

## Five new species of the genus *Carpelimus* Leach, 1819, from the Oriental region (Coleoptera: Staphylinidae: Oxytelinae)

## Пять новых видов рода *Carpelimus* Leach, 1819 из Восточной области (Coleoptera: Staphylinidae: Oxytelinae)

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KEY WORDS: Coleoptera, Staphylinidae, *Carpelimus*, new species, Oriental region, China, Northern India, Nepal, Thailand.

КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Staphylinidae, *Carpelimus*, новый вид, Восточная биогеографическая область, Китай, Северная Индия, Непал, Таиланд.

ABSTRACT: Five new species of the genus *Carpelimus* are described from the Oriental biogeographic region: *Carpelimus (Trogophloeus) asperus*, **sp.n.** from South China, *Carpelimus (Trogophloeus) fuligus*, **sp.n.** from North India, *Carpelimus (Trogophloeus) geminus*, **sp.n.** from Nepal, *Carpelimus (Trogophloeus) guillaumei*, **sp.n.** from South China and Thailand, and *Carpelimus (Vucephalinus) rubrus*, **sp.n.** from North India and Nepal.

РЕЗЮМЕ: Описываются пять новых видов рода *Carpelimus* из Восточной биогеографической области: *Carpelimus (Trogophloeus) asperus*, **sp.n.** из Южного Китая, *Carpelimus (Trogophloeus) fuligus*, **sp.n.** из Северной Индии, *Carpelimus (Trogophloeus) geminus*, **sp.n.** из Непала, *Carpelimus (Trogophloeus) guillaumei*, **sp.n.** из Южного Китая и Таиланда, *Carpelimus (Vucephalinus) rubrus*, **sp.n.** из Северной Индии и Непала.

### Introduction

The members of the genus *Carpelimus* Leach, 1819 are abundant on the shores of various water bodies. The *Carpelimus* fauna of the Palaearctic and tropical Africa has now been generally well-studied [Gildenkov, 2001a, b; 2002; 2003a, b; 2007a, b; 2011a, b; 2012; 2013a, b, d; 2015 b; 2016a, b; 2017]. In contrast, the fauna of the Oriental biogeographic region remains largely unexplored, although much work has already been done [Gildenkov, 2013c, d, e; 2014a, b, c, d; 2015a, b; 2016b]. For instance, one of the taxonomically most challenging is the «*taprobanae*» species group, whose

members can often be clearly distinguished only by the morphology of the aedeagus.

This paper is based on the specimens deposited in the following collections: BNHM — Natural History Museum (London, Great Britain); cGR — private collection of Guillaume de Rougemont (Oxford, Great Britain); cMG — private collection of M. Gildenkov (Smolensk, Russia); cMSch — private collection of Michael Schülke (Berlin, Germany); FMNH — Field Museum of Natural History (Chicago, USA); NHMW — Naturhistorisches Museum Wien (Austria); NKME — Naturkundemuseum Erfurt (Germany); ZFMK — Zoologisches Forschungsinstitut und Museum Alexander Koenig (Bonn, Germany).

In the present study, standard methods were used for the taxonomic research of insects; the preparations were made on an MBS-10 binocular microscope. The genital preparations were processed using 10% KOH and then fixed in euparal. In the descriptions and diagnoses, the following standard units were used for the length-to-width ratio of the head, pronotum, and elytra: 7 standard units = 0.1 mm; thus, 1 standard unit is about 0.0143 mm. Photographs were taken with a Canon EOS 5D Mark III camera and a Canon MP-E 65 mm objective using the extended focus technology.

### *Carpelimus (Trogophloeus) asperus* Gildenkov, **sp.n.**

Figs. 1, 5–7.

MATERIAL. Holotype, ♂ “HONG KONG, KARC VI.1996 | G. de Rougemont” “Flight interception trap” “Holotypus *Carpelimus asperus* | det. M. Gildenkov, 2018” (cGR). Paratypes: 1♂ “Hong Kong K.A.R.C. VIII.91 G. Ades” “Malaise trap” “Rougemont collection” “Paratypus *Carpelimus asperus* | det. M. Gildenkov, 2018” (cMG); 1♂ “HONG KONG CUHK III.1996 | G. de Rougemont” “Flight interception trap” “Paratypus *Carpelimus asperus* | det. M.

Gildenkov, 2018" (cGR); 1♀, 1 ex. "HONG KONG Tai Po VII.1996 | G. de Rougemont" "Flight interception trap" "Paratypus *Carpelimus asperus* | det. M. Gildenkov, 2018" (cGR; 1 ex. – cMG); 1 ex. "HONG KONG Tai Po V.1996 | G. de Rougemont" "Flight interception trap" "Paratypus *Carpelimus asperus* | det. M. Gildenkov, 2018" (cGR).

**DESCRIPTION** (holotype). Length 2.0 mm. Colouration brown. Head and pronotum dark brown, abdomen black-brown, elytra reddish brown; legs and antennae yellowish brown, antennal segments 1 and 9–11 much paler than others. Integument slightly shining, body with short light-coloured hairs.

*Head* transverse, with wide base, ratio of head length (from neck mid-length to anterior margin of clypeus) to its maximum width about 20:26. Neck constriction prominent. Eyes small, slightly convex. Temples well-developed, round, eye diameter in dorsal view slightly smaller than temple length. Head widest across temples (Fig. 1). Head surface densely shagreened. Antennae short, antennal segments 1–3 elongate; segments 4–6 slightly transverse; segments 7–10 transverse; segment 11 elongate, conical. Last 3 segments more massive than others and form loose club (Fig. 1).

*Pronotum* widest about 2/3 its length from base, then narrowed. Lateral margin with small notch near base (Fig. 1).



Figs 1–2. *Carpelimus* spp., holotypes, males, dorsal view: 1 — *Carpelimus (Trogophloeus) asperus*, sp.n.; 2 — *Carpelimus (Trogophloeus) fuligus*, sp.n.

Рис. 1–2. *Carpelimus* spp., глотипы, самцы, сверху: 1 — *Carpelimus (Trogophloeus) asperus*, sp.n.; 2 — *Carpelimus (Trogophloeus) fuligus*, sp.n.

Ratio of pronotum length to its maximum width about 20:30. Surface of pronotum densely shagreened, similarly to head surface. Base of pronotal disc with shallow, symmetrical, round depressions. Central part of disc with almost indistinct symmetrical, round depressions (Fig. 1).

Ratio of *length of elytra* to their combined width about 31:36. Scutellum with shallow round depressions (Fig. 1). Elytra with rather distinct, fine and dense punctation. Diameter of punctures about equal to that of eye facet. Distances between punctures significantly smaller than puncture diameter, interspaces often smoothly shagreened.

*Abdomen* delicately shagreened.

*Aedeagus* of characteristic structure (Figs 5–6).

*Female*. Sexual dimorphism absent, female morphologically similar to male. Spermatheca of characteristic structure (Fig. 7).

COMPARATIVE REMARKS. The new species belongs to the “*taprobanae*” species group. In this group, the new species is most similar in size and densely shagreened surface of the head and pronotum to a closely related species, *Carpelimus (Trogophloeus) flavomustachus* Gildenkov, 2013. The new species differs markedly by its shorter elytra and can be clearly distinguished by the structure of the aedeagus [Giltenkov, 2015b, p. 384, figs. 18: 12–13]. It can be easily differentiated from most species of the group by the lack of punctation on the head and pronotum.

DISTRIBUTION. South China.

ETYMOLOGY. From Latin *asper* (rough) referring to the densely shagreened surface of the head and pronotum.

***Carpelimus (Trogophloeus) fuligus* Gildenkov, sp.n.**  
Figs 2, 8–10.

MATERIAL. Holotype, ♂ “NE INDIA, ARUNACHAL PR. 8 km S Jamiri – SESSA vicinity 27°07′–09′N 92°34′E, 350m L. Dembick□ leg., 26.v.–4.vi.2005, BMNH 2006 – 48” (BNHM). Paratypes: 3♂♂, 7♀♀, 18 ex. “NE INDIA, ARUNACHAL PR. 8 km S Jamiri – SESSA vicinity 27°07′–09′N 92°34′E, 350m L. Dembick□ leg., 26.v.–4.vi.2005, BMNH 2006 – 48” (BNHM; 1♂, 1♀, 3 ex. — cMG).

DESCRIPTION (holotype). Length 2.0 mm. Colouration black, legs and antennae black-brown. Integument slightly shining, body with short light-coloured hairs.

*Head* transverse, with wide base, ratio of head length (from neck mid-length to anterior margin of clypeus) to its maximum width about 20:27. Neck constriction prominent. Eyes rather large, convex. Temples well-developed, round, eye diameter in dorsal view about twice as long as temple length. Head widest across eyes (Fig. 2). Head surface with delicate, fine and dense punctation. Diameter of punctures about 3 times as small as eye facet. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining. Antennae rather long, antennal segments 1–7 elongate; segments 8–10 about as long as wide; segment 11 elongate, conical. Last 3 segments more massive than others and form loose club (Fig. 2).

*Pronotum* widest about 2/3 its length from base, then narrowed. Lateral margin smoothly rounded (Fig. 2). Ratio of pronotum length to its maximum width about 23:28. Surface of pronotum with delicate, distinct, fine, and dense punctation, distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining. Punctuation similar to that on head. Base of pronotal disc with prominent, symmetrical, widely crescent-shaped depressions. Central part of disc with rather deep, oval depressions merging across midline to single butterfly-shaped depression (Fig. 2).

Ratio of *length of elytra* to their combined width about

36:40. Scutellum with shallow rounded depressions (Fig. 2). Elytra with delicate, fine and dense punctation. Diameter of punctures about 1.5 times as small as eye facet. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining.

*Abdomen* delicately shagreened.

*Aedeagus* of characteristic structure (Figs 8–9).

*Female*. Sexual dimorphism absent, female morphologically similar to male. Spermatheca of characteristic structure (Fig. 10).

COMPARATIVE REMARKS. The new species is somewhat similar to *Carpelimus guillaumei* sp.n., which is described below. It differs in a darker colouration, somewhat more developed eyes, and longer antennae. It can be clearly distinguished by the structure of the aedeagus (Figs 8–9, 14–15).

DISTRIBUTION. North India.

ETYMOLOGY. From Latin *fuligo* (soot) referring to the black colouration of the beetle.

***Carpelimus (Trogophloeus) geminus* Gildenkov, sp.n.**

Figs 3, 11–13.

MATERIAL. Holotype, ♂ “NEPAL, Maewa Khola Sanghu Lower oak forest 27°20′N; 87°32′E 16/10/1961” “On mosses and liverworts on damp shaded sandy bank no humus” “K.H. Hyatt, 1961-62 BMNH Nepal Exped BMNH {E} 1975-287” (BNHM). Paratypes: 1♂ “NEPAL: Topke Gold 27°38′N, 87°35′E. 28.X.1961. 6.12.500 ft.” “Funnel sample no. 274” “BMNH Nepal Exp. 1961-1962 B.M. 1975-287” (cMG); 1♂, 1♀ “NEPAL, Maewa Khola Sanghu Lower oak forest 27°20′N; 87°32′E 16/10/1961” “On mosses and liverworts on damp shaded sandy bank no humus” “K.H. Hyatt, 1961-62 BMNH Nepal Exped BMNH {E} 1975-287” (BNHM); 2♂♂, 2♀♀ “NEP: Tumlingtar Dist., Arun Valley, 3 mi E Tumlingtar Airstrip 1200’, 19-III-1975” “FMHD ♂75-38, sphagnum moss in dry sal for., M.Marks” (FMNH; 1♂, 1♀ — cMG).

DESCRIPTION (holotype). Length 1.8 mm. Colouration brown, legs and antennae yellowish brown, antennal segments 1 and 9–11 slightly paler than others. Integument slightly shining, body with short light hairs.

*Head* transverse, with wide base, ratio of head length (from neck mid-length to anterior margin of clypeus) to its maximum width about 18:24. Neck constriction prominent. Eyes rather large, slightly convex. Temples well-developed, round, eye diameter in dorsal view only slightly longer than temple length. Head widest across temples (Fig. 3). Head surface with rather distinct, fine and dense punctation. Diameter of punctures about twice as small as that of eye facet. Distances between punctures much smaller than their diameter, interspaces smooth, slightly shining. Antennae rather short, antennal segments 1–5 elongate; segments 6–7 about as wide as long; segments 8–10 slightly transverse; segment 11 elongate, conical. Last 3 segments more massive than others and form loose club (Fig. 3).

*Pronotum* widest about 2/3 its length from base, then narrowed. Lateral margin smoothly rounded (Fig. 3). Ratio of pronotum length to its maximum width about 19:26. Surface of pronotum with rather distinct, fine and dense punctation. Diameter of punctures about twice as small as eye facet. Distances between punctures much smaller than their diameter, interspaces smooth, slightly shining. Punctuation similar to that on head. Base of pronotal disc with almost indistinct, symmetrical, round depressions (Fig. 3).

Ratio of *length of elytra* to their combined width about 25:32. Elytra with shallow longitudinal depressions extending from scutellum along suture to slightly beyond midline

(Fig. 3). Elytra with distinct, fine and dense punctation. Diameter of punctures only slightly smaller than eye facet. Distances between punctures much smaller than puncture diameter, interspaces smooth, slightly shining.

*Abdomen* delicately shagreened.

*Aedeagus* of characteristic structure (Figs 11–12).

*Female*. Sexual dimorphism absent, female morphologically similar to male. Spermatheca of characteristic structure (Fig. 13).

COMPARATIVE REMARKS. The new species belongs to the “*taprobanae*” species group. In this group, the new species is very similar in size, colouration and punctuation to

a closely related species, *Carpelimus (Trogophloeus) taprobanae* (Walker, 1859), from which it can be clearly distinguished only by the structure of the aedeagus [Gildenkov, 2015b, p. 385, figs. 19: 10–11]. It differs from *Carpelimus (Trogophloeus) vagans* (Cameron, 1930) by its larger size, longer antennae and can be clearly distinguished by the structure of parameres and the morphology of sclerites in the central part of the sac of aedeagus [Gildenkov, 2015b, p. 396, figs. 19: 13].

DISTRIBUTION. Nepal.

ETYMOLOGY. From Latin *geminus* (twins) referring to a significant similarity to *C. taprobanae*.



Figs 3–4. *Carpelimus* spp., males, dorsal view: 3 — *Carpelimus (Trogophloeus) geminus*, **sp.n.** (holotype); 4 — *Carpelimus (Trogophloeus) guillaumi*, **sp.n.** (paratype, Hong Kong).

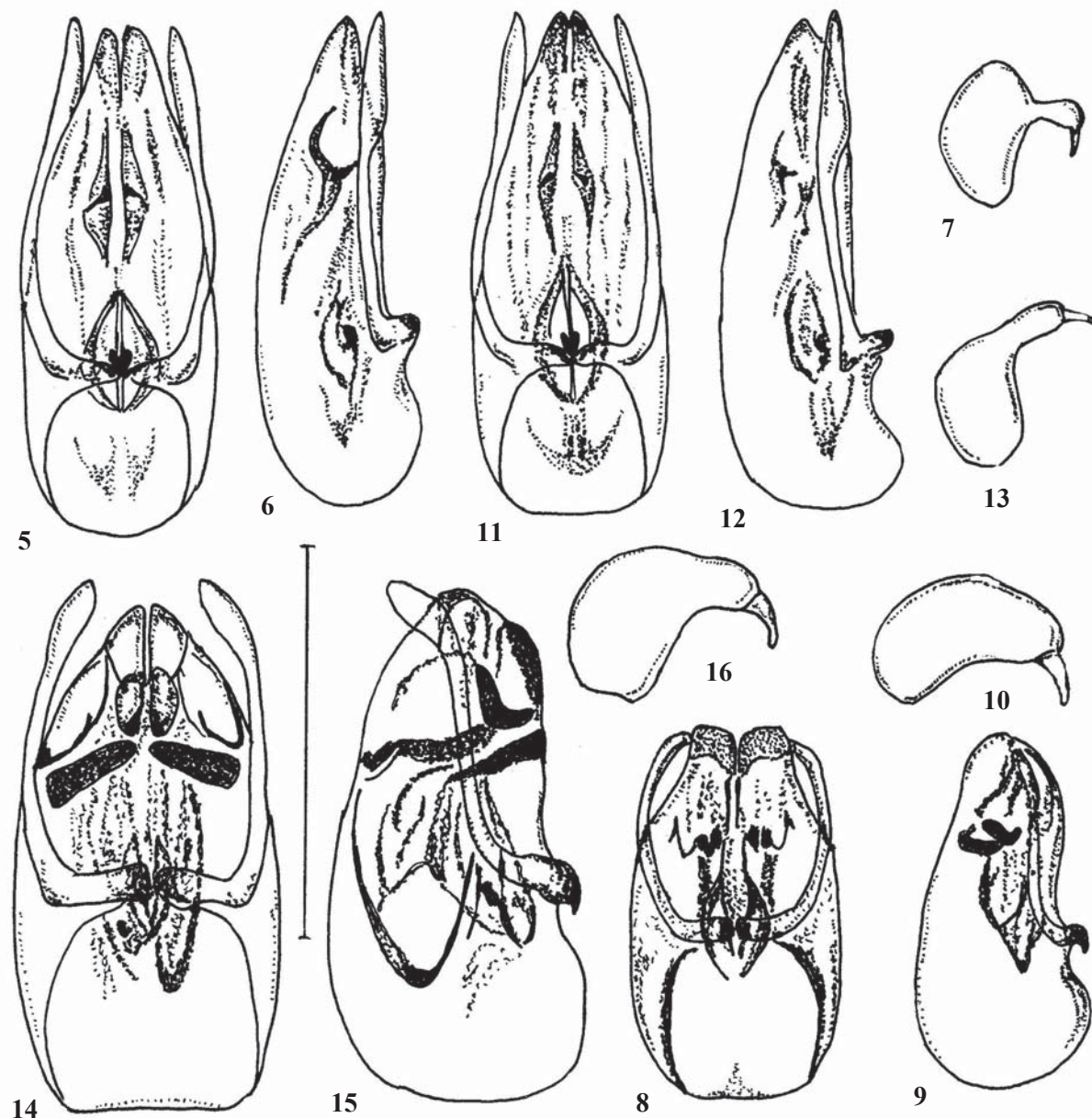
Рис. 3–4. *Carpelimus* spp., самцы, сверху: 3 — *Carpelimus (Trogophloeus) geminus*, **sp.n.** (голотип); 4 — *Carpelimus (Trogophloeus) guillaumi*, **sp.n.** (паратип, Гонконг).

*Carpelimus (Trogophloeus) guillaumei* Gildenkov, **sp.n.**

Figs. 4, 14–16.

**MATERIAL.** Holotype, ♂ “HONG KONG Fung Yuen 6.VI.1997 leg. G.T. Reels” “Flight interception trap” “Rougemont collection” “Holotypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (cGR). Paratypes: 3 ex. “HONG KONG, Tai Po III.1996 | G. de Rougemont” “Leaf litter” “Paratypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (cGR); 2♂♂, 2♀♀ “HONG KONG, Tai Po III.1996 | G. de Rougemont” “Flight interception trap” “Paratypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (cGR); 1♂, 1♀ – cMG); 2♂♂, 2♀♀, 5 ex. “HONG KONG Fung Yuen 6.VI.1997 leg.

G.T. Reels” “Flight interception trap” “Rougemont collection” “Paratypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (cGR); 1♂ – cMG); 1 ex. “Hong Kong Mui tsz Lam 1.X.96 | G.T. Reels” “Flight interception trap” “Rougemont collection” “Paratypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (cGR); 1 ex. “Hong Kong K.A.B.C. VI.92 G. Ades” “Malaise trap” “Rougemont collection” “Paratypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (cGR); 4♀♀, 1 ex. “CHINA: B.M.1980-491 P.M. Hammond” “GUANGDONG: Guangzhou Baiyunshan 27.IX.80” “Paratypus *Carpelimus guillaumei* | det. M. Gildenkov, 2016” (BNHM; 1♀ – cMG); 1♂ “CHINA: Yunnan, Lincang Pref. Mekong valley, small creek cleft, 8 km SSE Lincang, 854 m, 23°33'13.2"N, 100°05'56.8"E, wet litter & flood debris under waterfall, 11.IX.2009, leg. M. Schülke



Figs 5–16. Genitalia of *Carpelimus*: 5–7 — *C. asperus*, **sp.n.**; 8–10 — *C. fuligus*, **sp.n.**; 11–13 — *C. geminus*, **sp.n.**; 14–16 — *C. guillaumei*, **sp.n.**; 5, 8, 11, 14 — aedeagus, ventral view (holotypes); 6, 9, 12, 15 — aedeagus lateral view (holotypes); 7, 10, 13, 16 — spermatheca (paratypes). Scale bar: 0.25 mm.

Рис. 5–16. Гениталии *Carpelimus*: 5–7 — *C. asperus*, **sp.n.**; 8–10 — *C. fuligus*, **sp.n.**; 11–13 — *C. geminus*, **sp.n.**; 14–16 — *C. guillaumei*, **sp.n.**; 5, 8, 11, 14 — эдеагус, снизу (голотип); 6, 9, 12, 15 — эдеагус, сбоку (голотип); 7, 10, 13, 16 — сперматека (паратип). Масштаб: 0.25 mm.

[CH09-44a] "Paratypus *Carpelimus guillaumei* | det. M. Gildenkova, 2016" (cMSch); 1♂ "W – THAILAND 1990 Tham Tharn Lot NP N Kanchanaburi (2), leg. Jäch 27.11." "Paratypus *Carpelimus guillaumei* | det. M. Gildenkova, 2016" (NHMW).

DESCRIPTION (holotype). Length 2.0 mm. Colouration dark brown, legs and first 2 antennal segments yellowish brown. Integument slightly shining, body with short light-coloured hairs.

*Head* transverse, with wide base, ratio of head length (from neck mid-length to anterior margin of clypeus) to its maximum width about 20:26. Neck constriction prominent. Eyes rather large, slightly convex. Temples well-developed, round, eye diameter in dorsal view slightly longer than temple length. Head widest across eyes (Fig. 4). Head surface with rather distinct, fine and dense punctation. Puncture diameter on vertex about twice as small as eye facet. Punctures on frons slightly smaller and more densely set. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining. Antennae rather short, antennal segments 1–6 elongate; segments 7 and 8 about as wide as long; segments 9–10 slightly transverse; segment 11 elongate, conical. Last 3 segments more massive than others and form loose club (Fig. 4).

*Pronotum* widest about 2/3 its length from base, then narrowed. Lateral margin with small notch near base (Fig. 4). Ratio of pronotum length to its maximum width about 21:29. Surface of pronotum with rather distinct, fine and dense punctation, distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining. Punctuation similar to that on vertex. Pronotal disc with 2 pairs of prominent, symmetrical depressions: 1 pair of narrowly crescent-shaped depressions on base and 1 pair of longitudinal, oval depressions in central part (Fig. 4).

Ratio of *length of elytra* to their combined width about 33:40. Elytra with shallow longitudinal depressions extending from scutellum along suture to slightly beyond midline (Fig. 4). Surface of elytra with rather distinct, fine and dense punctation. Diameter of punctures about 1.5 times as small as eye facet, punctures slightly larger than those on pronotum and head. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining.

*Abdomen* delicately shagreened.

*Aedeagus* of characteristic structure (Figs 14, 15).

*Female*. Sexual dimorphism absent, female morphologically similar to male. Spermatheca of characteristic structure (Fig. 16).

COMPARATIVE REMARKS. The new species is similar to *Carpelimus (Trogophloeus) torrentum* (Cameron, 1930) in colouration, size, punctation patterns and head structure. It differs by slightly more developed eyes, more lightly-coloured legs and an entirely different structure of the aedeagus [Gildenkova, 2015b, p. 396, figs. 30: 8].

DISTRIBUTION. South China, West Thailand.

ETYMOLOGY. Named after Guillaume de Rougemont (Oxford, UK), a well-known beetle collector and expert on Staphylinidae, who kindly provided the material for the study.

***Carpelimus (Bucephalinus) rubrus* Gildenkova, sp.n.**  
Figs. 17–20.

MATERIAL. Holotype, ♂ "NE INDIA, ASSAM, Bhalukpong 27°02'N 92°35'E, 150m, L. Dembick leg., 26.v.–3.vi.2006 BMNH 2006-48" (BNHM). Paratypes: 4♀♀ "NE INDIA, ASSAM, Bhalukpong 27°02'N 92°35'E, 150m, L. Dembick leg., 26.v.–3.vi.2006 BMNH 2006-48" (BNHM); 1♀ – cMG); 2♂♂, 2♀♀ "NE INDIA, Assam-Arunachal border, Bhalukpong, 150m 27°00'48" N

92°39'08" E, L. Dembick leg. 1.–8.v.2012" (ZFMK); 1♂ – cMG); 1♀ "NEPAL, P: Narayani, D: Chitwan, Sauraha, Hotel Riversid, 190 m NN – 26.VI–02.VII.2011, LF N 27°34'55", E 84°29'58" leg. M. Hartmann, ♂54" (NKME).

DESCRIPTION (holotype). Length 2.3 mm. Colouration brown. Head, abdomen and antennae dark brown, pronotum and elytra reddish brown; legs and antennal bases yellowish brown. Integument slightly shining, body with short light hairs.

*Head* transverse, with wide base, ratio of head length (from neck mid-length to anterior margin of clypeus) to its maximum width about 21:28. Neck constriction prominent. Eyes rather large, convex. Temples rather well-developed, round, eye diameter in dorsal view about 1.5 times as long as temple length. Head widest across eyes (Fig. 17). Head surface with rather distinct and dense punctation. Many punctures on vertex umbilicate, their diameter slightly larger than eye facet. Punctures on frons simple, much smaller than those on vertex, their diameter more than twice as small as eye facet. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining. Antennae long, antennal segments 1–9 elongate; segment 10 about as wide as long; segment 11 elongate, conical. Last 3 segments more massive than others and form loose club (Fig. 17).

*Pronotum* widest about 2/3 its length from base, then narrowed. Lateral margin with small notch near base (Fig. 17). Ratio of pronotum length to its maximum width about 24:31. Surface of pronotum with rather distinct and dense punctation. Many punctures umbilicate, their diameter on base of pronotum and along its lateral margin much larger than eye facet; punctation not uniform, central portion of pronotal disc with much smaller punctures. Distances between punctures much smaller than their diameter, interspaces smooth, slightly shining. Base of pronotal disc with prominent, symmetrical, narrowly crescent-shaped depressions, almost merging at midline. Central part of disc with rather deep, oval depressions merging across midline to single butterfly-shaped depression (Fig. 17).

Ratio of *length of elytra* to their combined width about 38:43. Scutellum with shallow round depressions (Fig. 17). Surface of elytra with rather distinct, fine and dense punctation. Diameter of punctures only slightly smaller than eye facet. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining.

*Abdomen* delicately shagreened.

*Aedeagus* of characteristic structure (Figs 18, 19).

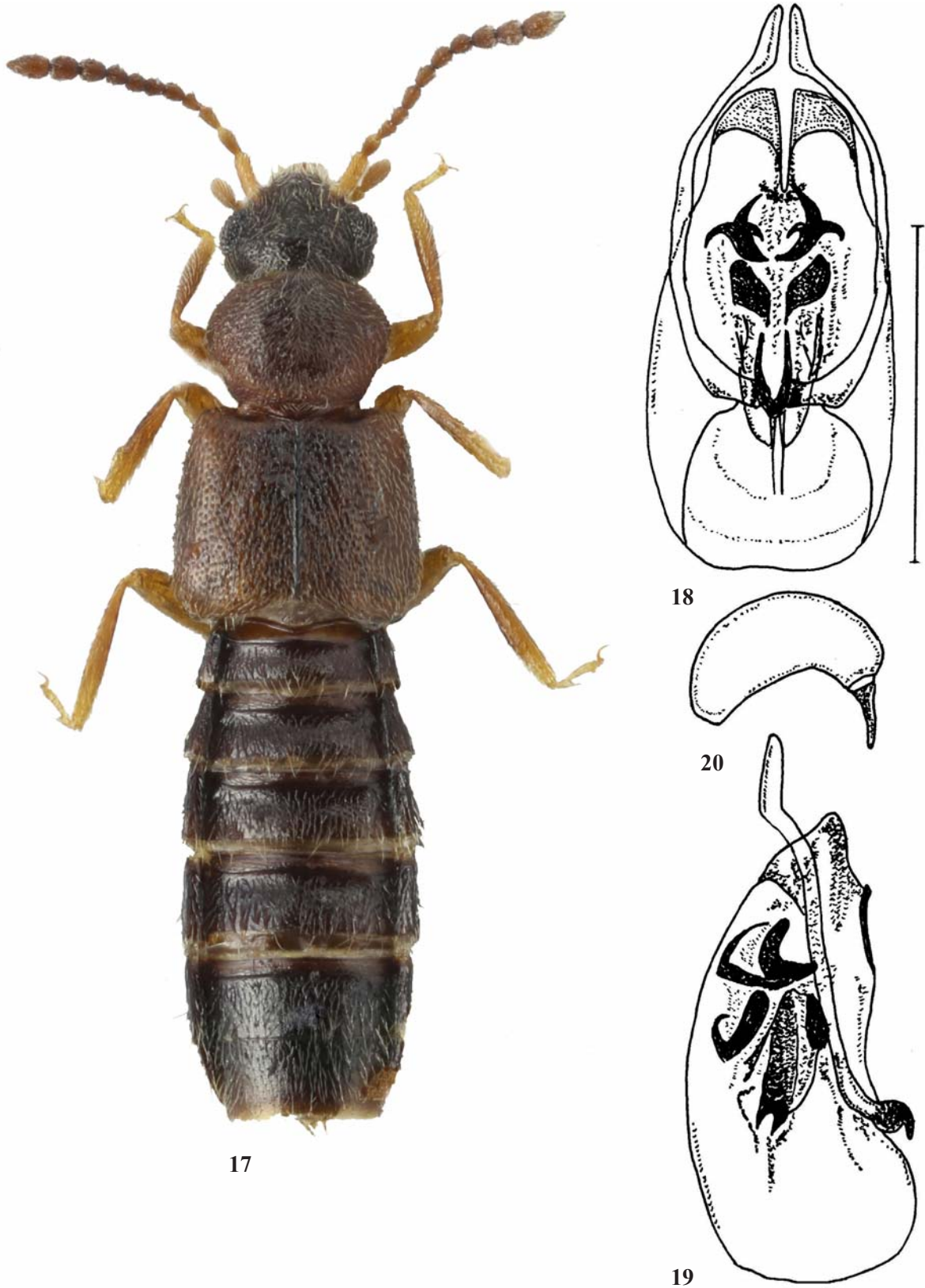
*Female*. Sexual dimorphism absent, female morphologically similar to male. Spermatheca of characteristic structure (Fig. 20).

COMPARATIVE REMARKS. The new species is similar in the structure of the aedeagus and especially in the morphology of parameres [Gildenkova, 2015b, p. 378, figs. 12: 17] to *Carpelimus (Bucephalinus) terribilis* Gildenkova, 2014 from the Philippine Islands [Gildenkova, 2014c]. It differs by its distribution range, smaller size and a lighter colouration and can be clearly distinguished by the structure of the aedeagus.

DISTRIBUTION. North India, Nepal.

ETYMOLOGY. From Latin rubro (red) referring to a distinct reddish tinge in the color of the elytra.

ACKNOWLEDGEMENTS. The author wishes to thank all colleagues for making material available for the study: Roger Booth (BNHM); Guillaume de Rougemont (Oxford); Michael Schülke (Berlin); Alfred Newton, Margaret Thayer



Figs 17–20. *Carpelimus (Trogophloeus) rubrus*, **sp.n.**: 17 — habitus, dorsal view; 18 — aedeagus, ventral view; 19 — aedeagus, lateral view; 20 — spermatheca; 17–19 — holotype, male; 20 — paratype, female. Scale bar: 0.25 mm.  
 Рис. 17–20. *Carpelimus (Trogophloeus) rubrus*, **sp.n.**: 17 — габитус, сверху; 18 — эдеагус, снизу; 19 — эдеагус, сбоку; 20 — сперматека; 17–19 — голотип, самец; 20 — паратип, самка. Scale bar: 0.25 mm.

and James Boone (FMNH); Harald Schillhammer (NHMW); Matthias Hartmann (NKME); Dirk Ahrens (ZFMK). I also thank Kirill Makarov for taking the photographs (Moscow Pedagogical State University, Russia).

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