent; dorsal surface matt. Eyes large and bulging, approximately 0.7–0.8 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two short teeth in the middle, without distinct median incision.

Pronotum (Fig. 183) 1.05–1.10 times as long as broad and 0.80–0.85 times as wide as head, distinctly convex in cross-section; punctation similar to that of head; dorsal surface completely matt.

Elytra (Fig. 183) approximately 0.85–0.90 times as long as pronotum; punctation fine and moderately dense, with additional slightly coarser, but indistinct non-setiferous punctures arranged in a row on either side of suture and irregularly spaced on disc; interstices without microsculpture. Hind wings fully developed. Metatarsomere I elongate, approximately as long as the combined length of II–IV, or nearly so.

Abdomen narrower than elytra; tergites III–V anteriorly with impressions with moderately coarse punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices with very shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae; sternite

VIII with broad and moderately shallow posterior excision (Fig. 184); aedeagus approximately 0.50 mm long, ventral process dorsally hooked in lateral view.

#### Comparative notes

As can be inferred from the similarly derived morphology of the aedeagus (apex of ventral process dorsally hooked), *R. uncatus* is very closely related to, and probably the sister species of *R. plagiatus*. The latter, however, is of larger body size, has smaller eyes, longer and more slender legs, a larger aedeagus, and a ventral process of slightly different shape (apex more acute in ventral view and subapically stouter in lateral view). Based on external characters alone, a distinction of *R. uncatus* from *R. ceylanensis* and *R. ocellaris* is difficult. The latter is on average slightly larger and in the former the head is of slightly different shape (posterior angles more pronounced, eyes relatively smaller).

#### Distribution and natural history

The type material was found in two localities in Thailand and Sri Lanka. The specimens from Thailand were collected with a light trap at an altitude of 110 m in January and February, together with two specimens of *R. ceylanensis*.

#### *Rugilus (Eurystilicus) plagiatus* (Cameron, 1924) (Figs. 187–191)

*Stilicus plagiatus* Cameron, 1924: 181 f.

#### Type material examined

Lectotype ♂, present designation: “Type H. T. / Dehra Dun. Dr. M. CAMERON 27/II 1921. / *Stilicus plagiatus* Cam. / M. CAMERON Bequest 1955-147 / Lectotypus ♂ *Stilicus plagiatus* Cameron, desig. V. ASSING 2011 / *Rugilus plagiatus* (Cameron), det. V. ASSING 2011” (BMNH). Paralectotype ♀: “Dehra Dun. Dr. CAMERON 26.II.1922. / *Stilicus plagiatus* Cam. / M. CAMERON Bequest 1955-147 / Syntype” (BMNH).

#### Additional material examined

**India:** 1 ex., Dehra Dun, at light, IX.1932, leg. CHAMPION (BMNH).

#### Comment

The original description is based on an unspecified number of syntypes from “Dehra Dun”. CAMERON (1924) “only found this species frequenting the broken comb after excavating the nests of *Hodotermes obesus*”. Two syntypes, a male and a female, from the CAMERON collection at the BMNH were seen. The male is designated as the lectotype.

#### Redescription

Body length 5.3–5.6 mm.

Coloration: head and pronotum blackish-brown; elytra bicoloured, anteriorly yellowish, posterior two-fifths infuscate, the dark coloration extending into anterior half laterally, postero-external angles and posterior margin more or less extensively yellowish; abdomen reddish-brown to dark-brown; legs and antennae reddish-yellow.

Head (Fig. 187) transverse, 1.05–1.10 times as wide as long; lateral margins behind eyes convexly rounded towards posterior constriction, posterior angles practically obsolete; punctation rather fine and very dense; surface matt. Anterior margin of labrum concave in the middle; in the middle of this concavity with two very short teeth, without distinct median incision.

Pronotum (Fig. 187) approximately as broad as long or indistinctly oblong, and 0.80–0.85 times as broad as head, strongly convex in cross section; laterally with two long setae on either side, one near anterior angles and one in posterior half; punctation similar to that of head; midline punctate like lateral portions.

Elytra (Fig. 187) approximately 1.05 times as long as, and much broader than pronotum; punctation rather fine, moderately dense, and weakly granulose; interstices without microsculpture. Hind wings fully developed. Legs slender; metatarsus almost as long as metatibia; metatarsomere I elongate, almost as long as the combined length of II–IV; all metatarsomeres distinctly oblong.

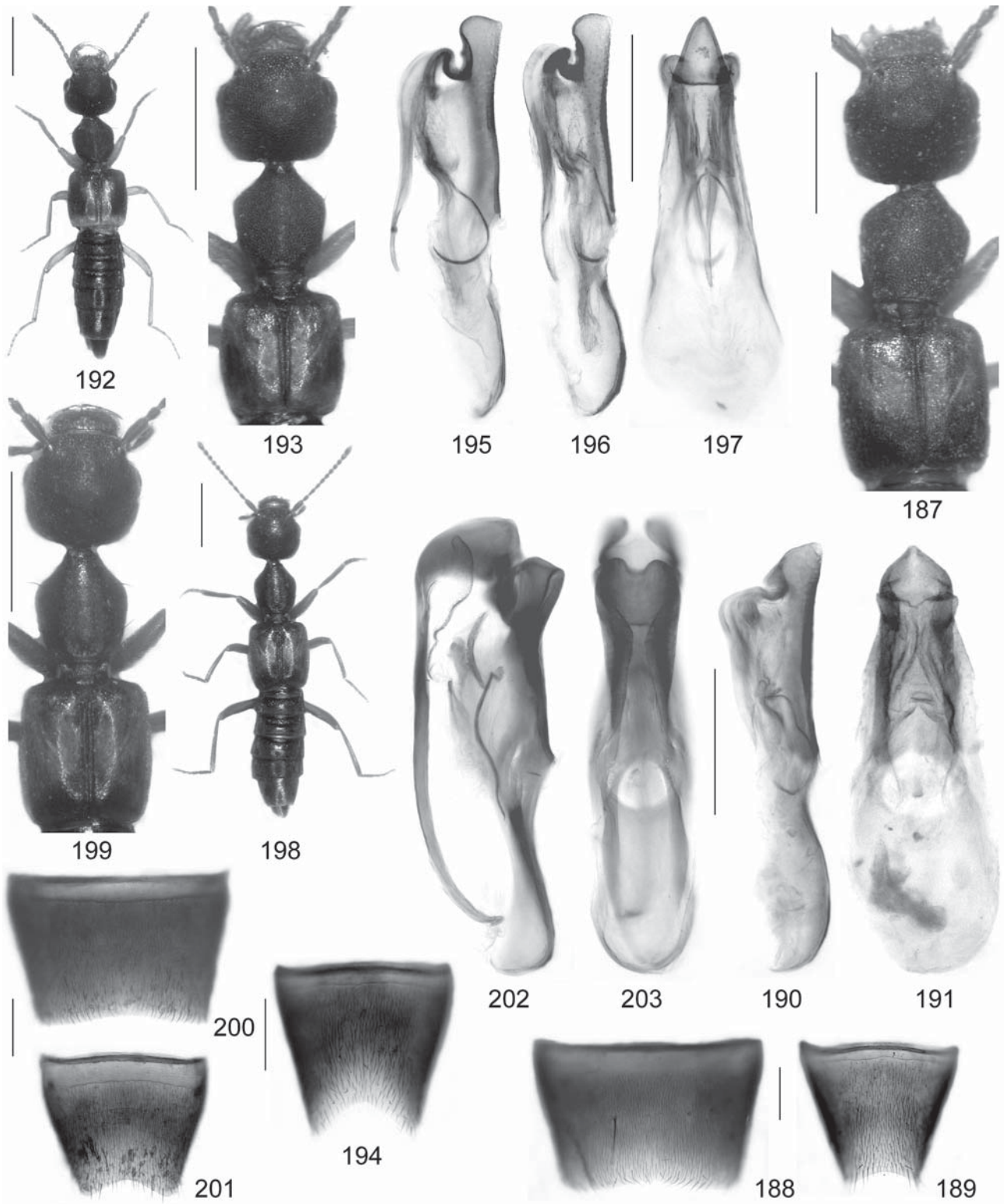
Abdomen distinctly narrower than elytra; tergites III–IV with moderately shallow, tergite V with very shallow anterior impressions, these impressions as finely punctate as remainder of tergal surfaces; tergite VI without trace of anterior impression; punctation fine and dense; interstices with shallow microreticulation; posterior margin of tergite VII with palisade fringe.

♂: sternite VII with very shallowly concave posterior margin, near posterior margin with row of longer dark setae, laterally with very long seta on either side and in the middle with a pair of very long setae (Fig. 188); sternite VIII laterally with very long seta on either side in posterior half, posterior margin shallowly concave (Fig. 189); aedeagus approximately 0.6 mm long; ventral process relatively short, apically of almost triangular shape in ventral view (Figs. 190, 191).

#### Comparative notes

*Rugilus plagiatus* is characterized particularly by the coloration of the elytra, the long and slender legs with long metatarsi and an elongate metatarsomere I, the shallow and finely punctate anterior impressions of tergites III–V, as well as by the posteriorly very shallowly concave male sternite VIII and the shape of the aedeagus. For characters





**Figs. 187–203.** *Rugilus plagiatus*, lectotype (187–191), *R. ceylanensis* (192–197), and *R. simlaensis* (198–203). – 187, 193, 199. Forebody. 188, 200. Male sternite VII. 189, 194, 201. Male sternite VIII. 190–191, 195–197, 202–203. Aedeagus in lateral and in ventral view. 192, 198. Habitus. – Scale bars: 1.0 mm (187, 192–193, 198–199), 0.2 mm (188–191, 194–197, 200–203).

separating it from the closely related *R. uncatus*, its presumable adelphotaxon, see the preceding section.

#### Distribution and natural history

The species has been recorded only from the vicinity of Dehra Dun, where it was found in association with termites (CAMERON 1924, 1931) and at a light source (additional material).

#### *Rugilus (Eurystilicus) ceylanensis* (Kraatz, 1859) (Figs. 192–197)

*Stilicus ceylanensis* Kraatz, 1859: 126.

*Stilicus luteipennis* Kraatz, 1859: 126; **n. syn.**

*Stilicus sutteri* Scheerpeltz, 1957: 278 ff.; **n. syn.**

*Stilicus wittmeri* Coiffait, 1978: 132 f.; **n. syn.**

*Rugilus triangulus* var. *croceus* Last, 1984: 116; unavailable name.

#### Type material examined

*S. ceylanensis* [see also type material of *R. uncatus*]: Lectotype ♂ [dissected prior to present study; abdomen separated from forebody and mounted separately]: “Ceylon / Syntypus / Coll. KRAATZ / coll. DEI Eberswalde / Lectotype *Stilicus ceylanensis* Kraatz, Desig. E. R. HOEBEKE 2009 / *Rugilus ceylanensis* (Kraatz), det. V. ASSING 2011” (SDEI). Paralectotypes: 1 ♂, 4 ♀♀ [1 ♀ without head and pronotum]: same data as lectotype, but “Paralectotype ...” (SDEI).

*S. luteipennis*: Syntype ♀ [teneral]: “97 / Ceylon / Holotypus / *luteipennis* / Coll. KRAATZ / coll. DEI Eberswalde / Syntypus *Stilicus luteipennis* Kraatz, rev. V. ASSING 2011 / *Rugilus ceylanensis* (Kraatz), det. V. ASSING 2011” (DEI).

*S. wittmeri*: Holotype ♂: “Samchi, 300 m, 7.–11.5. / Nat.-Hist. Museum Basel, Bhutan Expedition 1972 / Holotype / *Stilicus wittmeri* H. Coiffait 1977 / *Rugilus ceylanensis* (Kraatz), det. V. ASSING 2011” (NHMB). Paratype ♀: “Samchi, 9.5. / Nat.-Hist. Museum Basel, Bhutan Expedition 1972 / Paratype / *Rugilus ceylanensis* (Kraatz), det. V. ASSING 2011” (NHMB).

*S. sutteri*: Holotype ♂: “♂ / 238 O-Sumba, Laluku 4.VII.49 / Lichtfang / Expedition BÜHLER-SUTTER / Sumba-Exped. d. Naturhist. Mus. Basel 1949 / Typus *Stilicus Sutteri* O. Scheerpeltz / *Stilicus Sutteri* nom. nov. [sic] / *Rugilus ceylanensis* (Kraatz), det. V. ASSING 2011” (NHMB). Paratypes: 1 ♀: same data as holotype, but “Cotypus” (NHMB); 1 ♀: “461 W-Sumba, Waimangura, 18.–21.VIII.49 / Lichtfang / Expedition BÜHLER-SUTTER / Sumba-Exped. d. Naturhist. Mus. Basel 1949 / ex coll. SCHEERPELTZ / Cotypus *Stilicus Sutteri* O. Scheerpeltz” (NHMW).

#### Additional material examined

**Nepal:** 4 exs., Kathmandu valley, Bhagmati river, 5.V.1993, leg. KLEEBERG (cKle, cAss); 1 ex., Kathmandu, Baneshwar, 1350 m, 18.–24.VI.2000, leg. SCHAWALLER (SMNS).

**India:** 1 ex., Meghalaya, 1 km E Tura, 25° 30' N, 90° 14' E, 500–600 m, 2.–5.V.2002, leg. TRÝZNA & BENDA (cSch); 2 exs., Assam, Umrongso env., 25° 27' N, 92° 43' E, 700 m, 3.–8.VI.2002, leg. TRÝZNA & BENDA (cSch, cAss); 1 ex., Orissa state, Similipal

National Park, Lulung, 21° 56' N, 86° 32' E, 25.V.–13.VI.1998, leg. K. & S. MAJER (NHMB); 2 exs., Karnataka, Bandipur N.P., 1000 m, elephant dung, 21.XII.1993, leg. CUCCODORO (MHNG); 3 exs., Uttaranchal, Almora, Kumaon, leg. CHAMPION (BMNH, cAss); 30 exs., Uttaranchal, Haldwani, Kumaon, leg. CHAMPION (BMNH, cAss); 3 exs., Haldwani, Nandhour river, leg. CHAMPION (BMNH, cAss); 3 exs., Assam, Bhalukpong, 27° 02' N, 92° 35' E, 150 m, 26.V.–3.VI.2006, leg. DEMBICKÝ (BMNH, cAss); 1 ex., Karnataka, Coorg mt., Tadiyendamol env., 12° 13' N, 75° 36' E, 12.XII.1998, leg. BOUKAL (cAss); 2 exs., Tamil Nadu, Nilgiri Hills, 15 km SE Kotagiri, Kunchappanai, 11° 22' N, 76° 56' E, 900 m, 17.–28.XI.1993, leg. BOUKAL & KEJVAL (NHMW); 1 ex., “Ind. post.” (NHMW).

**Sri Lanka:** 4 exs., Peradeniya (NHMW); 7 exs., Weligama, 1899, leg. HORN (SDEI); 7 exs., “Ceylon” (BMNH, NHMW); 1 ex., “Ceylon”, leg. DOHRN (SDEI); 2 exs., S-Province, Matara District, 2 km E Weligama, at light, 1.I.2001, leg. SCHUH (NHMW, cAss).

**Myanmar:** 1 ex., Kachin State, Indawgyi Lake, 7 km S Lonton, 25° 03' N, 96° 17' E, 250 m, 21.V.1999, leg. SCHILLHAMMER & SCHUH (NHMW); 2 exs., Sagaing Division, Alaungdaw Kathapa National Park, 22° 19' N, 94° 28' E, 400 m, 6.V.2003, leg. SCHILLHAMMER et al. (NHMW, cAss); 6 exs., “Carin, Asciiui Ghecú”, 1400–1500 m, III.–IV.1888, leg. FEA (NHMW, SDEI).

**China:** 3 exs., Yunnan, Dali Bai Aut. Pref., 22 km NNE Dali, NE bank of Er Hai, 25° 57' N, 100° 09' E, 1990 m, ruderal field margin, debris sifted, 12.VI.2007, leg. PÜTZ (cPüt, cAss); 2 exs., Yunnan, Dali Bai Aut. Pref., 35 km N Dali, 26° 01' N, 100° 07' E, 1980 m, rotting vegetables near pond sifted, 24.VIII.2009, leg. SCHÜLKE (cSch, cAss); 1 ex., Yunnan, Dali Bai Aut. Pref., 4 km E Dali old town, shore of Er Hai lake, 25° 42' N, 100° 02' E, 2020 m, rotting vegetables, 27.VIII.2003, leg. SCHÜLKE (cSch, cAss); 5 exs., Yunnan, Dali Bai Aut. Pref., 1 km W Dali, foothill of Diancang Shan, 25° 42' N, 100° 08' E, 2170 m, 3.IX.2003, leg. SMETANA [C146] (cSme, cAss); 2 exs., N-Yunnan, Diqing Tibet. Aut. Pref., Deqin Co., 33 km WNW Zhongdian, small cleft W Yangtze river, 27° 57' N, 99° 25' E, 2220–2300 m, litter, moss, gravel, dead wood sifted near water, 4.VI.2005, leg. SCHÜLKE (cSch, cAss); 1 ex., Yunnan, Baoshan Pref., creek valley 21 km S Tengchong, 24° 50' N, 98° 27' E, 1360 m, washed from stream bank and gravel bank, 30.VIII.2009, leg. SCHÜLKE (cSch); 16 exs., N-Guangxi, Miaoershan, S-slope, 1300–2000 m, 25.–26.VI.1997, leg. BOLM (NHMB, cAss); 5 exs., N-Guangxi, Miaoershan, S-slope, 800–1300 m, 20.–27.VI.1997, leg. BOLM (NHMB, cAss); 1 ex., Jiangsu, Zhenjiang [“Chinkiang”], leg. REITTER (NHMW); 1 ex., W-Fujian, 2 km SE Xianqiao, 27.02° N, 117.06° E, 23.–24.IV.2006, leg. TURNA (NHMW).

**Taiwan:** 3 exs., Taichung Hsien, Wufeng, Wushi river, 100 m, 21.IV.1990, leg. SMETANA [T13] (cSme); 1 ex., Taichung Hsien, Wufeng, 100 m, 11.VII.1993, leg. SMETANA [T148] (cAss); 8 exs., Taihorin, VII.1911, leg. SAUTER (SDEI); 1 ex., Pilam, I.1908, leg. SAUTER (SDEI).

**Japan: Honshu:** 4 exs., Kyoto Palace Gardens, leaf litter, VIII.1980, leg. HAMMOND (BMNH, cAss); 1 ex., Yokohama, 28.IX.–3.XI.1881, leg. LEWIS (BMNH); 4 exs., Yokohama env., Bukenji, XII.1905, leg. SAUTER (NHMW, SDEI). – **Kyushu:** 1 ex., Nagasaki, 13.II.–21.IV.1881, leg. LEWIS (BMNH); 1 ex., Nagasaki, 14.IV.1881, leg. LEWIS (BMNH). – **Ryuku Islands:** 5 exs., Okinawa-ken, Iriomote Island, Ôhara, 27.IV.1981, leg. MORITA (SDEI, cAss). – **Locality not specified:** 14 exs., “Japan”, “Japonia”, leg. LEWIS, etc. (BMNH, SDEI).

**South Korea:** 1 ex., Seoul env., VII.1974, leg. WHALLEY (BMNH); 1 ex., Jejudo, 5.V.1983, leg. KWANG SEOB LEE (cSch).

**Laos:** 2 exs., Viangchan province, Phou Khao Khouay National Park, Nam Leuk, Tad Leuk waterfalls, 200 m, at light, 1.–8.VI.1996, leg. SCHILLHAMMER (NHMW).

**Thailand:** 1 ex., Chiang Rai, Ban Tha Don, 24.VI.1995, leg. ULLRICH (cAss); 1 ♂, 1 ex., 240 km NW Bangkok, 25 km NW Lan-Sak, 110 m, at light, I.1989, leg. THIELEN (NHMW, cAss); 1 ex., Mae Hong Son, Ban Si Lang, 1200 m, 23.–31.V.1992, leg. HORAK (NHMW).

**Singapore:** 1 ex., “Singapore”, leg. SAUNDERS (BMNH); 1 ♂ [previously misidentified as *R. ocularis*], Keppel Harbour, leg. CAMERON (SDEI).

**Indonesia:** 1 ex., Java, Perak (BMNH); 1 ex., E-Java, 50 km S Surabaya, Tretes, Kekok Bodo WF, 800 m, 20.IX.1995, leg. KOUBEK (cAss); 1 ♂, Sumatra, Padang, 1890, leg. MODIGLIANI (NHMW).

**Philippines:** 2 exs., Luzon, San Pablo, at light, 26.XI.1996, leg. KODADA (MHNG).

**Papua New Guinea:** 1 ♀: “Holotype / Madang, N. Guinea, 30.XI.69. R. HORNABROOK / Brit. Mus. 1985-4-01 / *Rugilus triangulus* Var. *croceus*, H. R. LAST det., sp?, Holotype / *S. ceylanensis* Kr. det. ROUGEMONT / *Rugilus ceylanensis* (Kraatz), det. V. ASSING 2011” (BMNH).

#### Comment

*Stilicus ceylanensis* was described from an unspecified number of syntypes, among them at least one male, from “Ceylan” (KRAATZ 1859). A lectotype was designated by HOEBEKE (2010). The type series deposited in the KRAATZ collection at the SDEI, altogether ten specimens, is composed of two species. Five of the paralectotypes are conspecific with the lectotype; four paralectotypes, a male and three females, belong to an undescribed species, which is described as *R. uncatus* above.

*Stilicus luteipennis* was described in the same work and on the same page based on an unspecified number of syntypes from “Ceylan” (KRAATZ 1859). Only one syntype, unfortunately a slightly teneral female, is deposited in the KRAATZ collection at the SDEI. Its eyes are rather large and near the upper extreme of the range of *R. ceylanensis*. As can be inferred from other characters, particularly the shape of the head, it is conspecific with neither *R. ocularis* nor *R. uncatus*. As emphasized below, *R. ceylanensis* is a highly variable species; specimens with similarly large eyes were seen also from other regions. Moreover, the presence of an undiscovered endemic species in Sri Lanka would be most unlikely. Consequently, the syntype of *R. luteipennis* is hypothesized to be conspecific with the lectotype of *R. ceylanensis*. Since the latter name has been used much more frequently than the former, it is designated as the senior name and *R. luteipennis* is placed in synonymy with *R. ceylanensis*.

*Stilicus sutteri* was described based on a male holotype and two female paratypes from “O- und W-Sumba ... Laluku, 4.7.49” (SCHEERPELTZ 1957). The examined type specimens have the elytra almost uniformly yellowish, but

the aedeagus of the holotype is identical to that of the type material of *S. ceylanensis*.

The original description of *S. wittmeri* is based on a holotype and three paratypes from “Samchi, 300 m” in Bhutan (COIFFAIT 1978). An examination of the type material revealed that it is conspecific with that of *R. ceylanensis*.

LAST (1984) described *S. triangulus* var. *croceus* based on a “holotype” and one “paratype” from Madang. Since the name is infrasubspecific and consequently not available, the “holotype” has no type status and is listed as additional material above. ROUGEMONT (1995) studied the “holotype”, hypothesized it to be conspecific with *S. ceylanensis*, and “synonymized” *S. triangulus* var. *croceus*.

#### Redescription

Body length 4.0–5.2 mm. Habitus as in Fig. 192.

Coloration highly variable: head and pronotum reddish-brown to black; elytra yellowish to reddish, usually with a more or less extensive dark spot laterally, this spot sometimes absent (so that the elytra are uniformly yellowish to reddish) or occupying almost all of the elytra and leaving only the posterior margins yellowish and the humeral angles reddish; abdomen blackish; legs yellowish to reddish yellow; antennae reddish.

Head (Fig. 193) more or less distinctly transverse, 1.05–1.15 times as wide as long; posterior angles rounded, but noticeable; punctation dense, moderately fine, not confluent; dorsal surface matt. Eyes of rather variable size, approximately as long as, or longer than postocular region and 0.5–0.8 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with a distinct tooth on either side of the small median incision.

Pronotum (Fig. 193) weakly oblong, approximately 1.05 times as long as broad and 0.80–0.85 times as wide as head, distinctly convex in cross-section; punctation similar to that of head, often slightly coarser; dorsal surface completely matt.

Elytra (Fig. 193) of somewhat variable length, usually 0.9–1.0 times as long as pronotum; punctation fine and moderately dense, usually without, but sometimes with additional slightly coarser, irregularly spaced punctures on disc; interstices without microsculpture. Hind wings fully developed. Metatarsomere I elongate, approximately as long as the combined length of II–IV, or nearly so.

Abdomen narrower than elytra; tergites III–V anteriorly with impressions with coarse punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices with very shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae; sternite VIII with broad and relatively deep posterior excision

(Fig. 194); aedeagus approximately 0.55 mm long, ventral process of characteristic shape particularly in lateral view (Figs. 195–197).

#### Comparative notes

*Rugilus ceylanensis* is readily distinguished from all its congeners based on the shape of the ventral process of the aedeagus (lateral view). In addition, it is separated from the similar *R. ocellaris* and *R. uncatius* by the smaller eyes and the shape of the head (posterior angles weakly pronounced, but noticeable).

#### Distribution and natural history

This species is widespread and common in the south of the East Palaearctic, in the Oriental (see material examined), and the Australian regions (ROUGEMONT 1995). It was recently reported also from several localities in North America and from Hawaii (HOEBEKE 2010). According to BERNHAUER (1922b), it was found even in the Seychelles, but this record requires confirmation. For additional records see BERNHAUER (1922a) (Taiwan), CAMERON (1928, 1930) (Malaysia, Sumatra), COIFFAIT (1982) (Assam; as *R. luteipennis*), NOMURA et al. (2000) (Japan), WATANABE (1961, 1990, 2010b) (Japan: Izu Islands, Ryukyus), and WATANABE & SHIBATA (1972) (Japan).

The examined material with dates and additional data specified on the labels was collected from lake shores, river banks, rotting plant material, leaf litter, and elephant dung at altitudes of 100–2300 m. The species was recorded throughout the year with a maximum during the period from May through August. Flying specimens were captured at light sources in January, June, July, August, and November.

#### *Rugilus (Eurystilicus) simlaensis* (Cameron, 1931) (Figs. 198–203)

*Stilicus simlaensis* Cameron, 1931: 106.

#### Type material examined

Syntype ♀: “Type / Gahan 7000' Simla Hills. / Dr. CAMERON IX.1921. / *S. simlaensis* Cam. Type / M. CAMERON Bequest 1955-147 / *Rugilus simlaensis* (Cameron), det. V. ASSING 2011” (BMNH).

#### Additional material examined

**Nepal:** 1 ♀, Sete env., in litter near pond, 19.IV.1993, leg. KLEEBERG (cKle); 1 ex., Karnali province, Jumla district, 2 km W Gothichaur, 2700 m, V.1995, leg. WEIGEL (NME).

**India:** 1 ♂, West Sikkim, Khecheopari lake, 1800 m, 4.–10. VI.1999, leg. KUČERA (cFel).

**Bhutan:** 1 ♀, Thimpu District, E Dochu-La, Monchunang, 2400 m, 7.VII.1988, leg. HOLZSCHUH (NHMW).

**China: Hubei:** 2 ♀♀, Daba Shan, pass E Mt. Da Shennongjia, 12 km NW Muyuping, 31° 30' N, 110° 21' E, 1950–2050 m, mixed deciduous forest in dry creek valley, sifted, 22.VII.2001,

leg. SCHÜLKE & SMETANA (cSch, cSme); 5 ♀♀, same data, but 1950 m, 19.VII.2001, leg. SMETANA [C111] (cSme, cAss); 1 ♀, Daba Shan, 110° 22' E [latitude not indicated], creek valley, 1550–1650 m, 18.VII.2001, leg. SMETANA [C115a] (cSme). – **Shaanxi:** 1 ex., 15 km SW Dongjiangkou, 1700 m, 14.–17. VII.1998, leg. BOLM (NHMB); 1 ♀, Daba Shan, 25 km NW Zhenping, NW pass, 32° 01' N, 109° 19' E, 2150 m, 11.VII.2001, leg. SMETANA [C99] (cSme); 1 ♀, Qinling Shan, 6 km E Xunxangba, 1000–1300 m, 23.V.–13.VI.2000, leg. HOLZSCHUH (NHMW). – **Shaanxi/Sichuan:** 6 ♀♀, Daba Shan, 20 km SSE Zhenping, 31° 44' N, 109° 35' E, 1700–1800 m, 9.VII.2001, leg. SMETANA [C96b] (cSme, cAss). – **Sichuan:** 2 ♂♂, 1 ♀, Qingcheng Shan, NW Chengdu, 30° 54' N, 103° 32' E, 650–700 m, 3.–4.VI.1997, leg. SCHÜLKE (cSch, cAss); 1 ex., Ya'an Pref., Shimian Co., Xiaoxiang Ling, side valley above Nanya Cun near Caluo, 11 km S Shimian, 1250 m, 7.VII.1999, leg. PÜTZ (cPüt); 1 ex., Kunming, Western Hills, 25° 04' N, 102° 41' E, 1800 m, 24.VII.1996, leg. SMETANA et al. [C68] (cSme); 1 ex., Moxi, 29° 13' N, 102° 10' E, 1600 m, 2.VII.1998, leg. SMETANA et al. [C73] (cAss). – **Yunnan:** 1 ♀, Dali Bai Aut. Pref., 22 km NNE Dali, NE bank of Er Hai, 25° 57' N, 100° 09' E, 1990 m, ruderal field margin, debris sifted, 12.VI.2007, leg. PÜTZ (cPüt).

**Taiwan:** 1 ex., Kaohsiung Hsien, Tona Forest Station, 1050 m, 1.V.1998, leg. SMETANA [T194] (cSme); 1 ex., Taitung Hsien, Hsinkangshan above Chengkung, 800 m, 27.IV.1995, leg. SMETANA [T168] (cSme); 1 ex., Nantou Hsien, Meifeng, 2130 m, 4.V.1998, leg. SMETANA [T197] (cAss); 4 exs., Nantou Hsien, Shanlinchi, 1650 m, 19.V.1991, leg. SMETANA [T87] (cSme, cAss); 1 ex., Nantou Hsien, Shanlinchi, 1650 m, 16.V.1990, leg. SMETANA [T60] (cSme); 2 exs., Nantou Hsien, Nienkaoshan trail, 2050–2150 m, 8.V.1992, leg. SMETANA [T120] (cSme); 14 exs., Ilan Hsien, Taipingshan, 1820 m, 15.VII.1993, leg. SMETANA [T153] (cSme, cAss); 1 ex., Ilan Hsien, Taipingshan, 1820 m, 15.VII.1993, leg. SMETANA [T154] (cSme); 1 ex., Ilan Hsien, Shen-Mi Lake, 24° 23' N, 121° 44' E, 1110 m, 10.V.1995, leg. SMETANA [T177] (cAss); 1 ex., Ilan Hsien, Chyr Duan, 1100 m, 19.IV.1990, leg. SMETANA [T9] (cSme); 7 exs., Taichung Hsien, Anmashan, 2150 m, 13.V.1992, leg. SMETANA [T129] (cSme, cAss); 1 ex., Taichung Hsien, Anmashan, 2120 m, 1.V.1990, leg. SMETANA [T36] (cSme, cAss); 1 ex., Taichung Hsien, Anmashan, 2230 m, 15.V.1992, leg. SMETANA [T132] (cSme); 2 exs., Chiayi Hsien, Alishan, 2200 m, 26.IV.1990, leg. SMETANA [T25] (cSme, cAss); 1 ex., Chiayi Hsien, Alishan, Sister Ponds, 2180 m, 26.IV.1990, leg. SMETANA [T24] (cAss); 1 ex., Chiayi Hsien, Alishan, road 18 to Youth Activ. Centre, 2000 m, fern litter, 8.I.2009, leg. Vit (cAss).

#### Comment

The original description is based on an unspecified number of syntypes, among them at least one male, from “Simla Hills. Gahan. Chakrata and Mussoorie districts” (CAMERON 1931). Only one of these syntypes, a female, was available from the CAMERON collection.

#### Redescription

Body length 4.3–5.5 mm. Habitus as in Fig. 198.

Coloration: head, pronotum, and abdomen blackish-brown to black; elytra reddish-yellow to reddish, usually

more or less extensively infuscate in postero-sutural angles and in scutellar region, rarely uniformly reddish; legs reddish-yellow to reddish-brown; antennae reddish to reddish-brown.

Head (Fig. 199) weakly transverse, approximately 1.05 times as wide as long; posterior angles rounded, but noticeable; punctation dense, moderately fine, not confluent; dorsal surface matt. Eyes approximately as long as, or slightly longer than postocular region and 0.5–0.7 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with a distinct tooth on either side of the small median incision.

Pronotum (Fig. 199) oblong, usually 1.05–1.10 times as long as broad and 0.80–0.85 times as wide as head, distinctly convex in cross-section; punctation similar to that of head; interstices often with subdued shine.

Elytra (Fig. 199) approximately 1.05 times as long as pronotum; punctation very fine and moderately dense, without additional coarser punctures on disc; interstices with or without very shallow traces of microsculpture. Hind wings fully developed. Metatarsomere I longer than the combined length of II and III, but usually shorter than the combined length of II–IV.

Abdomen narrower than elytra; tergites III–V anteriorly with impressions with coarse punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices with very shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae (Fig. 200); sternite VIII with broad and relatively shallow posterior excision (Fig. 201); aedeagus 0.60–0.65 mm long, ventral process of characteristic shape (Figs. 202, 203).

#### Comparative notes

The species is distinguished from the sympatric *R. ceylanensis* particularly by the different coloration and the greater length of the elytra. It is separated from all its congeners by the characteristic shape of the aedeagus.

#### Distribution and natural history

The distribution ranges from the Himalaya (Nepal, northern India, Bhutan) across China to Taiwan (material examined). For additional records from Taiwan see HAYASHI (1996). The examined specimens with labels specifying ecological details were collected from leaf and fern litter and debris in forests and near a pond at altitudes of 650–2700 m in January, April through July, and September, with a maximum during the period from April through July.

#### *Rugilus (Eurystilicus) rufescens* (Sharp, 1874) (Figs. 210–214)

*Stilicus rufescens* Sharp, 1874: 61.

*Stilicus indicus* Cameron, 1914: 542.

*Stilicus rufescens* var. *indicus*: CAMERON (1931).

*Rugilus kamchaticus* Ryabukhin, 2007: 2 ff.; n. syn.

#### Type material examined

*S. rufescens*: Syntypes: 2 ♀♀ [mounted on same label]: “Type / Japan. LEWIS. / SHARP Coll 1905-313. / *Stilicus rufescens*. type D. S. / Japan / Syntype / *Rugilus rufescens* (Sharp), det. V. ASSING 2011” (BMNH).

*S. indicus*: Syntype [abdomen missing]: “61000 / DOHERTY / Assam, Patkai Mts. / FRY Coll. 1905-100 / *Stilicus indicus* Cam / Syntype / *Rugilus rufescens* (Sharp), det. V. ASSING 2011” (BMNH).

*R. kamchaticus*: Holotype ♀: “Kamchatka, near Esso, 24.VIII.2005 r., A. S. RYABUKHIN / river Uksichan, meadow, under stones / Holotypus *Rugilus kamchaticus* Ryabukhin” (ZIN). Paratype ♀: same data as holotype, but “17.VIII.2006 r.” (ZIN).

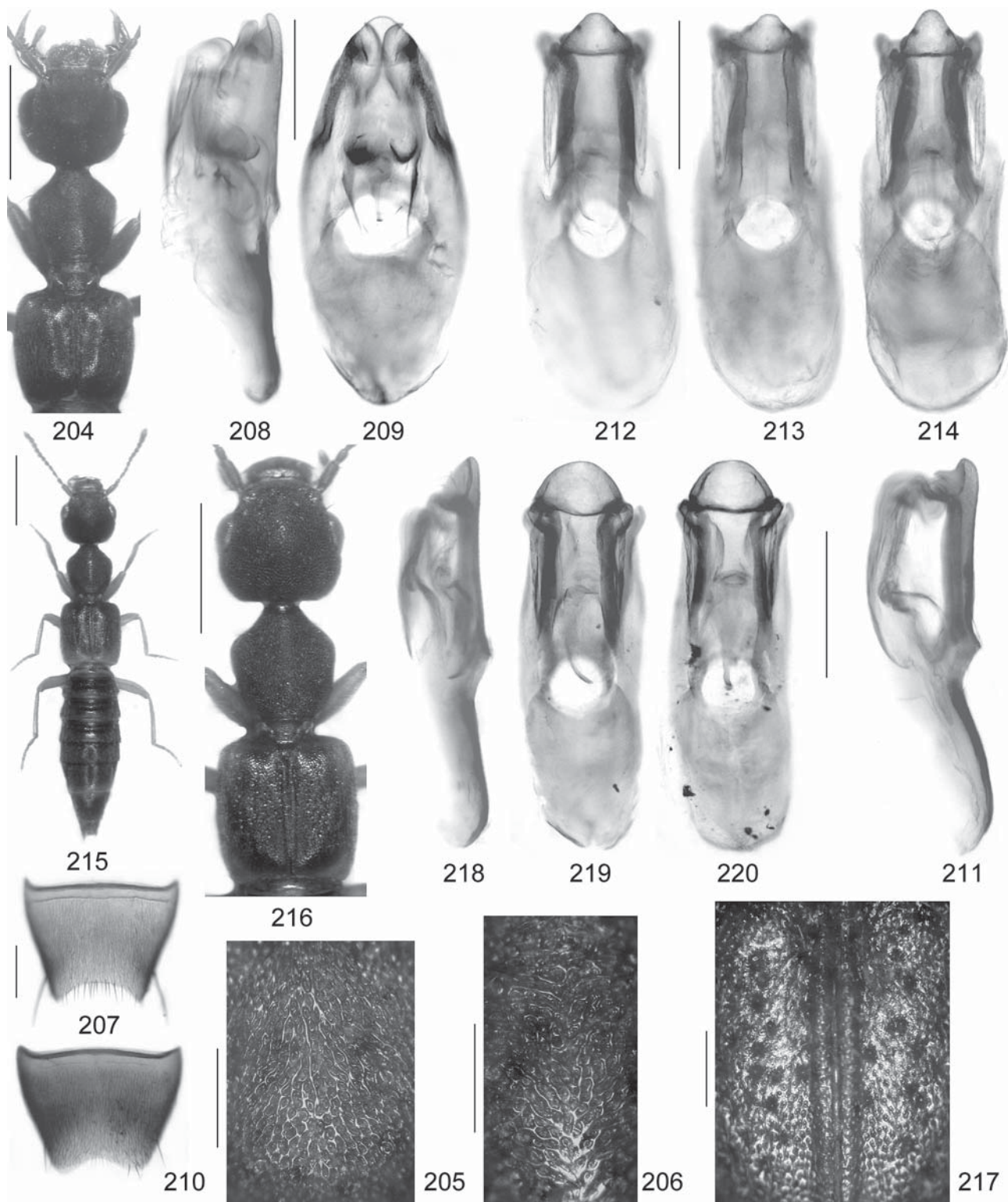
#### Additional material examined

**India:** 1 ♀, Kerala, Cardamom Hills, 10 km SW Kumily, Val-lakadavu, 9° 31' N, 77° 07' E, 1000 m, 24.XII.1993, leg. BOUKAL & KEJVAL (NHMW); 2 ♀♀, Tamil Nadu, Nilgiri Hills, 15 km SE Kotagiri, Kunchappanai, 11° 22' N, 76° 56' E, 900 m, 17.–28. XI.1993, leg. BOUKAL & KEJVAL (NHMW).

**Sri Lanka:** 2 exs., “Ceylon” (NHMW).

**China: Beijing:** 1 ex., Beijing, British embassy, compost heap, IX.2004, leg. GALSWORTHY (BMNH); 2 exs., 10 km N Beijing, Ching R. Br., human faeces, 29.VII.1980, leg. HAMMOND (BMNH, cAss); 5 exs., Beijing, N. suburbs, rotting hay, 30.VIII.1980, leg. HAMMOND (BMNH, cAss); 4 exs., Beijing, 2.X.1966 (BMNH); 5 exs., Badaling, 9.IX.1980, leg. HAMMOND (BMNH, cAss). – **Heilongjiang:** 2 exs., Harbin, 27.VIII.1965, leg. HAMMOND (BMNH); 1 ex., same data, but 14.VI.1965 (BMNH); 2 exs., same data, but 3.VII.1966 (BMNH); 3 exs., Harbin, Taiyang Dao, cut grass heaps, 14.IX.1980, leg. HAMMOND (BMNH, cAss); 1 ex., Bin Xien, Jiulong Shan, 12.IX.1980, leg. HAMMOND (cAss). – **Shanxi:** 1 ♀, Yongji, 23.–25.V.2001, leg. KUČERA (cSch). – **Hebei:** 1 ♂, Yongnian, “36.47 N, 114.30 E”, VI–XI.1995, leg. LI (cAss). – **Shaanxi:** 9 exs., Qinling Shan, river valley 30 km SSW Xi'an, autoroute km 33, 34° 00' N, 108° 49' E, 600 m, sifted, 31.VIII.1995, leg. PÜTZ & SCHÜLKE (cSch, cPüt, cAss); 1 ex., 15 km N Xi'an, Wei He bank near bridge on autoroute to Xi'an airport, 34° 24' N, 108° 55' E, 400 m, 22.VIII.1995, leg. PÜTZ (cPüt); 3 exs., 20 km S Xi'an, Cuihua Shan, rotting figs, 19.IX.1980, leg. HAMMOND (BMNH, cAss). – **Hunan:** 6 exs., NW-Hunan, Li Shui river valley, 15 km E Dayong, 500 m, 15.VI.1997, leg. BOLM (NHMB, cAss). – **Hubei:** 5 exs., NW-Hubei, Xingshan Co., Zhenziling, 1600 m, 3.VII.1998, leg. BOLM (NHMB, cAss); 1 ex., W-Hubei, Dashennongjia Nat. Res., Muyu, E-slope, 2000 m, 12.–15.VI.1997, leg. BOLM (NHMB); 1 ex., SE-Hubei, Mufu Shan, Jiugongshan forest park, “29.4 N 114.6 E”, VI.2002, leg. TURNA (NHMW). – **Locality not specified:** 1 ex., “China”, rotting hay, leg. HAMMOND (BMNH).

**Russia:** 1 ex., Primorskiy Kray, Lazovskiy Distr., 5 km NE Lazo, Kovarinovo, spring valley, 1.–5.VI.1995, leg. SUNDUKOV (cAss); 1 ex. [slightly teneral], Lazovskiy Res., Kordon Petrova, 42° 52' N, 133° 48' E, 10.–20.IX.1999, leg. SUNDUKOV (cSch);



**Figs. 204–220.** *Rugilus ocularis* from Ceram (204–209), *R. rufescens* (210–214; 211–212: Primorskiy; 213: Japan; 214: Beijing), and *R. chinensis* (215–220; 218: lectotype). – **204, 216.** Forebody. **205.** Median dorsal portion of head. **206.** Median dorsal portion of pronotum. **207, 210.** Male sternite VIII. **208–209, 211–214, 218–220.** Aedeagus in lateral and in ventral view. **215.** Habitus. **217.** Sutural portion of elytra. – Scale bars: 1.0 mm (204, 215–216), 0.2 mm (205–214, 217–220).

1 ex., Lazovskiy Res., Lazo, Lazovka valley, 15.V.1997, leg. SUNDUKOV (cAss); 2 exs., Ussuryyskiy Distr., Kajmanovka, 43° 38' N, 132° 14' E, 31.VII.1999, leg. SUNDUKOV (cSch); 2 exs., Ussuryyskiy Distr., S. dk. Beloborodov, Kaymanovka, 2.–9.VII.1992 (NHMB, cAss); 1 ex., Primorskiy Kray, 25 km NW Terney, 1.–5.VII.1992, leg. KURBATOV (MHNG); 1 ex., Primorskiy Kray, ca. 50 km W Vladivostok, at light, 3.VII.1991, leg. HEINIG (cSch).

**Japan: Honshu:** 1 ex., Kyoto, 7.–8.VIII.1980, leg. BESUCHET (MHNG); 1 ex., Kyoto, 20.VIII.1980, leg. BESUCHET (MHNG); 1 ex., Nara Pref., Asuka V., 1.IV.1973, leg. SAWADA (cAss); 3 exs., Kyoto, flood debris, VII.1980, leg. HAMMOND (BMNH, cAss); 4 exs., same data, but VIII.1980 (BMNH, cAss); 4 exs., 8 km N Kyoto, Seryo Toge, 6.VIII.1980, leg. HAMMOND (BMNH); 1 ex., Kyoto, litter in park, 7.IX.1980, leg. HAMMOND (BMNH); 5 exs., Kyoto Palace Gardens, leaf litter, VIII.1980, leg. HAMMOND (BMNH, cAss); 1 ex., Miyanosita, leg. LEWIS (BMNH); 1 ex., Chiuzenji, leg. LEWIS (BMNH); 4 exs., Kanagawa, Shimomizo, Sagami river, 24.VII.1993, leg. ITO (SDEI, cAss); 4 exs., Nagano, Misato, 17.VIII.1991, leg. ITO (SDEI, cAss); 7 exs., same data, but 13.VIII.1995 (SDEI, cAss); 7 exs., Osaka, Sasabe, 16.VII.1993, leg. ITO (SDEI, cAss); 16 exs., same data, but 11.IX.1993 (SDEI, cAss); 2 exs., same data, but 8.V.1994 (SDEI); 12 exs., Shiga, Hira mts., Kojorou valley, 4.V.1995, leg. ITO (SDEI, cAss); 1 ex., Hyogo, Uneno, 8.V.1995, leg. ITO (SDEI); 1 ex., Ibaragi, Toride, Tone river, 2.VI.1994, leg. ITO (SDEI); 1 ex., Osaka, Myoken mt., 26.VI.1994, leg. ITO (SDEI); 1 ex., Fukushima Pref., Iwaki City, Eda, 4.VIII.1976 (SDEI); 5 exs., Tochigi Pref., 13.IX.1989 (SDEI); 4 exs., Tochigi Pref., Nishi-Nasuno, 22.III.1990 (SDEI). – **Locality not specified:** 9 exs., “Japan”, leg. LEWIS (BMNH).

**Singapore:** 1 ♂, Central Catchment area, N Nee Soon Swamp Forest, blacklight, 22.IV.1997, leg. HENDRICH (cSch).

#### Comment

In the original description of *S. rufescens*, which is based on an unspecified, probably greater number of syntypes, concrete localities are not indicated. SHARP (1874) only states that the species is “common”. Two female syntypes were available from the SHARP collection at the BMNH. They are in good agreement with the additional material listed below.

*Stilicus indicus* was described from an unspecified number of females from “Assam, Patkai Mountains” (CAMERON 1914) and subsequently regarded as a variety of *R. rufescens* with a black head and pronotum by CAMERON (1931). The only syntype found in the collections of the BMNH is a specimen without abdomen; its eyes are somewhat larger than is usually the case in *R. rufescens*. However, an examination of non-type specimens matching the original description revealed that they apparently represent a colour morph of *R. rufescens*.

*Rugilus kamchaticus* was described from two females, one of them designated as the holotype, from “central part of Kamchatka Peninsula, environs of Esso village, the bottomland of Uksichan River (RYABUKHIN 2007). According to the original description, *R. kamchaticus* is close to *R. rufescens*, but distinguished by “smaller size, the darker coloration, the shape and proportions of pronotum and

elytra, and by less distinct punctation of elytra”. An examination of the type specimens, however, revealed that in all these characters they are well within the range of intraspecific variation of *R. rufescens*; hence the synonymy proposed above.

#### Redescription

Body length 4.4–5.5 mm. In habitus and forebody similar to *R. chinensis* (see Figs. 215, 216).

Coloration: head and pronotum reddish to blackish-brown; elytra reddish to brown, with the lateral and the posterior margins, more rarely also the anterior margins paler, yellowish to reddish; abdomen blackish-brown, with the posterior portions of segments VII and VIII yellowish; legs yellowish to dark-yellowish; antennae reddish.

Head 1.05–1.10 times as wide as long; posterior angles rounded, but moderately marked; punctation dense, moderately fine, not confluent; dorsal surface matt. Eyes large and bulging, approximately as long as postocular region in dorsal view. Anterior margin of labrum with two short teeth in the middle, without distinct median incision.

Pronotum 1.05–1.10 times as wide as long and usually 0.80–0.85 times as wide as head; punctation similar to that of head; dorsal surface matt; midline punctate, but often somewhat less matt than remainder of dorsal surface.

Elytra approximately as long as, or slightly longer than pronotum; punctation fine, dense, and weakly granulose, with additional coarser, non-setiferous punctures arranged in a row on either side of suture and irregularly spaced on disc (similar to Fig. 217); interstices without microsculpture. Hind wings fully developed. Metatarsomere I elongate, as long as the combined length of II–IV, or nearly so.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with narrow impressions with moderately coarse punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices with very shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae; sternite VIII with shallowly concave posterior margin (Fig. 210); aedeagus small in relation to body size, approximately 0.55 mm long, apex of ventral process of broadly triangular shape in ventral view (Figs. 211–214).

#### Comparative notes

In external characters, *R. rufescens* is most similar to *R. brevior*, *R. bifidus*, and *R. chinensis*. For characters separating these species see the following sections.

#### Distribution and natural history

*Rugilus rufescens* is widespread in the East Palearctic and Oriental regions, from India to Kamchatka, Japan and

Singapore (material examined). According to CAMERON (1931), the species is distributed also “on the west and east coasts of Africa”. For additional records see BERNHAUER (1922a, 1926) (Taiwan, Indonesia), CAMERON (1928) (Malaysia; as *R. indicus*), CAMERON (1930) (Sumatra), COIFFAIT (1974) (Russian Far East), SCHEERPELTZ (1954) (Sri Lanka), WATANABE (1961, 1998) (Japan: Izu Islands, Koshiki Islands), and WATANABE & SHIBATA (1972, 1976) (Japan).

The examined material with labels specifying dates and additional details was collected from under stones and in various kinds of decaying organic matter such as compost, rotting hay, cut grass heaps, rotting figs, flood debris, leaf litter, and human faeces at a wide range of altitudes (400–2000 m) during the period from March through December. Teneral adults were observed in September. Flying specimens were captured at light sources in April and July.

*Rugilus (Eurystilicus) chinensis* (Bernhauer, 1938)  
(Figs. 215–220)

*Stilicus chinensis* Bernhauer, 1938: 34 f.

Type material examined

Lectotype ♂, present designation: “♀ [sic] / Nordwestl. / China / Chinkiang, Col. REITTER / EMMERICH REITTER vend. I.1938 / Cotypus / ex coll. SCHEERPELTZ / Cotypus *Stilicus chinensis* Bernhauer / Lectotypus ♂ *Stilicus chinensis* Bernhauer, desig. V. ASSING 2011 / *Rugilus chinensis* (Bernhauer), det. V. ASSING 2011” (NHMW). Paralectotype ♀: “Nordwestl. China, Chinkiang, Col. REITTER / *chinensis* Brnh. Typ. / *chinensis* Brnh. Typus, *Stilicus* / Chicago NHMus M. BERNHAUER Collection / *Rugilus chinensis* (Bernhauer), det. V. ASSING 2011” (FMNH).

Additional material examined

**China: Hubei:** 2 exs. [previously misidentified as *R. ceylanensis*], Mufu Shan, Jiugongshan forest park, 29.4° N, 114.65° E, VI.2002, leg. TURNA (NHMW). – **Fujian:** 45 exs., Ziyungdongshan, NW-slopes, 25° 46' N, 117° 20' E, 900–1100 m, 13.–14. VII.2007, leg. TURNA (NHMW, cAss); 2 exs., Fenshui Guan, NW-slopes, 27.9° N, 117.85° E, 1700 m, 7.V.2005, leg. TURNA (NHMW, cAss); 1 ex., 10 km NNE Shaowu, Guadun [“Kuatun”], 15.IV.1946, leg. TSCHUN (NHMW); 1 ex., same data, but 26.III.1946 (NHMW); 1 ex., same data, but 25.IV.1946 (NHMW); 1 ex., same data, but 20.VII.1946 (cAss); 1 ex., Fujian, Wuyi Shan Nat. Res., Sangan env., 900 m, flight interception trap, 30.V.–12.VI.2001, leg. HLAVÁČ & COOTER (cAss). – **Guangxi:** 1 ex., N-Guangxi, Miaoershan, S-slope, 1300–2000 m, 25.–26. VI.1997, leg. BOLM (cAss).

Comment

The original description is based on an unspecified number of females (“♂ nicht bekannt”) from “Nordwestl. China: Chinkiang” collected by “EM. REITTER” (BERNHAUER 1938). One female syntype was located in the

BERNHAUER collection at the FMNH; a second syntype, a mis-sexed male, was found in the SCHEERPELTZ collection at the NHMW. The latter is designated as the lectotype. According to MAKRANCZY (pers. comm.), no type material was found in the REITTER collection at the natural history museum of Budapest.

Redescription

Body length 4.4–5.6 mm. Habitus as in Fig. 215.

Coloration: head and pronotum blackish-brown; elytra blackish-brown with the humeral angles, the postero-lateral angles, and the posterior margins yellowish to reddish; abdomen blackish-brown, with the posterior portions of segments VII and VIII yellowish; legs and antennae reddish.

Head (Fig. 215) 1.05–1.10 times as wide as long; posterior angles rounded, but moderately marked; punctuation dense, moderately fine, not confluent; dorsal surface matt. Eyes large and bulging, approximately as long as postocular region and about 0.7–0.8 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two short teeth in the middle, without distinct median incision.

Pronotum (Fig. 215) short and broad, approximately as wide as long and usually 0.80–0.85 times as wide as head, strongly convex in cross-section; punctuation similar to that of head; dorsal surface completely matt.

Elytra (Fig. 215) approximately as long as, and much broader than pronotum; lateral margins distinctly convex in dorsal view; punctuation fine, very dense, and weakly granulose, with additional coarser, non-setiferous punctures arranged in a row on either side of suture and irregularly spaced on disc (Fig. 217); interstices without microsculpture. Hind wings fully developed. Metatarsomere I elongate, approximately as long as the combined length of II–IV, or nearly so.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with narrow impressions with moderately coarse punctuation; tergite VI without anterior impression; punctuation of remaining tergal surfaces very fine and dense; interstices with microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae; sternite VIII with shallowly concave posterior margin; aedeagus (Figs. 218–220) small in relation to body size, approximately 0.50 mm long, apical margin of ventral process evenly convex in ventral view.

Comparative notes

Based on the similar double punctuation of the elytra and particularly the similar general morphology of the aede-



gus, this species is undoubtedly closely allied to *R. rufescens*, from which it is distinguished by the larger average size, darker average coloration, the coloration of the elytra (humeral angles yellowish to reddish, lateral margins dark in the middle; *R. rufescens*: humeral angles not yellowish; lateral margins yellowish), and by the shape of the ventral process of the aedeagus (*R. rufescens*: apex of ventral process of triangular shape in ventral view).

#### Distribution and natural history

The species has been recorded from several localities in western and southern China (Jiangsu, Hubei, Fujian, Guangxi). The altitudes range from 900 to almost 2000 m. The examined specimens were collected in January and during the period from March through July.

#### *Rugilus (Eurystilicus) brevior* n. sp. (Figs. 221–227)

##### Type material

**Holotype** ♂: “China (C Sichuan) (2), Qincheng Shan, NW Chengdu, 650–700 m, 30.54 N, 103.33 E, 18.V.1997 WRASE / Holotypus ♂ *Rugilus brevior* sp. n. det. V. ASSING 2011” (cAss).

**Paratypes**: 2 ♀♀: same data as holotype (cSch); 1 ♂: “China: Sichuan (17), Qingcheng-Shan, NW Chengdu, 650–700 m, 30.53.57 N, 103.32.23 E, 3.–4.06.1997, M. SCHÜLKE / *Rugilus* n. sp.? cf. *rufescens* Shp. det. 199 [sic] G. DE ROUGEMONT” (cSch); 2 ♂♂, 1 ♀ [teneral]: “China C. Sichuan (Wenjiang Distr., Dujiangyan Co.) Qingcheng Shan, 975 m, 56 km NW Chengdu, 30° 54 N, 103° 33 E (field ridge), 18.VI.1999 D. W. WRASE” (cSch, cAss).

##### Etymology

The specific epithet (Latin, comparative of the adjective brevis: short) refers to the short elytra, one of the characters distinguishing *R. brevior* from the similar *R. rufescens*.

##### Description

Body length 4.0–4.6 mm. Habitus as in Fig. 221.

Coloration: forebody dark-reddish, with the posterior margin and the posterior sutural portion of the elytra yellowish; abdomen blackish with paler apex; legs dark-yellowish; antennae reddish-yellow.

Head (Fig. 222) approximately 1.05 times as wide as long; posterior angles rounded, but moderately marked; punctation dense, moderately fine, not confluent (Fig. 223); dorsal surface matt. Eyes moderately large, shorter than postocular region and barely 0.5 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with one moderately long tooth on either side of median incision.

Pronotum (Fig. 222) approximately 1.05 times as long as broad and 0.85 times as wide as head, strongly convex

in cross-section; punctation similar to that of head; dorsal surface completely matt.

Elytra (Fig. 222) relatively short, approximately 0.8 times as long as pronotum; punctation fine, moderately dense, and weakly granulose, with additional coarser, non-setiferous punctures arranged in a row on either side of suture and irregularly spaced on disc (Fig. 224); interstices without microsculpture. Hind wings apparently fully developed. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen approximately as broad as elytra; tergites III–V anteriorly with shallow impressions with rather fine punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices glossy, at most with shallow traces of microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae; sternite VIII with broadly concave posterior excision (Fig. 225); aedeagus approximately 0.55 mm long, shaped as in Figs. 226, 227.

##### Comparative notes

Based on the similar double punctation of the elytra, the otherwise similar external appearance, and particularly on the similar general morphology of the aedeagus, this species is closely allied to *R. rufescens*, from which it is distinguished by the much shorter and narrower elytra, the coarser non-setiferous punctures of the elytra, the smaller eyes, and the more slender apex of the aedeagus in ventral view.

##### Distribution and natural history

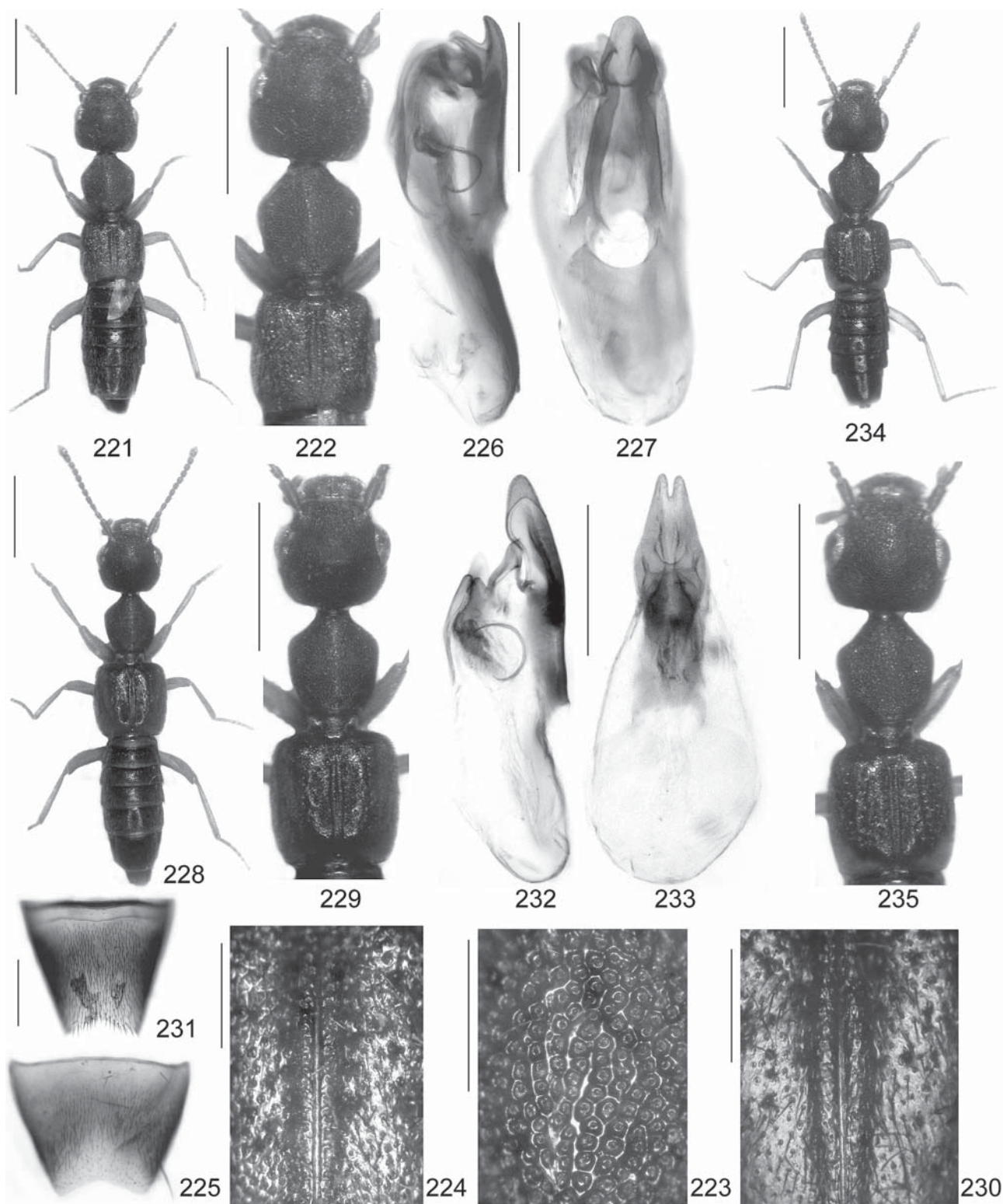
The species is known only from central Sichuan province, China, where it was collected at altitudes of 650–975 m in May and June. Three specimens collected in June are teneral.

#### *Rugilus (Eurystilicus) bifidus* n. sp. (Figs. 228–233)

##### Type material

**Holotype** ♂: “China: W-Fujian, 10.–29.V., 2 km SE Xinqiao, 27.02° N 117.06° E, 2005, leg. J. TURNA / Holotypus ♂ *Rugilus bifidus* sp. n. det. V. ASSING 2011” (NHMW).

**Paratypes**: 1 ♂, 1 ♀: “China: W-Fujian, Xinqiao, 10.V.2005, 27.05° N 117.1° E, leg. J. TURNA” (NHMW, cAss); 1 ♀: “China: Zhejiang [CH07-38], Hangzhou Pref., Tianmu Shan, S pass 41 km WNW Linan, NE valley, 350 m, 30° 21' 34" N, 119° 19' 01" E, plant refuse near creek, 17.VI.2007, M. SCHÜLKE” (cSch); 2 ♂♂, 4 ♀♀: “Myanmar: Sagaing Division, Alaungdaw Katthapa NP, 22° 18.902' N, 94° 28.060' E, 6.V.2003, ca. 400 m, leg. SCHILLHAMMER et al. (108) / *Rugilus ceylanensis* Kr., det. 2005 G. DE ROUGEMONT” (NHMW, cAss); 1 ♀: “Myanmar: Kachin State, Indawgyi Lake, 7 km S Lonton, 25° 02.42' N, 96° 16.52' E,



**Figs. 221–235.** *Rugilus brevior* (221–227), *R. bifidus* (228–233), and *R. japonicus* (234–235). – 221, 228, 234. Habitus. 222, 229, 235. Forebody. 223. Median dorsal portion of head. 224, 230. Sutural portion of elytra. 225, 231. Male sternite VIII. 226–227, 232–233. Aedeagus in lateral and in ventral view. – Scale bars: 1.0 mm (221–222, 228–229, 234–235), 0.2 mm (223–227, 230–233).

20.–25.V.1999, ca. 250 m / Flight Intercept Trap, leg. SCHILLHAMMER & SCHUH (51b) / *Rugilus ceylanensis* Kr., det. 2005 G. DE ROUGEMONT” (NHMW).

#### Etymology

The specific epithet (Latin, adjective) refers to the apically bifid ventral process of the aedeagus.

#### Description

Body length 4.5–5.3 mm. Habitus as in Fig. 228.

Coloration: head and pronotum dark-brown to blackish-brown; elytra dark-reddish, usually with the anterior margin, the scutellar portion, and the area on either side of the suture, sometimes also the lateral margins more or less extensively and usually somewhat diffusely infuscate; abdomen blackish-brown, with the posterior portions of segments VII and VIII yellowish; legs yellowish to dark-yellowish; antennae reddish.

Head (Fig. 229) 1.05–1.10 times as wide as long; posterior angles rounded, but moderately marked; punctation dense, moderately fine, not confluent; dorsal surface matt. Eyes large and bulging, approximately as long as postocular region and about 0.7–0.8 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with one rather short tooth on either side of the median incision.

Pronotum (Fig. 229) 1.05–1.10 times as long as broad and 0.75–0.80 times as wide as head, distinctly convex in cross-section; punctation similar to that of head; dorsal surface completely matt; rarely with indistinct, narrow, and short band with subdued shine in posterior half of midline.

Elytra (Fig. 229) approximately 0.95 times as long as pronotum; lateral margins distinctly convex in dorsal view; punctation fine and moderately dense, with additional coarser, non-setiferous punctures arranged in a row on either side of suture and irregularly spaced on disc (Fig. 230); interstices without microsculpture. Hind wings fully developed. Metatarsomere I elongate, approximately as long as the combined length of II–IV, or nearly so.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with narrow impressions with moderately coarse punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices with microreticulation; tergite VII with palisade fringe.

♂: sternite VII with weakly concave posterior margin, in the middle with a pair of long black setae; sternite VIII with broad and moderately shallow posterior excision (Fig. 231); aedeagus approximately 0.55 mm long, shaped as in Figs. 232, 233.

#### Comparative notes

Based on the similar double punctation of the elytra and the otherwise similar external appearance, this species is

probably closely allied to *R. rufescens*, from which it is distinguished only by the shorter elytra and by the completely different shape of the ventral process of the aedeagus. No other species in the region has the apex of the ventral process deeply bifid in ventral view.

#### Distribution and natural history

The species is known from Myanmar and western China. The type material with labels specifying additional data was collected from plant refuse and with a flight interception trap at low altitudes (250–400 m) in May and June.

#### *Rugilus (Eurystilicus) japonicus* Watanabe, 1961 (Figs. 234–244)

*Rugilus japonicus* Watanabe, 1961: 351 f.

*Stilicus ferreirai* Scheerpeltz, 1978: 200 ff.; **n. syn.**

*Stilicus bakeri* Bernhauer, in litteris; partim.

#### Type material examined

Holotype ♂ [damaged; abdominal apex including aedeagus missing]: “♂ / Timor / Na nb. Abatu, junto a Rainbo [?], 17-II-65 R. N. F. / *Stilicus Ferreirai* Scheerp. / ex coll. SCHEERPELTZ / Typus *Stilicus Ferreirai* O. Scheerpeltz / Holotypus *Stilicus ferreirai* Scheerpeltz, rev. V. ASSING 2011 / *Rugilus japonicus* Watanabe, det. V. ASSING 2011” (NHMW). Paratype ♂: “♀ [sic] / Timor (Turiscai), Rib. junto a campá [?] / 2e finca [?] 28.X.65 R. N. F. / *Stilicus Ferreirai* Scheerp. / ex coll. SCHEERPELTZ / Typus *Stilicus Ferreirai* O. Scheerpeltz / Paratypus *Stilicus ferreirai* Scheerpeltz, rev. V. ASSING 2011 / *Rugilus japonicus* Watanabe, det. V. ASSING 2011” (NHMW).

#### Additional material examined

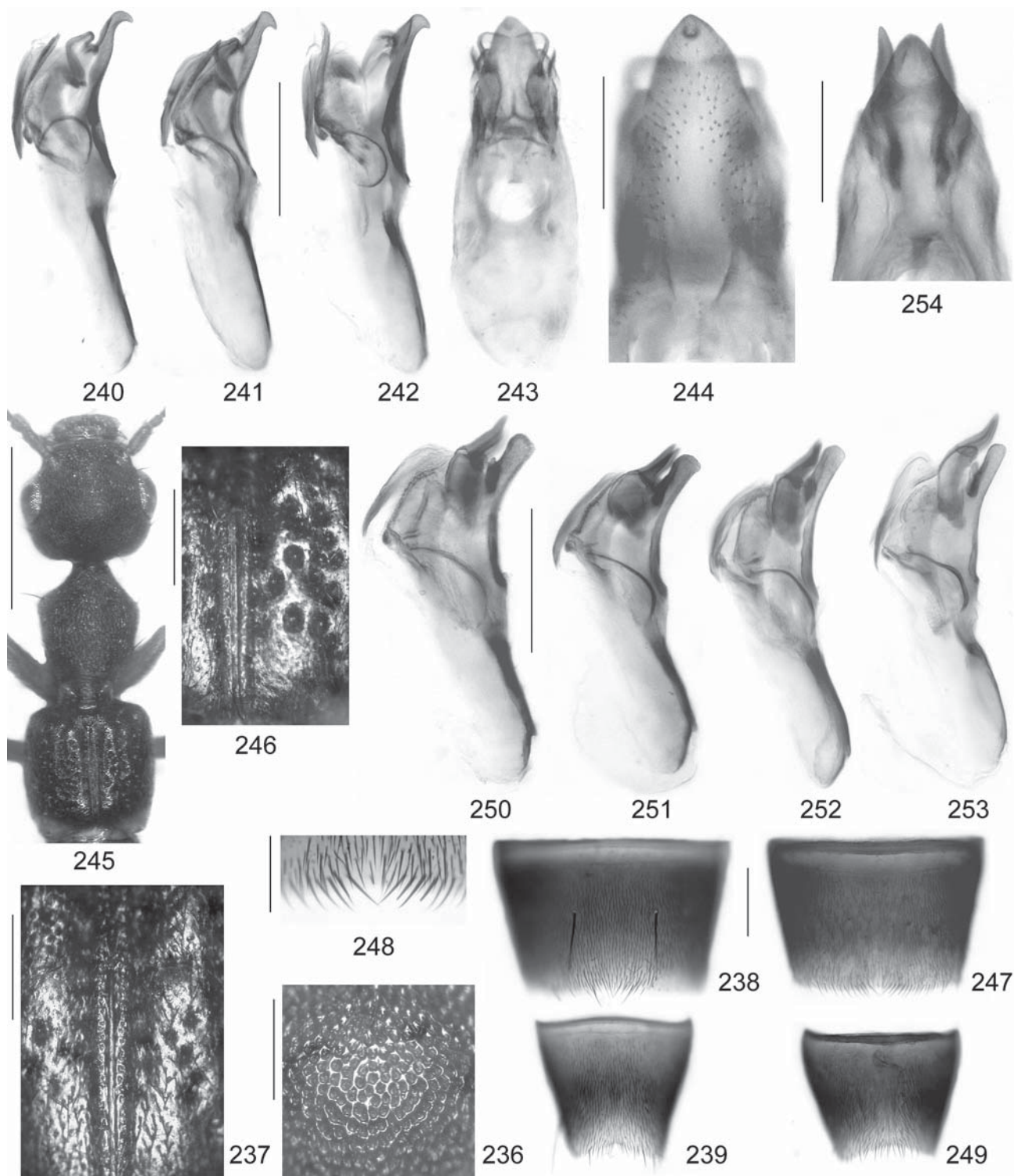
**Japan:** 2 exs., Ryukyu islands, Iriomote island, Funauki env., 21.–25.III.2007, leg. LACKNER (cAss).

**Taiwan:** 6 exs., Taitung Hsien, Hsinkangshan foothills near Chengkung, 350–400 m, 19.VII.1993, leg. SMETANA [T155] (cSme, cAss); 5 exs., Taitung Hsien, Hsinkangshan foothills near Chengkung, 400–450 m, 20.VII.1993, leg. SMETANA [T157] (cSme, cAss); 2 exs., Taichung Hsien, Wufeng, 100–120 m, 14.IV.1990, leg. SMETANA [T1] (cSme, cAss); 2 exs., Taichung Hsien, Wufeng, 60 m, 24.IV.1992, leg. SMETANA [T99] (cSme); 1 ex., Taipei Hsien, TianMu Gudao Hiking Trail, Beitou, S Saman mt., old forest litter, 3.I.2009, leg. VIT (cAss); 3 exs., Chiayi Hsien, Alishan, road 129, km 15.5, after Tanaigu track, 600 m, leaf litter, 13.IV.2009, leg. VIT (cAss); 4 exs., Hualien Hsien, road no. 23, km 7.5, 400 m, farming gully litter, 10.IV.2007, leg. VIT (cAss).

**Thailand:** 1 ex., Rayong province, Khao Chamao National Park, at light, 12.XII.1990, leg. JACH (NHMW).

**Vietnam:** 1 ex. [teneral], Nam Cat Tien National Park, 1.–15.V.1994, leg. PACHOLATKO & DEMBICKÝ (cAss).

**Sri Lanka:** 5 exs., Mihiripennia, 6° 00' N, 80° 00' E, cow dung, 1.1983, leg. DARBY (BMNH, cAss); 3 exs., Kandy, Udawat-takela Res., 7° 20' N, 80° 07' E, 500 m, ex rotting fruit of *Artocarpus heterophyllus* on ground in rain forest, 10.I.1983, leg. DARBY (BMNH); 2 exs., Polonnaruwa, 7° 55' N, 81° 00' E, litter at edge of Lake Parakrama Jamudra, 13.I.1983, leg. DARBY (BMNH, cAss).



**Figs. 236–254.** *Rugilus japonicus* (236–244) and *R. seriatus* (245–254). – **236.** Median dorsal portion of head. **237, 246.** Sutural portion of elytra. **238, 247.** Male sternite VII. **239, 249.** Male sternite VIII. **240–242, 250–253.** Aedeagus in lateral view (240: paratype of *R. ferreirai*; 241: Taiwan; 242: Sri Lanka; 250: holotype; 251: Luzon; 252–253: Sulawesi). **243.** Aedeagus in ventral view. **244, 254.** Ventral process of aedeagus in ventral view. **245.** Forebody. **248.** Median portion of posterior margin of male sternite VII. – Scale bars: 1.0 mm (245), 0.2 mm (236–243, 246–247, 249–253), 0.1 mm (244, 248, 254).

**Indonesia:** 1 ex., Timor, 11 km N Soe, evergreen forest, 30.III.1991, leg. AGOSTI (MHNG); 1 ♂, Sumbawa (NHMW).

**Philippines:** 1 ex., Masbate, Aroroy (SDEI); 1 ♀, Mindanao, Momungan, leg. BÖTTCHER & STAUDINGER (NHMW).

#### Comment

The original description of *R. japonicus* is based on the holotype and four paratypes from “Mt. Oyama, Miyake Is. Japan” and one paratype from “Eigô, Hachijô Is. Japan” (WATANABE 1961). The type material was not examined, but the additional material listed below, including two specimens from southern Japan, is in good agreement with the details and the illustration of the aedeagus provided in the original description.

SCHERPELTZ (1978) described *S. ferreirai* based on two specimens (“Dadim-Bere, Same, 17-II-1965, Holotypus ♂; Turucui, 28-X-1965, Allotypus ♀”) collected from rotting plant material. Both type specimens were located in the SCHERPELTZ collection at the NHMW. The holotype is damaged; the paratype – a mis-sexed male – is in good condition. Based on the material seen from Japan and other geographically close localities, there is little doubt that *R. ferreirai* is conspecific to – and a synonym of – *R. japonicus*. The aedeagus of the paratype of *R. ferreirai* is illustrated in Fig. 240.

#### Redescription

Body length 4.0–4.8 mm. Habitus as in Fig. 234.

Coloration variable: head, pronotum, and abdomen reddish-brown to blackish; elytra bicoloured, reddish-brown to blackish, with the postero-lateral angles more or less extensively yellowish; legs usually yellowish; antennae reddish.

Head (Fig. 235) transverse, 1.10–1.15 times as wide as long, usually narrowed immediately behind eyes, more rarely shortly parallel behind eyes; posterior angles rounded, but mostly noticeable, rarely practically obsolete (some specimens from Sri Lanka); punctation (Fig. 236) dense, moderately fine, sometimes partly confluent; dorsal surface matt. Eyes large and bulging, usually distinctly longer than postocular region in dorsal view. Anterior margin of labrum with a short tooth on either side of the small median incision.

Pronotum (Fig. 235) short and broad, usually 1.03–1.07 times as wide as long and 0.75–0.80 times as wide as head, strongly convex in cross-section; punctation similar to that of head or slightly coarser, often more or less distinctly confluent; dorsal surface completely matt.

Elytra (Fig. 235) approximately as long as, and much broader than pronotum; punctation fine and dense, with additional moderately to very coarse, non-setiferous punctures arranged in series or irregularly spaced on disc (Fig. 237); interstices without microsculpture. Hind wings fully developed. Metatarsomere I elongate, usu-

ally slightly shorter than the combined length of II–IV, or nearly so.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with narrow impressions with moderately coarse punctation; tergite VI without anterior impression; punctation of remaining tergal surfaces very fine and dense; interstices with microreticulation; tergite VII with palisade fringe.

♂: sternite VII (Fig. 238) with weakly concave posterior margin, in the middle with a pair of long black setae; sternite VIII (Fig. 239) with shallowly concave posterior margin; aedeagus (Figs. 240–244) 0.50–0.55 mm long, ventral process apically acute (ventral view), curved, and somewhat hooked (lateral view).

#### Comparative notes

Based on the similar external characters, particularly the double punctation of the elytra, and the general morphology of the aedeagus, *R. japonicus* is apparently most closely allied to *R. seriatus*. From this and from other species of the genus, it is readily distinguished by the characteristic morphology of the aedeagus. For additional characters separating it from *R. seriatus* see the following section.

#### Distribution and natural history

*Rugilus japonicus* is widespread in the Oriental region, from Sri Lanka to the Philippines and Indonesia, its distribution extending northwards to southern Japan. For additional Japanese localities see WATANABE (2010a), WATANABE & ONODA (1994) and WATANABE & SHIBATA (1972).

The examined material with labels specifying dates and additional details was collected from forest leaf litter and rotting fruit at low altitudes (60–600 m) during the period from January through May and in July, October, and December. One specimen was captured at a light source in December.

#### *Rugilus (Eurystilicus) seriatus* (Cameron, 1930) (Figs. 245–254)

*Stilicus seriatus* Cameron, 1930: 336.

*Stilicus kraatzi* Bernhauer, in litteris.

*Stilicus bakeri* Bernhauer, in litteris; partim.

*Stilicus celebensis* Bernhauer, in litteris.

#### Type material examined

Holotype ♂ [apparently slightly teneral]: “Type / Bukit Kutu, Selangor, F. M. S., Dr. CAMERON. / *Astenus* [sic] *seriatus* Cam. Type / M. CAMERON Bequest. B. M. 1955-147 / Holotypus ♂ *Stilicus seriatus* Cameron, rev. V. ASSING 2011 / *Rugilus seriatus* (Cameron), det. V. ASSING 2011” (BMNH). Paratypes: 1 ♂ [without head], 1 ex.: “Fort de Kock (Sumatra) 920 M., 1926, leg. E. JACOBSON / M. CAMERON Bequest. B. M. 1955-147 / Syntype / Syntype *Stilicus seriatus* Cameron, 1930, det. R. G. BOOTH 2011 / Paratypus *Stilicus seriatus* Cameron, rev. V. ASSING 2011”

(BMNH); 1 ex.: “Sumatra. Fort de Kock. E. JACOBSON. B. M. 1932-202 / Fort de Kock (Sumatra) 920 M., 1926, leg. E. JACOBSON / *Stilicus seriatus* Cam / Syntype / Paratypus *Stilicus seriatus* Cameron, rev. V. ASSING 2011” (BMNH).

#### Additional material examined

**Malaysia:** 1 ♂, Borneo, Sabah, Poring Hot Springs, 500 m, 7.V.1987, BURCKHARDT & LÖBL (MHNG); 1 ♀, Pahang, Tioman Island, Kampung Tekek env., 15.–24.VII.1993, leg. SCHUH (NHMW); 1 ♂, 1 ♀ [elytra missing] [“*Stilicus Kraatzi* Brh. Typ.”], “Malay-Ins.” (SDEI).

**Indonesia:** 2 exs., SE-Sulawesi, 30 km W Kendari, Kendari Airport, 11.–14.II.1994, leg. STRBA & JENIS (NHMW, cAss); 10 exs. [“*Rugilus celebensis* Bnh., det. 1998 G. DE ROUGEMONT”], C-Sulawesi, Palu, Palolo, Kamarora, trail to waterfall, 700 m, 23.–27.VIII.1997, leg. A. RIEDEL (NHMW, cAss).

**Philippines:** 1 ♂, 1 ♀, Luzon, Lagunas, Mt. Makiling, above Mad Springs, 400–700 m, degraded rainforest, 19.–22.XI.1995, leg. KODADA (MHNG, cAss); 1 ♀, Mindoro, SE Puerto Galera, 14.XI.1992, 100 m, leg. JÄCH (NHMW); 1 ♂, 2 ♀♀ [“*Cotypus Stilicus bakeri* Bernhauer”], Aroroy, Masbate, leg. BÖTTCHER (NHMW); 1 ♀ [“*Cotypus Stilicus bakeri* Bernhauer”], Leyte, leg. BÖTTCHER (NHMW); 2 ♂♂ [“*Cotypus Stilicus bakeri* Bernhauer”], Mindanao, Momungan, leg. BÖTTCHER (NHMW); 1 ♂ [“*Cotypus Stilicus bakeri* Bernhauer”], Dapa, Siargao, leg. BÖTTCHER (cAss).

#### Comment

The original description is based on a “Type from Selangor, Malay Peninsula” and an unspecified number of paratypes from “Fort de Kock” (CAMERON 1930). The holotype and two paratypes were located in the collections of the BMNH. The aedeagus of the holotype is illustrated in Fig. 250.

#### Redescription

Body length 3.8–4.5 mm.

Coloration highly variable: head, pronotum, and abdomen dark-reddish to blackish; elytra with postero-lateral angles yellowish, remainder of dorsal surface reddish with more or less extensive dark lateral spot to blackish with weakly apparent dark-reddish humeral angles; legs with the tibiae and tarsi yellowish to reddish, femora yellowish with the apices extensively, but sometimes only weakly infuscate; antennae reddish.

Head (Fig. 245) approximately 1.1 times as wide as long, usually narrowed immediately behind eyes; posterior angles rounded, but usually noticeable; punctation dense, moderately fine, not confluent; dorsal surface matt. Eyes large, longer than postocular region and approximately 0.8 times as long as distance from posterior margin of eye to posterior constriction in dorsal view. Anterior margin of labrum with two extremely short, barely noticeable teeth situated in the median incision.

Pronotum (Fig. 245) short and broad, approximately as wide as long and 0.80–0.85 times as wide as head, strongly

convex in cross-section; punctation somewhat coarser than that of head; dorsal surface completely matt.

Elytra (Fig. 245) approximately as long as, and much broader than pronotum; suture depressed, particularly so in anterior portion, where the disc is smoothly elevated on either side of suture; ground punctation fine and dense, with conspicuously large non-setiferous punctures either randomly distributed (material from Malaysia and Indonesia, Fig. 246) or arranged in distinct series (material from Malaysia and Philippines); interstices without microsculpture, glossy. Hind wings fully developed. Metatarsomere I long, nearly as long as the combined length of II–IV.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced impressions with rather fine punctation; tergite VI with shallow, finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices with shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII (Fig. 247) with very weakly concave posterior margin, in the middle with a pair of very long black setae, near the middle of posterior margin with dense, moderately long setae (Fig. 248); sternite VIII with broadly concave posterior excision; aedeagus approximately 0.45 mm long, with a pair of apical internal structures of distinctive shape (Figs. 250–254).

#### Comparative notes

This species is distinguished from all its congeners by the characteristic morphology of the aedeagus, from the externally similar *R. japonicus* additionally by the – on average – coarser non-setiferous punctures of the elytra and by the coloration of the legs.

#### Distribution and natural history

*Rugilus seriatus* is widespread in Malaysia, Indonesia, and the Philippines. The material with labels specifying dates and additional details was collected at altitudes of 100–700 m in February, May, August, and November. Two specimens were found in a degraded rainforest.

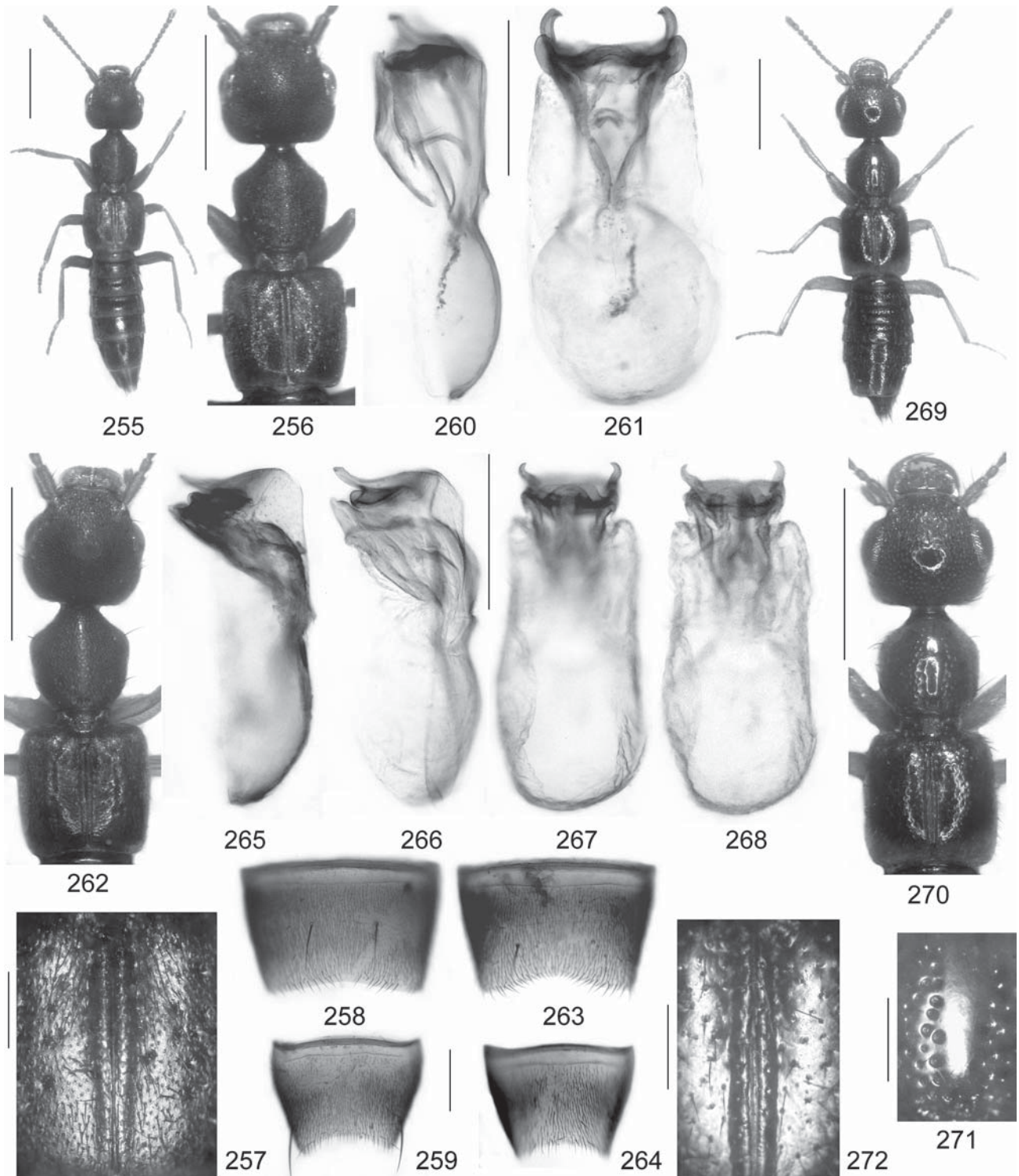
#### *Rugilus (Eurystilicus) bihamatus* n. sp. (Figs. 255–261)

*Stilicus philippinus* Bernhauer, in litteris.

#### Type material

**Holotype** ♂: “Philippines, Luzon: Lagunas, Mt. Banahaw above Kinabuhayan, 600–700 m, trail to Crystalino, 24.XI.1995, J. KODADA & B. RIGOVÁ lgt. / Holotypus ♂ *Rugilus bihamatus* sp. n. det. V. ASSING 2011” (MHNG).

**Paratypes**: 7 exs.: same data as holotype (MHNG, cAss); 1 ♂: “Momungan, Mindanao / *Stilicus philippinus* Bh., det. H. KORGE / DEI Müncheberg Col –01275” (SDEI); 1 ex., 1 ♀: “♀ / Momungan, Mindanao / leg. BÖTTCHER, I. LOS; STAUDINGER



**Figs. 255–272.** *Rugilus bihamatus* (255–261), *R. appendiculatus* (262–268), and *R. lucens* (269–272). – 255, 269. Habitus. 256, 262, 270. Forebody. 257, 272. Sutural portion of elytra. 258, 263. Male sternite VII. 259, 264. Male sternite VIII. 260–261, 265–268. Aedeagus in lateral and in ventral view. 271. Posterior median portion of pronotum. – Scale bars: 1.0 mm (255–256, 262, 269–270), 0.2 mm (257–261, 263–268, 271–272).

/ ex coll. SCHEERPELTZ / *Cotypus Stilicus philippinus* Bernhauer" (NHMW); 2 ♂♂: "♀ [sic] / Leyte, Philipp / leg. BÖTTCHER, I. LOS; STAUDINGER / ex coll. SCHEERPELTZ" (NHMW, cAss); 1 ♂: "♂ / Biliran, Philippin. / leg. BÖTTCHER, I. LOS; STAUDINGER / ex coll. SCHEERPELTZ / *Cotypus Stilicus philippinus* Bernhauer" (cAss).

#### Etymology

The specific epithet (Latin, adjective) is derived from the noun hamus (hook) and refers to the apical internal structures of the aedeagus.

#### Description

Body length 3.7–4.8 mm. Habitus as in Fig. 255.

Coloration: head, pronotum, and abdomen dark-brown to blackish-brown; elytra dark-brown, with the suture, the posterior margins, and the humeral portion extensively reddish; legs and antennae dark-reddish.

Head (Fig. 256) transverse, approximately 1.1 times as wide as long; posterior angles somewhat rounded, but moderately marked; punctuation dense, moderately fine, areolate, not distinctly confluent, and uniform; dorsal surface matt. Eyes large, longer than postocular portion and 0.8–0.9 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two short teeth in the middle, without distinct median incision.

Pronotum (Fig. 256) short, approximately 1.05 times as long as wide and 0.8 times as wide as head, strongly convex in cross-section; on either side with two very long lateral setae, one in anterior angle and one behind middle; punctuation similar to that of head.

Elytra (Fig. 256) approximately as long as, and much broader than pronotum; micropunctuation fine and dense, interspersed with coarser, but not very dense non-setiferous punctures (Fig. 257). Hind wings fully developed. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced impressions with coarser, but shallow sculpture; tergite VI with shallow, finely punctate impression; punctuation of remaining tergal surfaces very fine and dense; interstices with shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with broadly concave posterior margin, posteriorly with row of longer dark submarginal setae, in the middle with a pair of very long black setae (Fig. 258); sternite VIII broadly concave posteriorly, postero-laterally with conspicuously stout, long black seta on either side (Fig. 259); aedeagus approximately 0.45 mm long, weakly sclerotized and of broad shape, with two hook-shaped apical internal structures best visible in ventral view (Figs. 260, 261).

#### Comparative notes

*Rugilus bihamatus* is distinguished from the similarly coloured *R. ceylanensis* by smaller size, the presence of additional non-setiferous punctures on the elytra, the shape and chaetotaxy of the male sternites VII and VIII, and particularly by the derived morphology of the aedeagus.

#### Distribution and natural history

The species is currently known from several localities in the Philippines (Luzon, Mindanao, Leyte). The specimens from Luzon were collected at an altitude of 600–700 m in November.

#### *Rugilus (Eurystilicus) appendiculatus* n. sp. (Figs. 262–268)

#### Type material

**Holotype** ♂: "Sabah: Poring Hot Springs, 500 m, 11.V.1987, BURCKHARDT-LÖBL / Holotypus ♂ *Rugilus appendiculatus* sp. n. det. V. ASSING 2011" (MHNG).

**Paratype** ♂: same data as holotype (cAss).

#### Etymology

The specific epithet (adjective) is derived from the Latin noun appendix and refers to the apical internal structures of the aedeagus.

#### Description

Body length 3.8–4.0 mm.

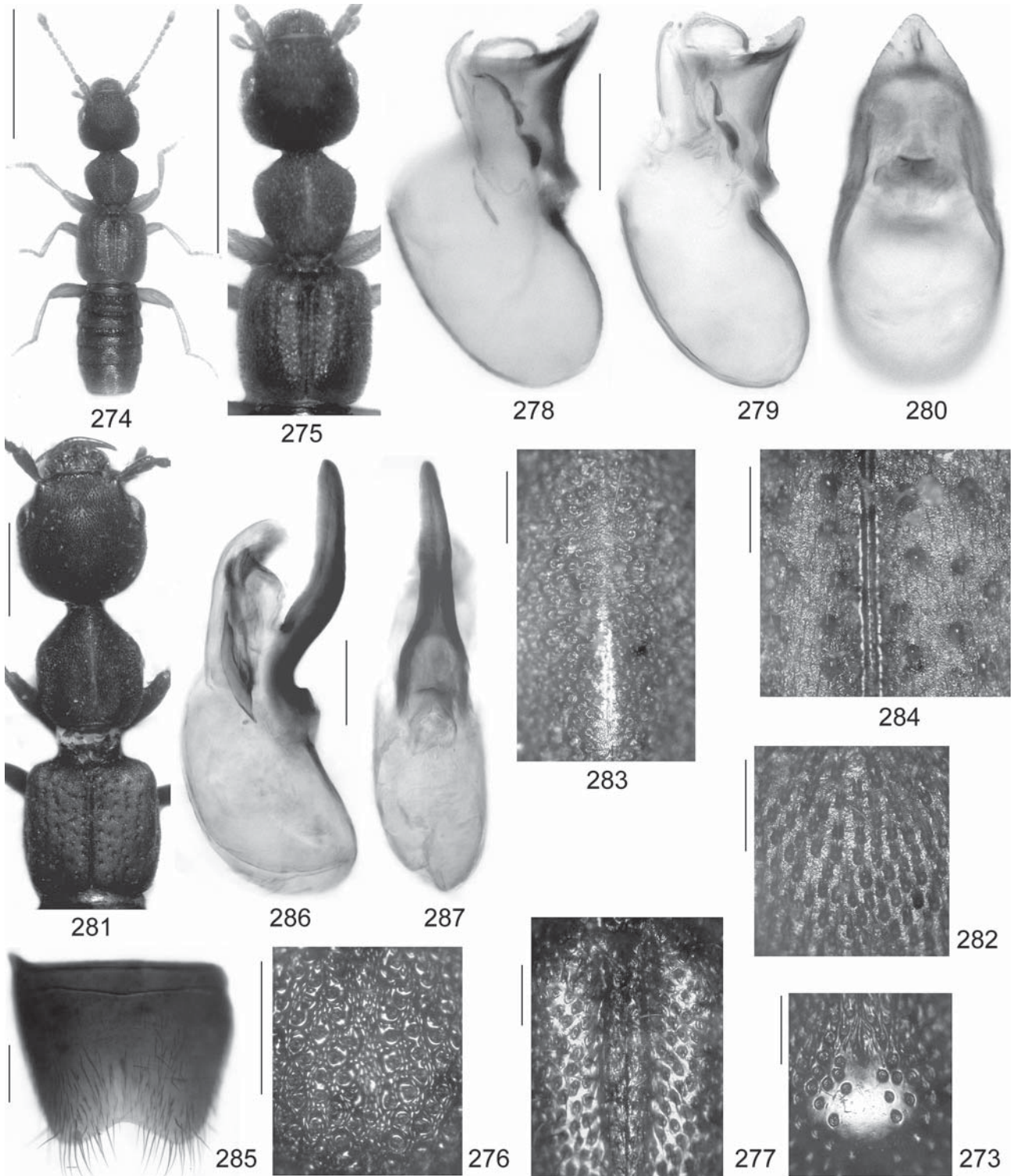
Coloration: head, pronotum, and abdomen reddish-brown; elytra reddish; legs yellowish; antennae pale-reddish.

Head (Fig. 262) weakly transverse, approximately 1.05 times as wide as long; posterior angles somewhat rounded, but moderately marked; punctuation dense, moderately fine, areolate, not distinctly confluent, and uniform; dorsal surface matt. Eyes large, longer than postocular portion and approximately 0.8 times as long as distance from posterior margin of eye to posterior constriction. Anterior margin of labrum with two very short teeth in the middle, without distinct median incision.

Pronotum (Fig. 262) short, approximately 1.05 times as long as wide and 0.85 times as wide as head, strongly convex in cross-section; on either side with two very long lateral setae, one in anterior angle and one behind middle; punctuation similar to that of head.

Elytra (Fig. 262) slightly shorter and much broader than pronotum; setiferous punctuation fine and moderately dense, interspersed with coarser, but not very dense non-setiferous punctures. Hind wings fully developed. Metatarsomere I approximately as long as the combined length of II and III, or nearly so.





**Figs. 273–287.** *Rugilus lucens* (273), *R. pygmaeus* (274–280; 279–280: lectotype), and *Stilicoderus melancholicus*, holotype (281–287). – 273, 276, 282. Median dorsal portion of head. 274. Habitus. 275, 281. Forebody. 277, 284. Sutural portion of elytra. 278–280, 286–287. Aedeagus in lateral and in ventral view. 283. Median portion of pronotum. 285. Male sternite VIII. – Scale bars: 1.0 mm (274–275, 281), 0.2 mm (282–287), 0.1 mm (273, 276–280).

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with pronounced, coarsely punctate impressions; tergite VI with shallow, finely punctate impression; punctation of remaining tergal surfaces very fine and dense; interstices with shallow microreticulation; tergite VII with palisade fringe.

♂: sternite VII with broadly concave posterior margin, posteriorly with row of longer dark submarginal setae, in the middle with a pair of very long black setae (Fig. 263); sternite VIII broadly concave posteriorly (Fig. 264), postero-laterally with conspicuously stout, long black seta on either side; aedeagus approximately 0.4 mm long, weakly sclerotized and of broad shape, with two hook-shaped apical internal structures best visible in ventral view (Figs. 265–268).

#### Comparative notes

Based on the similar external and male secondary sexual characters, as well as particularly on the similarly derived morphology of the aedeagus (weakly sclerotized, broad shape, hook-shaped apical internal structures), *R. appendiculatus* is closely related to *R. bihamatus*. It is distinguished from this species by different coloration (yellowish legs, uniformly reddish elytra) and above all by the differently shaped aedeagus.

#### Distribution and natural history

The type locality is situated in Sabah (Malaysia) in the north of Borneo. The two type specimens were collected at an altitude of 500 m in May.

#### *Rugilus lucens* n. sp. (Figs. 269–273)

##### Type material

**Holotype** ♀: “Nepal Himalaya, Dhawalagiri, 2004, Baglung Lekh / west Baglung, 2.400 m, N 28° 18' 50,1", E 083° 31' 18,6", 12.V.2004, leg. A. KLEEBERG / Holotypus ♀ *Rugilus lucens* sp. n. det. V. ASSING 2011” (cAss).

**Paratype** ♀: “C-Nepal, 21–27.VII.2000, Chitwan (Roy. Nat. Park), Sauraha vill. env., 27.35 N 84.30 E, 166 m [GPS], JAN FARKAČ lgt. (at light) / Nepal Expedition JAN FARKAČ, DAVID KRÁL & JAN SCHNEIDER, 2000” (NHMB).

##### Etymology

The specific epithet is the present participle of the Latin verb *lucere* (to shine) and refers to the conspicuously glossy appearance of the species.

##### Description

Small species; body length 3.5–4.0 mm. Habitus as in Fig. 269.

Coloration: head and pronotum reddish, with the dorsal surface of the head weakly and diffusely infuscate in the

middle; elytra reddish, with a broad, obliquely transverse dark spot in posterior half and with the postero-lateral angles and the posterior margins broadly yellowish; abdomen blackish-brown, with the apex (segments VIII–X, broad posterior margin of segment VII) yellowish; legs yellowish; antennae yellowish red.

Head (Fig. 270) distinctly transverse, almost 1.2 times as broad as long, narrowed behind eyes; punctation rather dense, with the interstices narrower than the diameter of the punctures, but not reduced to narrow ridges; median portion of dorsal surface impunctate and glossy (Fig. 273). Eyes large and bulging, more than twice as long as postocular portion in dorsal view. Anterior margin of labrum with one small tooth on either side of middle. Both mandibles with three molar teeth, the basal one not conspicuously enlarged.

Pronotum (Fig. 270) short, weakly oblong, approximately 1.05 times as long as broad and 0.75 times as wide as head, strongly convex in cross-section; posterior angles moderately marked; punctation relatively sparse, near middle of posterior margin with some very coarse punctures; interstices shiny, in lateral portions on average distinctly wider than diameter of punctures; midline broadly impunctate (Fig. 271).

Elytra (Fig. 270) approximately as long as, and much wider than pronotum; punctation fine and conspicuously sparse (Fig. 272); interstices glossy. Hind wings fully developed. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen almost as broad as elytra; tergites III–V with marked and coarsely punctate impressions; punctation of remaining tergal surfaces fine and dense; interstices without microsculpture and shiny; posterior margin of tergite VII with palisade fringe.

♂: unknown.

#### Comparative notes

This species is so distinctive in external characters that a description can be justified, even though the male sexual characters are unknown. It is readily distinguished from all other East Palaearctic and Oriental congeners by its colourful appearance, the absence of microsculpture on the dorsal surface of the whole body, the large eyes, the very sparsely and finely punctate elytra, and particularly the almost sparse punctation and broadly impunctate midline of the pronotum, as well as the punctation of the head (only moderately dense; median portion of dorsal surface impunctate). The subgeneric affiliations of *R. lucens* are uncertain.

#### Distribution and natural history

As is suggested by the fully developed wings, *R. lucens* is probably widespread, even if, at present, it is known only

from two localities in central Nepal, where it was collected at altitudes of approximately 170 and 2400 m. The paratype was found at a light source in July.

*Rugilus pygmaeus* (Kraatz, 1859)  
(Figs. 274–280)

*Stilicus pygmaeus* Kraatz, 1859: 126 f.

*Stilicus parvus* Cameron, 1931: 109 f.; **n. syn.**

Type material examined

*S. pygmaeus*: Lectotype ♂: “99 / Ceylon / *pygmaeus* / coll. KRAATZ / Holotypus / DEI Müncheberg Col–01254 / Lectotypus ♂ *Stilicus pygmaeus* Kraatz, rev. V. ASSING 2011 / *Rugilus pygmaeus* (Kraatz), det. V. ASSING 2011” (SDEI).

*S. parvus*: Syntype ♀: “Type / Dung / Chakrata Dist. Saiya 3600' / Dr. CAMERON 2.V.22. / *S. parvus* Cam. Type / M. CAMERON Bequest 1955-147 / *Rugilus pygmaeus* (Kraatz), det. V. ASSING 2011” (BMNH).

Additional material examined

**Thailand**: 1 ex., Chumphon province, Pha To env., 9° 48' N, 98° 47' E, 27.III.–14.IV.1996, leg. PRŮDEK (cSch); 1 ex., same data, but 1.–12.III.1996 (cAss).

Comment

*Stilicus pygmaeus* was described from an unspecified number of syntypes, among them at least one male, from “Ceylon” (KRAATZ 1859). One male type specimen was located in the KRAATZ collection at the SDEI. In using the term “Holotypus” for this specimen in a type catalogue, GAEDIKE (1981) unintentionally designated it as the lectotype. The holotype label attached to it is of no taxonomic significance. The aedeagus of the lectotype is illustrated in Figs. 279, 280.

The original description of *Stilicus parvus* is based on an unspecified number of syntypes from “Dehra Dun. Chakrata district: Saiya” (CAMERON 1931). Only one female syntype was available from the CAMERON collection at the BMNH. An examination of this specimen yielded no evidence whatsoever that it should not be conspecific with *R. pygmaeus*; hence the synonymy proposed above.

Redescription

Small species; body length 2.5–3.2 mm. Habitus as in Fig. 274.

Coloration: head dark-brown to blackish; pronotum reddish to dark-brown; elytra yellowish; abdomen pale-brown to brown with yellowish apex; legs yellowish; antennae dark-yellowish.

Head (Fig. 275) approximately as long as broad; lateral margins behind eyes smoothly rounded towards posterior constriction, posterior angles practically obsolete; punctation coarse and dense; interstices with pronounced micro-

reticulation and matt (Fig. 276). Eyes of moderate size, less than half as long as the distance from posterior margin of eye to posterior constriction. Labrum with distinct tooth on either side of the narrow median incision. Both mandibles with three molar teeth, the basal one not enlarged.

Pronotum (Fig. 275) short and compact, approximately as long as broad and 0.9 times as wide as head; punctation moderately dense; midline narrowly impunctate, but with pronounced microreticulation and matt.

Elytra (Fig. 275) approximately 1.05 times as long as, and much broader than pronotum; suture impressed, particularly so in anterior portion; ground punctation distinctly granulose and moderately dense (Fig. 277); each elytron with 1–2 weakly defined rows of – partly confluent – coarser non-setiferous punctures; interstices without microsculpture. Hind wings fully developed. Tarsi short; metatarsomere I approximately as long as the combined length of II and III; II approximately as broad as long; III and IV weakly transverse.

Abdomen distinctly narrower than elytra; tergites III–V anteriorly with relatively shallow, very coarsely punctate anterior impressions; tergite VI without appreciable anterior impression; punctation fine and dense; interstices with microreticulation, but somewhat glossy; posterior margin of tergite VII with palisade fringe.

♂: sternite VII without distinct modifications; posterior margin of sternite VIII moderately concave in the middle; aedeagus small, 0.33 mm long, and of distinctive shape (Figs. 278–280).

Comparative notes

This species is characterized particularly by its small size, the presence of pronounced microsculpture on the head and pronotum, the impunctate, but coarsely microsculptured midline of the pronotum, the distinctly granulose punctation of the elytra, the short tarsi, the shape of the male sternite VIII, as well as by the distinctive aedeagus. The subgeneric affiliations of *R. pygmaeus* are uncertain.

Distribution and natural history

*Rugilus pygmaeus* has been recorded from northern India, Sri Lanka, Thailand, Vietnam, Timor, and “the Federated Malay States” (CAMERON 1931 and material examined). The examined syntype of *Stilicus parvus* was collected from dung at an altitude of approximately 1100 m.

**5 Key to the *Rugilus* species of the East Palearctic and Oriental regions**

The following key accounts for the species recorded from the Oriental and East Palearctic regions east of Middle Asia, including the Himalaya and its western extensions. *Rugilus brahmanus* from Bhutan, whose male sexual characters are unknown, is

omitted. ROUGEMONT (1998) states that *R. latiparameris* (no material examined) is characterized by long and broad elytra and in this respect similar to *R. nepalensis*, but does not mention how the measurements were taken. In the key below, *R. latiparameris* is treated as having elytra of similar length as *R. nepalensis*, which is micropterous. Note that a reliable identification is mostly possible only based on an examination of the male sexual characters.

For illustrations of the aedeagi of species not illustrated in the present paper see COIFFAIT (1984) and ROUGEMONT (1987, 1998).

- 1 Conspicuously small species (Fig. 274); body length 2.5–3.2 mm. Head and pronotum with pronounced microsculpture (Fig. 276). Midline of pronotum impunctate. Punctuation of elytra distinctly granulose (Fig. 277). ♂: aedeagus as in Figs. 278–280. – Widespread in the Oriental region, but rare. .... *R. pygmaeus* (Kraatz)
- Larger species; body length >3.2 mm. Head and pronotum without pronounced microsculpture. Punctuation of elytra at most finely granulose. ♂: sexual characters different. .... 2
- 2 Pronotum on either side of the broadly impunctate, glossy midline not conspicuously densely punctate and with distinct shiny interstices (Figs. 270, 271). Elytra sparsely punctate (Fig. 272). Eyes large, much longer than postocular region in dorsal view (Fig. 270). Head and pronotum reddish; elytra anteriorly reddish, with yellowish posterior margin and with large dark spot in posterior half. Small species of approximately 4 mm body length. ♂: unknown. – Nepal. .... *R. lucens* n. sp.
- Pronotum on either side of midline with conspicuously dense punctuation and matt (or nearly so); interstices reduced to narrow ridges. Elytra with denser punctuation. Coloration different. .... 3
- 3 Head and pronotum with coarse and often partly confluent punctuation (Fig. 96). Right mandible with four molar teeth; basal tooth not conspicuously large (Fig. 13). Pronotum with or without narrowly to broadly impunctate and glossy midline. Anterior margin of labrum bi- or quadridentate (Figs. 64, 88). ♂: sternite VIII with narrower, mostly more or less V-shaped posterior excision (e. g., Figs. 84, 94, 90). Ventral process of aedeagus distinctly sclerotized. .... Subgenus *Rugilus* 4
- Head and pronotum with finer and rarely partly confluent punctuation. Both mandibles with three molar teeth; basal tooth large and of more or less broadly triangular shape. Pronotum without impunctate band along midline (e. g., Figs. 162, 172), in one species (*R. longipennis*) with short narrow sulcus (Figs. 156, 157), as matt as lateral portions. Anterior margin of labrum not dentate. ♂: sternite VIII (except *R. longipennis*) with weakly to distinctly concave, broad posterior excision. Ventral process of aedeagus mostly weakly sclerotized. .... Subgenus *Eurystilicus* 44
- 4 Pronotum with broadly impunctate and glossy midline reaching anterior and posterior margins. Anterior margin of labrum bidentate. Macropterous species. .... 5
- Pronotum either without shiny midline, or with narrow to broadly shiny band of usually reduced length in the middle. Anterior margin of labrum quadridentate. .... 7
- 5 Colourful species: head black, pronotum bright-reddish, elytra reddish with yellowish posterior margin and with more or less extensive infusate spot posteriorly. Body length >5 mm. Head longer than broad. – Middle Asia, Afghanistan, China, East Siberia. .... *R. capitalis* (Gemminger & Harold)
- Forebody blackish, at most with the postero-lateral angles of the elytra yellowish. .... 6
- 6 Elytra dark-brown to blackish, not distinctly bicoloured; femora reddish-brown. Head oblong. Eyes little more than half as long as distance from posterior margin of eye to neck. ♂: sternite VII conspicuously modified; sternite VIII with pronounced and extensive median impression. – W-Himalaya. .... *R. caporiaccoi* (Bernhauer)
- Elytra bicoloured, with the postero-lateral angles of the elytra yellowish; femora yellowish with more or less distinctly infusate apices. Head approximately as wide as long or weakly transverse. Eyes approximately 0.8–0.9 times as long as distance from posterior margin of eye to neck. ♂: sternite VII without conspicuous modifications; sternite VIII without deep median impression. – Widespread in the Palaearctic, Nearctic, and Australian regions. .... *R. orbiculatus* (Paykull)
- 7 Species from the Himalaya eastwards to Bhutan. .... 8
- Species from China and Myanmar. .... 25
- 8 Elytra distinctly longer than pronotum. .... 9
- Elytra shorter than pronotum. .... 13
- 9 Elytra with very fine and sparse punctuation. Head distinctly oblong, of suboval shape, posteriorly narrowed immediately behind eyes; posterior angles completely obsolete. Eyes small, at most approximately one third the distance from posterior margin of eye to neck in dorsal view. Elytra reddish brown, distinctly paler than and contrasting with the blackish head and pronotum. Legs yellowish; very long and slender. – Middle Asia, Pakistan. .... 10
- Elytra with coarse and dense punctuation. Head not distinctly oblong. Eyes much larger. Elytra either uniformly blackish-brown to blackish or blackish with yellowish lateral margins. Legs of darker coloration, often with the femora apically infusate. .... 11
- 10 ♂: aedeagus as illustrated by ROUGEMONT (1988: fig. 6). – Middle Asia. .... *R. prolongatus prolongatus* (Solsky)
- ♂: aedeagus as illustrated by ROUGEMONT (1988: fig. 7). – Pakistan. .... *R. prolongatus khalash* (Rougemont)
- 11 Pronotum small in relation to head and elytra, and slender, usually 1.20–1.25 times as long and wide and 0.70–0.75 times as wide as head; midline broadly glossy. Elytra uniformly blackish. ♂: aedeagus as in Fig. 8. – S-Himalaya, from Pakistan to West Bengal. .... *R. gracilis* (Eppelsheim)
- Pronotum larger in relation to head and elytra, and less slender, usually 1.05–1.15 times as long as wide and 0.75–0.80 times as wide as head; midline at most with short impunctate band. Elytra often with yellowish lateral margins. ♂: aedeagus of different morphology. .... 12
- 12 ♂: aedeagus as illustrated by ROUGEMONT (1987: fig. 11). – Nepal: Dhaulagiri. .... *R. morvani* (Rougemont)
- ♂: aedeagus as illustrated by ROUGEMONT (1998: fig. 2). – Nepal: Annapurna, Manaslu. .... *R. smetanai* Rougemont
- 13 ♂: aedeagus with ventral process slender and weakly curved in lateral view, apically not distinctly hooked or dentate. .... 14
- ♂: aedeagus different. .... 15
- 14 ♂: ventral process of aedeagus subapically more distinctly curved and apically somewhat dilated in lateral view (Figs. 34, 35). – Nepal: Manaslu. .... *R. manasluensis* n. sp.
- ♂: ventral process of aedeagus almost straight and apically not distinctly dilated in lateral view (Figs. 10, 11). – Bhutan, Nepal, N-India. .... *R. gogonensis* (Coiffait)

- 15 ♂: ventral process of aedeagus apically obliquely truncate in lateral view..... 16  
 – ♂: ventral process of aedeagus apically not distinctly truncate in lateral view..... 19
- 16 ♂: ventral process of aedeagus apically narrowly truncate in lateral view (Figs. 28, 29). – Nepal: Everest range.....  
 ..... *R. truncatus* n. sp.  
 – ♂: ventral process of aedeagus apically broadly truncate in lateral view..... 17
- 17 ♂: ventral process of aedeagus dorso-apically rounded in lateral view (ROUGEMONT 1998: figs. 5, 6). – C- and E-Nepal.....  
 ..... *R. latiparameris* Rougemont  
 – ♂: ventral process of aedeagus dorso-apically angular. – Species from C-Nepal..... 18
- 18 ♂: aedeagus as in Fig. 36..... *R. bagmaticolus* Rougemont  
 – ♂: aedeagus as illustrated by ROUGEMONT (1998: fig. 8).....  
 ..... *R. prodoni* (Coiffait)
- 19 ♂: ventral process of aedeagus rather slender, weakly to distinctly curved in lateral view and apically only slightly dilated and with small tooth. .... 20  
 – ♂: ventral process of aedeagus of different shape..... 21
- 20 ♂: ventral process shorter and less strongly curved in lateral view (Fig. 37). – Bhutan, N-India.... *R. bhotius* (Rougemont)  
 – ♂: ventral process of aedeagus longer and distinctly curved in lateral view (ROUGEMONT 1998: fig. 3). – E-Nepal: Khandbari district. .... *R. longiparameris* Rougemont
- 21 ♂: apex of ventral process of aedeagus somewhat spear-shaped in lateral view (ROUGEMONT 1987: fig. 12). – Bhutan.....  
 ..... *R. dorjulensis* (Coiffait)  
 – ♂: ventral process of aedeagus not spear-shaped in lateral view. – Nepal. .... 22
- 22 ♂: aedeagus broad and apically with median incision in ventral view; ventral process subapically strongly curved and apically of distinctive shape in lateral view (ROUGEMONT 1998: fig. 7). – NE-Nepal: Sankhuwa Sabha district.....  
 ..... *R. schawalleri* Rougemont  
 – ♂: aedeagus of different morphology. .... 23
- 23 ♂: ventral process of aedeagus longer, almost straight and subapically not dentate in lateral view (Figs. 16, 17). – E-Nepal: Chordung range..... *R. nepalensis* (Scheerpeltz)  
 – ♂: ventral process of aedeagus short and stout, and/or subapically dentate in lateral view. .... 24
- 24 ♂: ventral process of aedeagus apically not distinctly dentate in lateral view (Fig. 9). – Nepal: Annapurna. ....  
 ..... *R. quadridentatus* (Coiffait)  
 – ♂: ventral process of aedeagus subapically distinctly dentate in lateral view (Figs. 21, 22). – Nepal: Rolwaling Himal.....  
 ..... *R. kleebergi* n. sp.
- 25 Large species; pronotum at least 0.85 mm, usually 0.9–1.05 mm broad. Pronotum weakly oblong, at most approximately 1.1 times as long as broad (Figs. 141, 151). Head and pronotum with coarse and largely longitudinally confluent punctation. ♂: sternite VII either with pronounced impression in posterior median portion or with strongly excavate posterior margin (Figs. 137, 143, 147, 152); posterior excision of sternite VIII deep and broad, not distinctly V-shaped (Figs. 138, 144, 148, 153); aedeagus with stout ventral process; internal sac with a pair of large and strongly sclerotized internal structures. – Species from China or Myanmar.....  
 ..... *R. malaisei* group 26
- Smaller species; pronotum at most approximately 0.8 mm broad. Pronotum usually > 1.1 times as long as broad. ♂: sternite VII at most weakly impressed posteriorly; sternite VIII with smaller and usually more or less V-shaped posterior excision; aedeagus in most species with slender ventral process; internal sac without pair of large sclerotized structures. – Species from China..... 30
- 26 Elytra with conspicuous lateral fold extending from humeral angles to posterior third of elytra (Fig. 134). ♂: unknown. – NW-Yunnan: Nu Shan. .... *R. nuicus* n. sp.  
 – Elytra without lateral fold..... 27
- 27 Elytra finely punctate (Fig. 136). Head approximately as long as broad. Legs yellowish with the apices of all femora distinctly and rather extensively infusate. Fully winged species (Fig. 136). ♂: sternite VII in posterior median portion distinctly impressed, posterior margin not strongly excavate (Fig. 137); aedeagus shaped as in Fig. 139. – Yunnan.....  
 ..... *R. glabripennis* n. sp.  
 – Elytra very coarsely punctate. Head transverse. Apices of meso- and metafemora at most weakly and narrowly infusate, those of profemora not infusate. ♂: sternite VII with posterior margin deeply and broadly excavate in the middle. .... 28
- 28 ♂: male primary and secondary sexual characters as in Figs. 147–149. – Myanmar..... *R. malaisei* (Scheerpeltz)  
 – ♂: male primary and secondary sexual characters different. – Species from China..... 29
- 29 Elytra short and narrow, 0.75–0.85 times as long, and approximately as wide as pronotum (Fig. 151). Posterior margin of tergite VII without palisade fringe. Pronotum conspicuously convex in cross-section, i. e., level of median portion distinctly above level of elytra in lateral view. Eyes larger, only slightly shorter than distance from posterior margin of eye to neck (Fig. 151). ♂: sternite VII without distinct processes on either side of posterior excavation and with shallower median impression (Fig. 152); sternite VIII with smaller posterior excision (Fig. 153); aedeagus smaller, 0.60–0.65 mm long, and with apically somewhat hooked ventral process (Fig. 154). – Jiangxi..... *R. wuyicus* n. sp.  
 – Elytra approximately as long as, and distinctly broader than pronotum (Fig. 141). Posterior margin of tergite VII with palisade fringe. Pronotum moderately convex in cross-section, i. e., level of median portion not distinctly above level of elytra in lateral view. Eyes distinctly shorter than distance from posterior margin to neck (Fig. 141). ♂: sternite VII with tooth-like process on either side of posterior excavation and with pronounced median impression (Fig. 143); sternite VIII with larger posterior excision (Fig. 144); aedeagus larger, approximately 0.77 mm long, and with conspicuously stout and apically truncate ventral process (Figs. 145, 146). – Yunnan.....  
 ..... *R. desectus* n. sp.
- 30 Head at least as long as broad, usually longer than broad (Fig. 129). Punctuation of head and pronotum extensively and coarsely confluent (Fig. 129). ♂: aedeagus as in Figs. 132, 133. – Sichuan, N-Yunnan..... *R. confluens* n. sp.  
 – Head transverse or as broad as long. Punctuation of head and pronotum not, or less extensively and less coarsely confluent. ♂: aedeagus of different morphology. – The following species are reliably distinguished only based on the male sexual characters. .... 31

- 31 Eyes very large, distinctly longer than distance from posterior margin of eye to neck in dorsal view (e. g., Figs. 79–82). ♂: sternite VIII with deep and very narrow posterior excision..... 32
- Eyes often large, but at most slightly longer than distance from posterior margin of eye to neck in dorsal view..... 35
- 32 Species from the Daba Shan..... 33
- Distribution different..... 34
- 33 Smaller species, at most approximately 5 mm long. ♂: aedeagus as in Fig. 78..... *R. dabaicus* n. sp.
- On average slightly larger species, body length 4.8–5.3 mm. ♂: aedeagus as in Figs. 85, 98..... *R. fodens* n. sp.
- 34 Larger species; body length 4.9–5.3 mm; head width 0.90 mm. Palisade fringe at posterior margin of abdominal tergite VII without sexual dimorphism, present in both sexes. ♂: ventral process of aedeagus curved, moderately long, and moderately slender (Figs. 104, 105). – Hubei: Dalaoshan..... *R. dalaoicus* n. sp.
- Small species; body length mostly 4.0–4.5 mm; head width <0.85 mm. Palisade fringe at posterior margin of abdominal tergite VII sexually dimorphic, in ♂ pronounced, in ♀ absent. ♂: ventral process of aedeagus conspicuously long, slender, and practically straight in apical half (Fig. 42). – Sichuan: Emei Shan..... *R. emeiensis* n. sp.
- 35 Species from Gansu, Henan, Shaanxi, or Sichuan..... 36
- Species from Yunnan..... 39
- 36 Head transverse, at least approximately 1.1 times as wide as long (e. g., Figs. 62, 63). – Species from Sichuan..... 37
- Head approximately as long as broad (e. g., Figs. 44, 45)....38
- 37 ♂: ventral process of aedeagus apically shorter and less acute (Figs. 67, 68). – W-Sichuan: Daxue Shan..... *R. daxuensis* n. sp.
- ♂: ventral process of aedeagus apically longer and more acute (Fig. 74). – Sichuan: Gongga Shan..... *R. gonggaicus* n. sp.
- 38 Abdomen without microsculpture, not even on tergite VII (Fig. 46). ♂: aedeagus as in Figs. 49–52. – Gansu, Shaanxi.... *R. gansuensis* (Rougemont)
- Abdomen with microsculpture best visible on tergite VII (Fig. 56). ♂: aedeagus as in Figs. 59, 60. – Shaanxi: Qinling Shan; Henan: Funio Shan..... *R. reticulatus* n. sp.
- 39 Small species, body length 4–5 mm. Eyes approximately as long as distance from posterior margin of eye to neck in dorsal view or nearly so (Figs. 87, 93). Elytra without, or with weakly pronounced sexual dimorphism. – Gaoligong Shan..... 40
- Larger species, body length >5 mm. Eyes noticeably shorter than distance from posterior margin of eye to neck in dorsal view. Elytra usually with pronounced sexual dimorphism. – Distribution different..... 41
- 40 Abdominal tergite VII with microsculpture present only in posterior portion. Elytra with weakly pronounced sexual dimorphism. ♂: aedeagus with conspicuously long and slender ventral process (Fig. 95). ..... *R. pungens* n. sp.
- Abdominal tergite VII with microsculpture everywhere. Elytra without appreciable sexual dimorphism. ♂: aedeagus of different morphology (Figs. 91, 92). ... *R. aequabilis* n. sp.
- 41 Elytra without appreciable dimorphism, in both sexes 0.8–0.9 times as long as pronotum (Figs. 107, 108). ♂: aedeagus as in Fig. 111. – Zhongdian County..... *R. schuelkei* n. sp.
- Elytra at least in part of the males longer than pronotum. ♂: aedeagus of different morphology..... 42
- 42 ♂: aedeagus as in Figs. 117, 118. – Diancang Shan and Yulongxue Shan..... *R. parvincisus* n. sp.
- ♂: aedeagus of different shape. Distribution different..... 43
- 43 ♂: aedeagus as in Fig. 127. – Meili Xue Shan..... *R. meilixuensis* n. sp.
- ♂: aedeagus as in Fig. 124. – Zhongdian County..... *R. biformis* n. sp.
- 44 Midline of pronotum finely and narrowly sulcate (sometimes only in posterior half) (Figs. 156, 157). ♂: posterior margin of sternite VIII very weakly concave in the middle (Fig. 158); aedeagus as in Figs. 159, 160. – Japan..... *R. longipennis* (Sharp)
- Midline of pronotum not sulcate. ♂: posterior margin of sternite VIII broadly concave; aedeagus of different morphology..... 45
- 45 Elytra with coarser, non-setiferous punctures in addition to the fine ground punctation (e. g., Figs. 217, 224, 230). 46
- Elytra only with fine punctation. (Note that in the widespread *R. ceylanensis* indistinct coarser punctures may occasionally be visible.) ..... 53
- 46 Elytra short, approximately 0.8 times as long as, and not much broader than pronotum (Fig. 222); ground punctation conspicuously dense and noticeably granulose (Fig. 224). ♂: aedeagus as in Figs. 226, 227. – China: Sichuan..... *R. brevior* n. sp.
- Elytra longer, at least as long as pronotum, or nearly so; ground punctation not fine, not distinctly granulose, and sparser..... 47
- 47 Additional non-setiferous punctures of elytra usually conspicuously coarse and often arranged in more or less irregular series (Figs. 237, 246). Elytra distinctly bicoloured, with the postero-lateral angles rather extensively yellowish; these yellow markings well-delimited..... 48
- Additional non-setiferous punctures of elytra less coarse, more clear-cut, and usually more or less randomly distributed (Figs. 217, 230). Postero-lateral angles of elytra often yellowish, but these markings less conspicuous and less well-delimited..... 49
- 48 Femora more or less distinctly infusate apically. Additional non-setiferous punctures of elytra on average coarser (Fig. 246). ♂: aedeagus with ventral process of characteristic shape and with two almost straight and distinctly sclerotized apical internal structures (Figs. 250–254). – Malaysia, Indonesia, Philippines..... *R. seriatus* (Cameron)
- Femora yellowish, not distinctly infusate apically. Additional non-setiferous punctures of elytra on average less coarse (Fig. 237). ♂: aedeagus with apically slender and hooked ventral process (lateral view), apical internal structures less distinctly sclerotized and of different shape (Figs. 240–244). – Widespread in the Oriental region.... *R. japonicus* Watanabe
- 49 ♂: aedeagus with broad and apically incised ventral process, and with a pair of distinctly sclerotized apical internal structures clearly extending beyond apex of ventral process (Figs. 261, 267, 268). ..... 50
- ♂: aedeagus with less broad and mostly not incised ventral process (exception: *R. bifidus*), apical internal structures weakly sclerotized and not projecting beyond apex of ventral process..... 51

- 50 Legs reddish to reddish-brown; elytra reddish to reddish-brown, with extensive dark spot postero-laterally, and with yellowish postero-lateral angles and posterior margins. ♂: aedeagus larger, with apically broadly excised ventral process, and with smoothly curved apical internal structures (ventral view) (Figs. 260, 261). – Philippines.....***R. bihamatus n. sp.***
- Legs yellowish; elytra uniformly reddish to reddish-brown, posterior margins indistinctly and very narrowly yellowish. ♂: aedeagus smaller, more slender; ventral process narrowly excised apically; apical internal structures of different shape (Figs. 265–268). – Malaysia: Borneo. ....***R. appendiculatus n. sp.***
- 51 Elytra with finer and moderately dense punctation, more glossy (Figs. 229, 230). ♂: ventral process of aedeagus apically deeply bifid in ventral view (Figs. 232, 233). – Myanmar, W-China. ....***R. bifidus n. sp.***
- Elytra with less fine and dense punctation, less glossy. ♂: ventral process of aedeagus apically not bifid. .... 52
- 52 Elytra with humeral angles usually yellowish and lateral margins dark in the middle. On average darker and larger species (Figs. 215, 216). ♂: apex of ventral process of aedeagus convex in ventral view (Figs. 218–220). – China. ....***R. chinensis*** (Bernhauer)
- Elytra with humeral angles usually not yellowish, lateral margin completely yellowish. On average smaller and paler species. ♂: apex of ventral process of aedeagus of triangular shape in ventral view (Figs. 211–214). – Widespread in East Palaearctic and Oriental regions; reported also from the Ethiopian region. ....***R. rufescens*** (Sharp)
- 53 Elytra blackish, at most with the posterior margin narrowly yellowish. .... 54
- Elytra of different coloration. .... 56
- 54 Elytra with fine, non-granulose, and moderately dense punctation, glossy (Fig. 172). Head with vertex not elevated. Legs shorter; metatarsus distinctly shorter than metatibia. ♂: aedeagus with ventral process not dentate in lateral view. ....***R. ocularis*** (Fauvel) (dark morph; see also couplet 57)
- Elytra with conspicuously dense, finely granulose punctation, with subdued shine (Fig. 162). Head with vertex elevated (somewhat resembling a large bump). Legs long and slender; metatarsus almost as long as metatibia. ♂: aedeagus with ventral process subapically dentate in lateral view. .... 55
- 55 Elytra blackish with the posterior margin narrowly yellowish (Fig. 162). ♂: aedeagus broader (Figs. 164, 165). – Widespread in the southern East Palaearctic and Oriental regions. ....***R. velutinus*** (Fauvel)
- Elytra completely blackish. ♂: aedeagus more slender (Figs. 169, 170). – Indonesia: Java, Sumatra. ....***R. pruinosus*** (Cameron)
- 56 Head narrowed towards posterior constriction immediately behind eyes; posterior angles obsolete. Eyes large, at least 0.7–0.8 times as long as distance from posterior margin of eye to neck (Figs. 172, 183, 204). .... 57
- Head with lateral margins behind eyes at least briefly parallel; posterior angles rounded, but noticeable. Eyes usually at most 0.7 times as long as distance from posterior margin of eye to neck (Figs. 187, 193, 198). .... 58
- 57 ♂: aedeagus as in Figs. 185, 186, ventral process subapically hooked dorsally in lateral view. – Thailand, Sri Lanka. ....***R. uncatatus n. sp.***
- ♂: aedeagus as in Figs. 175–182, 208, 209, apex of ventral process not hooked in lateral view. – Widespread in the Oriental region: India, Indonesia, Malaysia, Philippines. ....***R. ocularis*** (Fauvel)
- 58 Elytra shorter and less broad, 0.9–1.0 times as long as pronotum (Fig. 193). Coloration of elytra variable, but usually with more or less extensive dark lateral spot and with broadly yellowish posterior margin. ♂: aedeagus of characteristic morphology (Figs. 195–197). – Widespread and common in the south of the East Palaearctic and in the Oriental, Australian, and Nearctic regions. ....***R. ceylanensis*** (Kraatz)
- Elytra relatively larger and longer, slightly longer than pronotum. Coloration of elytra anteriorly extensively yellowish to reddish, posterior portion or posterior sutural angles infuscate. ♂: aedeagus of different morphology. .... 59
- 59 Posterior third of elytra infuscate; anterior portion yellowish (Fig. 187). ♂: aedeagus as in Figs. 190, 191. – N-India; probably associated with termites. ....***R. plagiatus*** (Cameron)
- Posterior sutural angles of elytra and often also anterior portion of elytra more or less extensively and more or less distinctly infuscate; remainder of elytral surface usually reddish (Fig. 199). ♂: aedeagus as in Figs. 202, 203. – Himalaya, China, Taiwan. ....***R. simlaensis*** (Cameron)

## 6 Catalogue of the Palaearctic and Oriental *Rugilus* species

The Palaearctic fauna includes at least one doubtful species, which is marked with an asterisk in the catalogue (Tab. 1). The type material of *R. couloni* Drugmand, which was described from Israel, is apparently lost. A clarification of the identity of this name is possible only when material from the vicinity of the type locality and in agreement with the original description becomes available.

## 7 Species excluded from *Rugilus*

The examination of the type material of two species described in *Stilicoderus* revealed that they belong to the genus *Stilicoderus* Sharp, 1889. Other species such as *Stilicoderus sericeus* Motschulsky, 1858, which was moved to *Enalagium* Bernhauer, 1915 by CAMERON (1934), had been excluded from *Rugilus* prior to the present study.

*Stilicoderus melancholicus* (Schubert, 1911), **n. comb.**  
(Figs. 281–287)

*Stilicoderus melancholicus* Schubert, 1911: 10 f.

Type material examined

Holotype ♂: “Shembaganur, Madura, Sd. Ind., H. ROLLE, Berlin, S. W. 11 / Type / *melancholicus* m. / Holotypus *Stilicoderus melancholicus* Schubert, 1911, labelled by MNHUB 2011 / *Stilicoderus melancholicus* (Schubert), det. V. ASSING 2011” (MNHUB).

**Tab. 1.** Catalogue of the Palaearctic and Oriental *Rugilus* species. – The page number refers to species treated in the present paper.

Taxon	Distribution	Page
<b>Subgenus <i>Rugilus</i> Leach, 1819</b>		
= <i>Stilicus</i> Berthold, 1827		
= <i>Sepeodomorphus</i> Gistel, 1834		
= <i>Stilicosoma</i> Casey, 1905		
= <i>Tetragnathostilicus</i> Scheerpeltz, 1976; n. syn.		
= <i>Stilidentus</i> Coiffait, 1978		
<i>aequabilis</i> n. sp.	China: Yunnan: Gaoligong Shan	139
<i>angustatus</i> (Geoffroy, 1785)	W-Palaearctic, W-Siberia, North America	
= <i>fragilis</i> (Latreille, 1804)		
= <i>fragilis</i> (Gravenhorst, 1806)		
= <i>scutellatus</i> (Motschulsky, 1858)		
<i>antoinei</i> (Peyerimhoff, 1937)	Morocco	120
<i>arabs</i> (Saulcy, 1865)	Middle East: central southern Turkey, Lebanon, Israel	119
<i>armeniacus</i> (Coiffait, 1970)	Caucasus region: Azerbaijan, Armenia	
<i>bagmaticolus</i> Rougemont, 1998	Central Nepal	127
<i>bhotius</i> (Rougemont, 1987)	Bhutan, N-India	128
<i>biformis</i> n. sp.	China: Yunnan	145
<i>brahmanus</i> (Coiffait, 1978)	Bhutan	
<i>capitalis</i> (Gemminger & Harold, 1868)	Middle Asia; Afghanistan; East Siberia; China (Xinjiang)	122
= <i>bimaculatus</i> (Motschulsky, 1860)		
<i>caporiaccoi</i> (Bernhauer, 1934)	W-Himalaya: Kashmir, Pakistan, Afghanistan	123
= <i>emodensis</i> (Coiffait, 1982)		
<i>confluens</i> n. sp.	China: Sichuan, N-Yunnan	146
* <i>couloni</i> Drugmand, 1989	Israel	
<i>dabaicus</i> n. sp.	China: W-Hubei: Daba Shan	136
<i>dalaoticus</i> n. sp.	China: W-Hubei	141
<i>daxuensis</i> n. sp.	China: W-Sichuan: Daxue Shan	133
<i>desectus</i> n. sp.	China: W-Yunnan	150
<i>dilutipes</i> (Reitter, 1884)	Greece	
<i>dorjulensis</i> (Coiffait, 1978)	Bhutan	123
<i>emeiensis</i> n. sp.	China: Sichuan: Emei Shan	128
<i>erichsonii</i> (Fauvel, 1867)	Europe	
<i>festivus</i> (Mulsant & Rey, 1853)	Atlanto-Mediterranean: NW-Africa to S-Switzerland	
<i>fodens</i> n. sp.	China: Daba Shan	138
<i>frischi</i> Assing, 2011	N-Iran	120
<i>gaditanus</i> (Peyerimhoff, 1937)	S-Spain	
<i>gansuensis</i> Rougemont, 1998	China: Gansu, Shaanxi	130
<i>geniculatus</i> (Erichson, 1839)	Atlanto-Mediterranean: NW-Africa to Ukraine	
= <i>punctipennis</i> Stephens, 1833		
<i>glabripennis</i> n. sp.	China: N-Yunnan	149
<i>gogonensis</i> (Coiffait, 1978)	Bhutan, Nepal, N-India	123
<i>gonggaicus</i> n. sp.	China: Sichuan: Gongga Shan	134
<i>gracilis</i> (Eppelsheim, 1895)	S-Himalaya: Pakistan to West Bengal	122
= <i>paradoxus</i> (Bernhauer, 1936)		
= <i>praelongus</i> (Cameron, 1924)		
<i>ibericus</i> (Fagel, 1959)	Spain: Extremadura	120
<i>iranicus</i> (Coiffait, 1981)	Iran, Georgia	
<i>kleebergi</i> n. sp.	Nepal: Rolwaling	124
<i>korbi</i> (Fauvel, 1900)	Caspian region: Azerbaijan, N-Iran	120
<i>latiparameris</i> Rougemont, 1998	Nepal	183
<i>lesbius</i> Assing, 2005	Greece (Lesbos), W-Turkey	
<i>longicollis</i> (Fauvel, 1900)	Caucasus region: Azerbaijan, Georgia, N-Iran	
<i>longiparameris</i> Rougemont, 1998	Nepal	183
<i>malaisei</i> (Scheerpeltz, 1965)	Myanmar	152
<i>maltzevi</i> Gusarov, 1991	Ukraine, Turkey	
<i>manasluensis</i> n. sp.	Nepal: Manaslu	128
<i>meilixuensis</i> n. sp.	China: N-Yunnan: Meili Xue Shan	146
<i>mixtus</i> (Lohse, 1956)	Central Europe, SE-Europe	
<i>morvani</i> (Rougemont, 1987)	Nepal: Dhaulagiri	127
<i>nepalensis</i> (Scheerpeltz, 1976)	Nepal: Chordung	124
<i>nivicus</i> n. sp.	China: Yunnan: Nu Shan	149



<b>Taxon</b>	<b>Distribution</b>	<b>Page</b>
<i>orbiculatus</i> (Paykull, 1789) = <i>exiguus</i> Heer, 1839 = <i>affinis</i> (Erichson, 1839) = <i>fuscipes</i> (Erichson, 1840) = <i>ruficornis</i> (Lucas, 1846) = <i>maxillosus</i> (Lentz, 1856) = <i>flavipes</i> (Motschulsky, 1860) = <i>latusculus</i> (Casey, 1885) = <i>oregonus</i> (Casey, 1905) = <i>pictipennis</i> (Reitter, 1909)	W-Palaeartic; Middle Asia; ?China; Nearctic and Australian regions	122
<i>parvincisus</i> n. sp.	China: Yunnan: Diancang Shan, Yulongxue Shan	143
<i>penicillatus</i> Assing, 2011	N-Iran	120
<i>prodoni</i> (Coiffait, 1982)	Nepal	183
<i>prolongatus khalash</i> (Rougemont, 1988)	Pakistan	122
<i>prolongatus prolongatus</i> (Solsky, 1874)	Middle Asia: Kyrgyzstan, Tajikistan, Uzbekistan	122
<i>pulcher</i> (Peyerimhoff, 1929)	Algeria, Saudi Arabia	
<i>pungens</i> n. sp.	China: Yunnan: Gaoligong Shan	140
<i>quadridentatus</i> (Coiffait, 1975)	Nepal: Annapurna	123
<i>reticulatus</i> n. sp.	China: Shaanxi: Qinling Shan; W-Henan: Funiu Shan	132
<i>rossii</i> (Zanetti, 1977)	Italy	119
<i>rufipes</i> Germar, 1836 = <i>immunis</i> Stephens, 1833 = <i>nematideus</i> (Gistel, 1857) = <i>pecticensis</i> (Coiffait, 1939); n. syn.	W-Palaeartic; W-Siberia; introduced in N-America	119
<i>sardous</i> (Lohse, 1956)	Italy: Sardinia	
<i>schawalleri</i> Rougemont, 1998	Nepal	183
<i>schuelkei</i> n. sp.	China: Yunnan	141
<i>similis</i> (Erichson, 1839)	Europe; Turkey; Kazakhstan	120
<i>smetanaei</i> Rougemont, 1998	Nepal: Annapurna, Manaslu	127
<i>subtilis</i> (Erichson, 1840) = <i>salicetorum</i> Gistel 1857 = <i>hungaricus</i> (Csiki, 1937)	Europe; Turkey	
<i>tauricus</i> Rougemont, 1988	Central southern Turkey	119
<i>truncatus</i> n. sp.	Nepal: Everest range	126
<i>wuyicus</i> n. sp.	China: Jiangxi: Wuyi Shan	152
<b>Subgenus <i>Eurystilicus</i> Fagel, 1953</b>		
<i>appendiculatus</i> n. sp.	Malaysia: Borneo	178
<i>bifidus</i> n. sp.	Myanmar; W-China	171
<i>bihamatus</i> n. sp.	Philippines: Luzon, Mindanao, Leyte	176
<i>brevior</i> n. sp.	China: Sichuan	171
<i>ceylanensis</i> (Kraatz, 1859) = <i>luteipennis</i> (Kraatz, 1859); n. syn. = <i>sutteri</i> (Scheerpeltz, 1957); n. syn. = <i>wittmeri</i> (Coiffait, 1978); n. syn.	Southern E-Palaeartic, Oriental, Australian, and Nearctic regions; Hawaii; ?Seychelles	164
<i>chinensis</i> (Bernhauer, 1938)	China: Jiangsu, Guangxi, Fujian, Hubei	170
<i>japonicus</i> Watanabe, 1961 = <i>ferreirai</i> (Scheerpeltz, 1978); n. syn.	S-Japan; Taiwan; Sri Lanka; Thailand; Vietnam; Indonesia; Philippines	173
<i>longipennis</i> (Sharp, 1889)	Japan, South Korea, ?China	155
<i>ocularis</i> (Fauvel, 1895) = <i>kolbei</i> (Bernhauer, 1915); n. syn. = <i>triangulus</i> Last, 1984; n. syn.	India; Indonesia; Malaysia; Philippines; New Guinea; New Britain	159
<i>plagiatus</i> (Cameron, 1924)	N-India	162
<i>pruinosis</i> (Cameron, 1925)	Indonesia: Java, Sumatra	158
<i>rufescens</i> (Sharp, 1874) = <i>indicus</i> (Cameron, 1914) = <i>kamchaticus</i> Ryabukhin, 2007; n. syn.	E-Palaeartic and Oriental regions; ?Ethiopian region	167
<i>seriatus</i> (Cameron, 1930)	Malaysia; Indonesia; Philippines	175
<i>simlaensis</i> (Cameron, 1931)	Himalaya: N-India, Nepal, Bhutan; China; Taiwan	166
<i>uncatus</i> n. sp.	Thailand; Sri Lanka	161
<i>velutinus</i> (Fauvel, 1895)	southern E-Palaeartic and Oriental regions	155
<b>Incertae sedis</b>		
<i>lucens</i> n. sp.	Nepal	180
<i>pygmaeus</i> (Kraatz, 1859) = <i>parvus</i> (Cameron, 1931); n. syn.	India; Sri Lanka; Thailand; Vietnam; Malaysia; Indonesia: Timor	181

## Comment

The original description is based on “1 Exemplar” from “Schembagamur, Madura, India mer.” (SCHUBERT 1911). The holotype was examined and proved to belong to the genus *Stilicoderus*.

## Redescription

Body length 7.6 mm.

Coloration: head, pronotum, and abdomen blackish; elytra opaque, dark-reddish, with the lateral margins, the postero-lateral angles, and the suture infuscate; legs and antennae dark-brown, femora even darker, blackish-brown.

Head (Fig. 281) approximately as broad as long; lateral margins behind eyes convexly rounded towards posterior constriction, posterior angles obsolete; punctation rather fine and dense; punctures mostly somewhat oblong; surface matt; interstices with fine microsculpture (Fig. 282). Eyes rather small, less than one-third the length of distance between posterior margin of eye to posterior constriction of head.

Pronotum (Fig. 281) 1.12 times as long as broad and approximately 0.85 times as broad as head; punctation very dense and granulate, coarser than that of head; midline narrowly impunctate, but with fine microsculpture (Fig. 283).

Elytra (Fig. 281) approximately 0.9 times as long as, and much broader than pronotum; punctation composed of moderately dense and extremely fine micropunctation, and of additional coarse sparse punctures partly arranged in irregular series; interstices with pronounced microsculpture and opaque (Fig. 284). Hind wings probably fully developed. Metatarsomere I somewhat longer than II, but shorter than the combined length of II and III.

Abdomen distinctly narrower than elytra; tergites III–V with moderately shallow and broad, tergite VI with very shallow anterior impressions; punctation fine and dense; interstices with microreticulation; posterior margin of tergite VII with palisade fringe.

♂: sternite VII with very shallowly concave posterior margin; sternite VIII with broad and almost triangular posterior excision, margin of this excision with conspicuously long setae (Fig. 285); aedeagus 1.05 mm long; ventral process slender and strongly sclerotized (Figs. 286, 287).

## Distribution

This species has become known only from the type locality in East Java (Jawa Timur), Indonesia.

*Stilicoderus signatus* Sharp, 1889

*Stilicoderus signatus* Sharp, 1889: 321.

*Stilicus reitteri* Bernhauer, 1938: 35 f.; n. syn.

## Type material examined

Lectotype ♂, present designation: “Nordwestl. China, Chinkingang, Col. REITTER / *Reitteri* Brnh. Type / *Reitteri* Brnh. Typus, *Stilicus* / Chicago NHMus M. BERNHAUER Collection / Lectotypus ♂ *Stilicus reitteri* Bernhauer, desig. V. ASSING 2011 / *Stilicoderus signatus* Sharp, det. V. ASSING 2011” (FMNH).

## Comment

The original description of *Stilicus reitteri* is based on an unspecified number of syntypes, among them at least one male, from “Nordwestl. China: Chinkingang” collected by “EM. REITTER” (BERNHAUER 1938). One male was located in the BERNHAUER collection at the FMNH. According to MAKRANCZY (pers. comm.), there is no type material in the REITTER collection at the natural history museum in Budapest, suggesting that BERNHAUER (1938) had only a single specimen before him. The examined syntype is designated as the lectotype. Its aedeagus is identical to that of material *Stilicoderus signatus* seen from Japan. Hence the synonymy proposed above.

## 8 References

- ASSING, V. (2005): Two new species and new records of Staphylinidae from the Greek island Lesbos (Insecta: Coleoptera). – Linzer biologische Beiträge **37**: 1035–1046.
- ASSING, V. (2008): On the taxonomy and zoogeography of some Palaearctic Paederinae and Xantholinini (Coleoptera: Staphylinidae). – Linzer biologische Beiträge **40**: 1237–1294.
- ASSING, V. (2011): On the Staphylinidae (Coleoptera) of Iran. II. New species and additional records, with special reference to the Paederinae, Xantholinini, and Aleocharinae. – Stuttgarter Beiträge zur Naturkunde A, Neue Serie **4**: 137–183.
- BERNHAUER, M. (1915): Beitrag zur Staphylinidenfauna von Neu-Guinea. – Deutsche entomologische Zeitschrift **1915**: 179–202.
- BERNHAUER, M. (1922a): SAUTER'S Formosa-Ausbeute: Staphylinidae. I. Teil. – Archiv für Naturgeschichte (A) **88** (7): 220–237.
- BERNHAUER, M. (1922b): No. II. – Coleoptera, Staphylinidae. – In: The PERCY SLADEN Trust Expedition to the Indian Ocean in 1905, under the leadership of Mr J. STANLEY GARDINER, M. A., volume VII. – The Transactions of the Linnean Society of London, 2<sup>nd</sup> Series Zoology **18**: 165–186.
- BERNHAUER, M. (1926): Fauna Buruana. Zur Staphylinidenfauna der Molukken. – Treubia **7**: 311–327.
- BERNHAUER, M. (1938): Zur Staphylinidenfauna von China u. Japan. (9. Beitrag). – Entomologisches Nachrichtenblatt **12**: 17–39.
- CAMERON, M. (1914): Descriptions of new species of Staphylinidae from India. – The Transactions of the Entomological Society of London **1913**: 525–544.
- CAMERON, M. (1924): New species of Staphylinidae from India. – The Transactions of the Entomological Society of London **1924**: 160–198.
- CAMERON, M. (1925): New Staphylinidae from the Dutch East Indies. – Treubia **6**: 174–198.

- CAMERON, M. (1928): XXVIII. – Staphylinidae from Mt. Poi & Mt. Penrissen, with descriptions of new species. – Sarawak Museum Journal **3**: 399–412.
- CAMERON, M. (1930): Fauna Sumatrensis. (Bijdrage nr. 67). Staphylinidae (Col.). – Tijdschrift voor Entomologie **73**: 325–348.
- CAMERON, M. (1931): The fauna of British India including Ceylon and Burma. Coleoptera. Staphylinidae. Volume 2, VIII+257 pp.; London (Taylor and Francis).
- CAMERON, M. (1934): Further remarks on some of MOTSCHOUISKY's types of Oriental Staphylinidae (Col.). – The Entomologist's Monthly Magazine **70**: 76–80.
- COIFFAIT, H. (1939): Un *Stiliculus* nouveau de France. – Revue française d'Entomologie **6**: 166–168.
- COIFFAIT, H. (1970): Tableau des *Stiliculus* de la région paléarctique occidentale avec description d'une espèce nouvelle (Coléoptères Staphylinidae). – Bulletin de la Société d'Histoire naturelle de Toulouse **106**: 146–155.
- COIFFAIT, H. (1974): Staphylinides récoltés en Ussuri (Asie Orientale) par S. M. KHNZORIAN-IBLOKOFF. – Nouvelle Revue d'Entomologie **3**: 197–204.
- COIFFAIT, H. (1975): Xantholininae, Paederinae et Euaesthetinae récoltés au Népal par le Professeur FRANZ (Col. Staphylinidae). – Nouvelle Revue d'Entomologie **5**: 153–186.
- COIFFAIT, H. (1978): Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel. Coleoptera: Fam. Staphylinidae Subfam. Paederinae, Euaesthetinae, Piestinae, Osoriinae et Omalinae [sic]. – Entomologica Basiliensia **3**: 109–150.
- COIFFAIT, H. (1982): Staphylinides (Col.) de la région himalayenne et de l'Inde (I. Xantholininae, Staphylininae et Paederinae). – Entomologica Basiliensia **7**: 231–302.
- COIFFAIT, H. (1984): Coléoptères Staphylinidae de la région paléarctique occidentale. V. Sous famille Paederinae Tribu Paederini 2, Sous famille Euaesthetinae. – Supplément à la Nouvelle Revue d'Entomologie **13** (4): 1–424.
- EPPELSHEIM, E. (1895): Neue ostindische Staphylinen. – Wiener entomologische Zeitung **14**: 53–70.
- FAGEL, G. (1953): Contribution à la connaissance des Staphylinidae. XXV – Essai de classification des *Stiliculus* africains. – Bulletin et Annales de la Société royale d'Entomologie de Belgique **89**: 282–299.
- FAGEL, G. (1959): Contribution à la connaissance des Staphylinidae. XIV. – Remarques sur la faune ibérique. – Bulletin et Annales de la Société royale d'Entomologie de Belgique **95**: 89–106.
- FAGEL, G. (1963): Genre *Stiliculus* Latreille (Coleoptera Polyphaga) Fam. Staphylinidae Paederinae. – Institut des Parcs nationaux du Congo et du Ruanda-Urundi, Parc National de la Garamba. – Mission H. DE SAEGER **39** (1): 1–33.
- FAUVEL, A. (1895): Staphylinides nouveaux de l'Inde et de la Malaisie. – Revue d'Entomologie **14**: 180–284.
- GAEDIKE, H. (1981): Katalog der in den Sammlungen der Abteilung Taxonomie der Insekten des Institutes für Pflanzenschutzforschung, Bereich Eberswalde (ehemals Deutsches Entomologisches Institut), aufbewahrten Typen – XIX. – Beiträge zur Entomologie, Berlin **31**: 175–232.
- HAYASHI, Y. (1996): New record of Staphylinidae from Taiwan, 1. – The Entomological Review of Japan **51**: 220.
- HOEBEKE, E. R. (2010): *Rugilus ceylanensis* (Kraatz) (Coleoptera: Staphylinidae: Paederinae): a South Asian rove beetle new to North America. – Proceedings of the Entomological Society of Washington **112**: 508–516.
- KRAATZ, G. (1859): Die Staphylinen-Fauna von Ostindien, insbesondere der Insel Ceylan. – Archiv für Naturgeschichte **25**: 1–196.
- LAST, H. (1984): Recorded and new species of Coleoptera (Staphylinidae, Paederinae) in Papua New Guinea. – Folia Entomologica Hungarica **45**: 109–125.
- LÖBL, I. & SMETANA, A. (2004): Catalogue of Palearctic Coleoptera. Volume 2. Hydrophiloidea – Histeroidea – Staphylinoida, 942 pp.; Stenstrup (Apollo Books).
- NEWTON, A. F., THAYER, M. K., ASHE, J. S. & CHANDLER, D. S. (2001): Superfamily Staphylinoida Latreille, 1802, Staphyliniformia Lameere, 1900; Brachelytra auctorum. 22. Staphylinidae Latreille, 1802. – In: ARNETT, R. H. Jr. & THOMAS, M. C.: American Beetles. Archostemata, Myxophaga, Adephaga, Polyphaga: Staphyliniformia. Volume 1, pp. 272–418; Boca Raton etc. (CRC Press).
- NOMURA, S., KISHIMOTO, T. & WATANABE, Y. (2000): A faunistic study on the staphylinoid beetles (Insecta, Coleoptera) from the garden of the Imperial Palace, Tokyo, Japan. – Memoirs of the National Science Museum, Tokyo **36**: 257–286.
- PEYERIMHOFF, P. DE (1937): Deux nouveaux *Stiliculus* (Col. Staphylinidae), l'un d'Andalousie, l'autre du Grand Atlas marocain. – Annales de la Société entomologique de France **42**: 119–121.
- ROUGEMONT, G. DE (1987): The subgenus *Tetragnathostiliculus* Scheerpeltz: remarks, synonymy and descriptions of new species (Coleoptera, Staphylinidae). – Nouvelle Revue d'Entomologie (Nouvelle Série) **4**: 211–219.
- ROUGEMONT, G. M. DE (1988): Notes on some palearctic *Stiliculus* species with special reference to Turkey (Col. Staphylinidae, Paederinae). – Revue suisse de Zoologie **95**: 513–520.
- ROUGEMONT, G. M. DE (1995): Review of the Australian species of the subtribe Stilicina (Coleoptera: Staphylinidae: Paederinae). – Elytron **9**: 87–113.
- ROUGEMONT, G. M. DE (1998): *Rugilus* Leach, subg. *Tetragnathostiliculus* Scheerpeltz: Addenda (Coleoptera, Staphylinidae). – Linzer biologische Beiträge **30**: 579–598.
- RYABUKHIN, A. S. (2007): First record of the genus *Rugilus* Leach, 1819 (Coleoptera: Staphylinidae: Paederinae) in the North-East Asia with a description of a new species. – Far Eastern Entomologist **172**: 1–4.
- SAULCY, F. H. C. DE (1865): Descriptions des espèces nouvelles de coléoptères recueillies en Syrie, en Égypte et en Palestine, pendant les mois d'octobre 1863 à janvier 1864, par M. DE SAULCY, sénateur, membre de l'Institut. 2e partie (1). – Annales de la Société entomologique de France (4) **4** (1864): 629–660.
- SCHERPPELTZ, O. (1954): Dritter Beitrag zu Kenntnis der orientalischen Staphyliniden. Die von Herrn Konsul Gg. FREY während seiner Studienreise nach Ostindien und Ceylon aufgesammelten Staphyliniden (Coleoptera). – Entomologische Arbeiten aus dem Museum G. FREY **5**: 109–115.
- SCHERPPELTZ, O. (1957): Wissenschaftliche Ergebnisse der Sumba-Expedition des Museums für Völkerkunde und des Naturhistorischen Museums in Basel, 1949. Staphylinidae (Col.) von Sumba und Flores. – Verhandlungen der naturforschenden Gesellschaft in Basel **68**: 217–357.

- SCHEERPELTZ, O. (1965): Wissenschaftliche Ergebnisse der Schwedischen Expedition 1934 nach Indien und Burma. Coleoptera Staphylinidae (except. Megalopsidiinae et Steninae). – *Arkiv för Zoologi* **17**: 93–371.
- SCHEERPELTZ, O. (1976): Wissenschaftliche Ergebnisse entomologischer Aufsammlungen in Nepal (Col. Staphylinidae). – *Khumbu Himal. Ergebnisse des Forschungsunternehmens Nepal Himalaya* **5**: 77–173.
- SCHEERPELTZ, O. (1978): Wissenschaftliche Ergebnisse der von Dr. RAUL DO NASCIMENTO FERREIRA – Coimbra, Portugal – während seines Aufenthaltes vom Ende des Jahres 1964 bis zum Anfang des Jahres 1966 auf der Insel Timor, der östlichsten der Kleinen Sunda-Inseln durchgeführten Aufsammlungen von Staphyliniden (Coleoptera). – *EOS, Revista española de Entomología* **52**: 185–233.
- SCHUBERT, K. (1911): Neue exotische Staphyliniden. (Col.). – *Deutsche entomologische Zeitschrift* **1911**: 1–39.
- SHARP, D. S. (1874): The Staphylinidae of Japan. – *The Transactions of the Entomological Society of London* **1874**: 1–103.
- SHARP, D. S. (1889): The Staphylinidae of Japan. – *The Annals and Magazine of Natural History* (6) **3**: 28–44, 108–121, 249–267, 319–334, 406–419, 463–476.
- SMETANA, A. (2004): Subfamily Paederinae Fleming, 1821. – In: LÖBL, I. & SMETANA, A. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 2. Hydrophiloidea – Histeroidea – Staphylinidea*, pp. 579–624; Stenstrup (Apollo Books).
- WATANABE, Y. (1961): The staphylinid-fauna of the middle and southern Izu islands. – *Journal of Agricultural Science (Tokyo)* **6**: 348–356.
- WATANABE, Y. (1990): Records of some staphylinid beetles from Kitadaitō-jima Island, the Ryukyus. – *Elytra, Tokyo* **18**: 214.
- WATANABE, Y. (1998): New records of staphylinid beetles (Coleoptera) from Shimo-koshiki-jima Island of the Koshiki Islands off southwestern Kyushu, Japan. – *Elytra, Tokyo* **26**: 313–314.
- WATANABE, Y. (2010a): New records of staphylinid beetles (Coleoptera, Staphylinidae) from the island of Tanegashima, Japan. – *Elytra, Tokyo* **38**: 82–83.
- WATANABE, Y. (2010b): New records of three staphylinid beetles (Coleoptera) from the island of Ishigaki-jima Island of the Ryukyus, Japan. – *Elytra, Tokyo* **38**: 265.
- WATANABE, Y. & ONODA, S. (1994): New records of staphylinid beetles (Coleoptera) from Kuchinoerabu-jima Island, Southwest Japan. – *Elytra, Tokyo* **22**: 220.
- WATANABE, Y. & SHIBATA, Y. (1965): The staphylinid-beetles from Rishiri and Rebun Isls., Hokkaido, Japan, with descriptions of three new species. – *Kontyû* **33**: 317–323.
- WATANABE, Y. & SHIBATA, Y. (1972): The staphylinid-fauna of Yaku-shima Island, Japan, with descriptions of a new genus and new species. – *Journal of Agricultural Science of the Tokyo University of Agriculture* **17**: 59–71.
- WATANABE, Y. & SHIBATA, Y. (1976): Staphylinid beetles obtained at the IBP Research Site in the Malay Peninsula. – *Nature and Life in Southeast Asia* **7**: 327–341.

Author's address:

Dr. VOLKER ASSING, Gabelsbergerstraße 2, 30163 Hannover, Germany;  
e-mail: vassing.hann@t-online.de

Manuscript received: 14.VI.2011, accepted: 15.VII.2011.