

A review of the oriental genus *Praepristus* (Coleoptera: Carabidae: Platynini)

Dmitry N. Fedorenko¹

Abstract—The holotype of *Praepristus nepalensis* Kirschenhofer, 1999 (Coleoptera: Carabidae: Platynini), the type species of the genus, is revised and it actually shows all basic characters of Platynini, not Lebiini: Pericalina as considered before. The genus is redescribed, based on fresh material, and the new transfer to the tribe Platynini is briefly discussed. Ten new species are described: *P. caviceps* **new species**, *P. depressus* **new species**, *P. foveiceps* **new species**, *P. grandis* **new species**, *P. kabakovi* **new species**, *P. similis* **new species**, *P. sulcifer* **new species**, *P. testaceus* **new species**, and *P. tonkinensis* **new species** all from Vietnam, and *P. borneensis* **new species** from Sabah, Borneo, Malaysia. Both *Colpodes planus* Landin, 1955 and *Notagonum rugifoveatus* Louwerens, 1955 are newly transferred to *Praepristus* Kirschenhofer, 1999. A key to all 13 currently known species of the genus is given.

Résumé—L'holotype de *Praepristus nepalensis* Kirschenhofer, 1999 (Coleoptera: Carabidae: Platynini), l'espèce type du genre, est révisé et il présente en effet tous les caractères principaux des Platynini, mais pas ceux des Lebiini: Pericalina, comme il était considéré précédemment. Le genre est re-décrit à partir de matériel frais et le transfert dans la tribu de Platynini est brièvement discuté. Dix nouvelles espèces sont décrites: *P. caviceps* **nouvelle espèce**, *P. depressus* **nouvelle espèce**, *P. foveiceps* **nouvelle espèce**, *P. grandis* **nouvelle espèce**, *P. kabakovi* **nouvelle espèce**, *P. similis* **nouvelle espèce**, *P. sulcifer* **nouvelle espèce**, *P. testaceus* **nouvelle espèce**, et *P. tonkinensis* **nouvelle espèce** du Viêt-Nam, et *P. borneensis* **nouvelle espèce**, du Sabah (Borneo, Malaisie). Les espèces *Colpodes planus* Landin, 1955 et *Notagonum rugifoveatus* Louwerens, 1955 sont transférées pour la première fois au genre *Praepristus* Kirschenhofer, 1999. Une clé pour l'identification des 13 espèces actuellement connues du genre est proposée.

Introduction

Platynini (Coleoptera: Carabidae) is a world-wide, megadiverse carabid tribe. The platynine fauna of south and southeast Asia is among the richest, with hundreds of new species and dozens of new genera described from the Himalayas and China over the last decades. However, it remains poorly understood due to the scarcity of revisionary work. The available papers (Liebherr 1998; Schmidt 2000, 2001a, 2001b, 2009; Liang and Kavanaugh 2005; Baehr 2010) treat just a few, mostly minor, groups; a regional generic revision of the tribe is lacking as well, except for that of Habu (1978). Platynine taxa originally placed in different tribes, e.g., Pterostichini or

Lebiini, exacerbate the problem; the recently transferred genera *Hannaphota* Landin, 1955 and *Meleagros* Kirschenhofer, 1999 are two typical examples (Morvan 2004; Will 2005).

The monobasic genus *Praepristus* Kirschenhofer, 1999 was described together with *Meleagros*, neither with any discussion of their tribal placement. *Praepristus* was only said to be close to *Peripristus* Chaudoir, 1869, but distinctive in having a smooth, versus serrate, lateral margin of the elytra. Following the descriptions of *Praepristus* and *Meleagros*, an artificial group was established (*Miscelus* Gruppe) to encompass the genera *Peripristus*, *Praepristus*, *Meleagros*, and *Miscelus* Klüg, 1834 as opposed to the other genera of the “Tribus Lebiini – Gruppe

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D.N. Fedorenko,¹ A.N. Severtsov Institute of Ecology & Evolution, Russian Academy of Sciences, Moscow, Russia

¹Corresponding author (e-mail: dmitri-fedorenko@yandex.ru).

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Catascopi” from east and southeast Asia, with a key to those four genera proposed (Kirschenhofer, 1999). The group was defined by the following characters: labrum subquadrate, not transverse; apical margin of clypeus straight or convex; tarsomere 4 truncate or slightly emarginate apically; pronotal base straight; pronotum with one lateral seta at most; lateral groove of pronotum not broadened in apical third; tarsal claws smooth. My study of the holotype of *Praeprius nepalensis* Kirschenhofer, 1999, the type species of the genus *Praeprius* Kirschenhofer, 1999 has revealed that this is yet another platynine.

Nine new species of *Praeprius* from Vietnam and Borneo are described below, and the genus is re-defined based on the new material. According to the detailed original descriptions accompanied by good illustrations, *Colpodes planus* Landin, 1955 and *Notagonum rugifoveatus* Louwerens, 1955 share all characteristic features of *Praeprius*. Therefore they are considered here as further two species of the genus. A key is provided that includes all the known species except for *P. rugifoveatus* **new combination**, which is briefly discussed but not keyed because some important characters are not mentioned in the original description. *Praeprius* species are externally similar; positive identification requires careful examination of the penile internal sac.

Material and methods

A total of 369 specimens were examined during this study. The vast majority of the material was collected during expeditions to various areas of Vietnam, sponsored by the Joint Russo-Vietnamese Tropical Center, Moscow, Russia, and Hanoi, Vietnam. The holotypes and some paratypes are deposited in the Zoological Museum of the Moscow State University (ZMMU) and Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (ZISP), with the remaining paratypes in the author’s synoptic collection at the A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia (SIEE). All labels are typeset, unless otherwise specified. Data on labels of type specimens are cited in quotes, each line being delimited by slash. Type specimens each is supplied with red typeset label: “HOLOTYPE (or PARATYPE)/*Praeprius*/... sp. n./D. Fedorenko des. 2013”.

Measured parameters used: Apparent body length, from mandible tips to elytral apices (BL); pronotal length along midline (PL); elytral length from base along suture (EL); maximum widths of the head (across the eyes), pronotum, and elytra (HW, PW, and EW, respectively). The measurements were taken using an ocular micrometer within the accuracy of two decimal places. Unless otherwise indicated, the number of specimens measured (*n*) is only given for the first ratio in the description. The aedeagi were examined in glycerin, after being boiled for two minutes or put for a day in a diluted KOH solution and then rinsed.

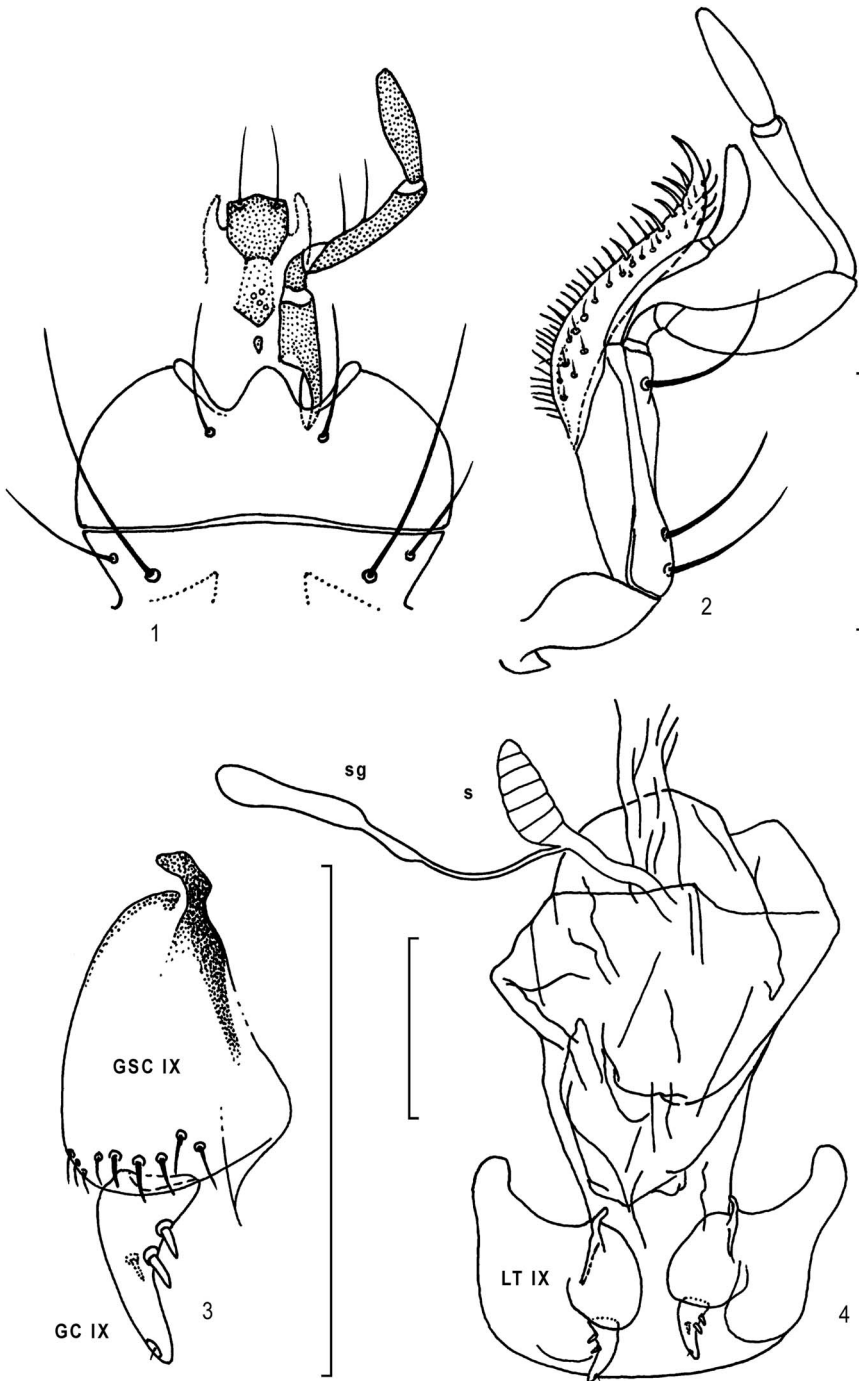
Genus *Praeprius* Kirschenhofer, 1999

Praeprius Kirschenhofer, 1999: 67. Type species: *Praeprius nepalensis* Kirschenhofer, 1999, by original designation.

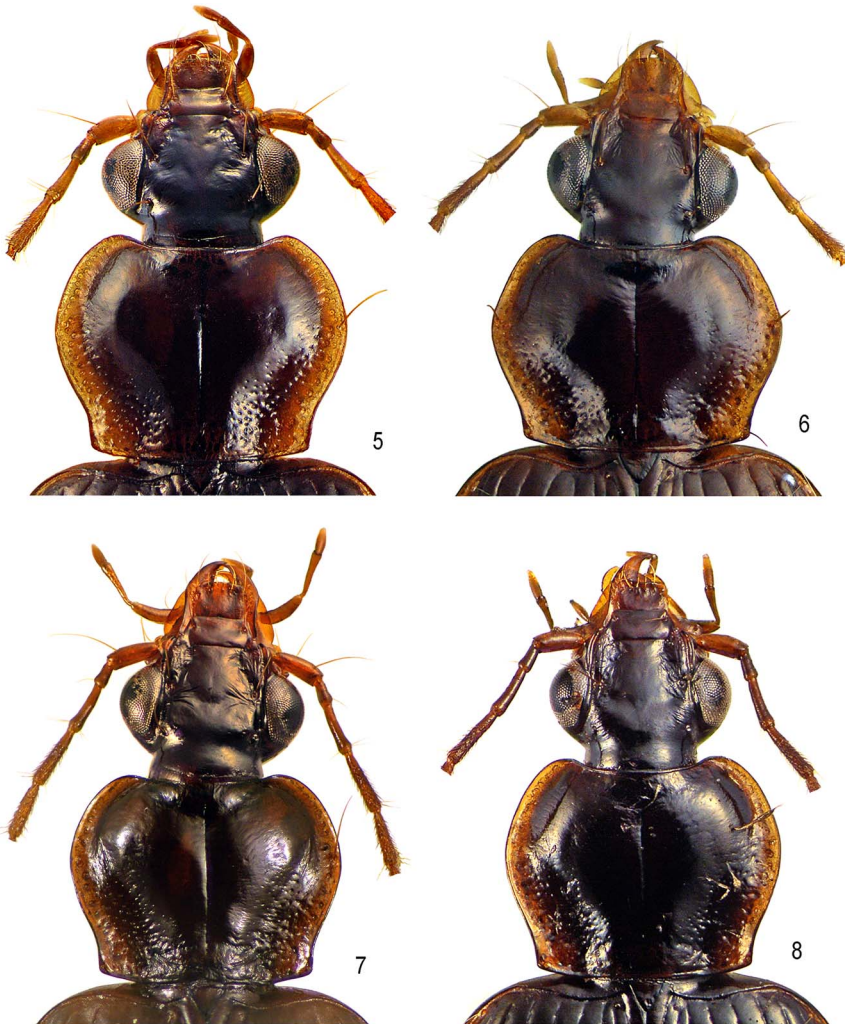
Diagnosis. A combination of characters, mostly plesiomorphic, defines this genus well. The apomorphies, such as a simple (non-bifid) tooth of mentum, the bisetose metacoxa, ventrally glabrous tarsomere 5, and a wide and depressed body, are found in various combinations in many other platynines. Two basal setae on the maxillary stipes is an autapomorphy. The combination of a conspicuously depressed head, non-metallic body, subcordate pronotum with basal foveae mostly punctate, and metatarsomere 4 subtruncate, differentiates *Praeprius* from the rest of the Oriental Platynini.

Redescription. Macropterous to apterous. Body medium-sized, 6.3–9.2 mm in length, rather flat and wide, mostly concolourous brown to dark brown, with no metallic luster; body appendages and more or less narrow lateral margins of both pronotum and elytra pale, yellow or dirty yellow. Dorsum rather shiny, microsculpture fine, often obliterate on head and pronotum; elytra slightly to moderately iridescent. Underside generally impunctate, only mesepisterna rather sparsely or moderately punctate along front margins, exceptionally (*P. planus*, based on the description) mesoventrite and mesopleura conspicuously punctate. **Head** (Figs. 5–15) flat. Eyes large and convex to slightly reduced and somewhat flattened; genae short to moderately long; angle between gena and neck obtuse but distinct; vertex mostly with a wide U-shaped impression that is

Figs. 1–4. *Praepristus depressus* new species; 1. Ventral aspect: labium; 2. Left maxilla; 3. Left gonocoxite IX and gonosubcoxite IX; 4. Female reproductive tract. LT IX, laterotergite IX; s, spermatheca; sg, spermathecal gland. Scale bars 0.5 mm.



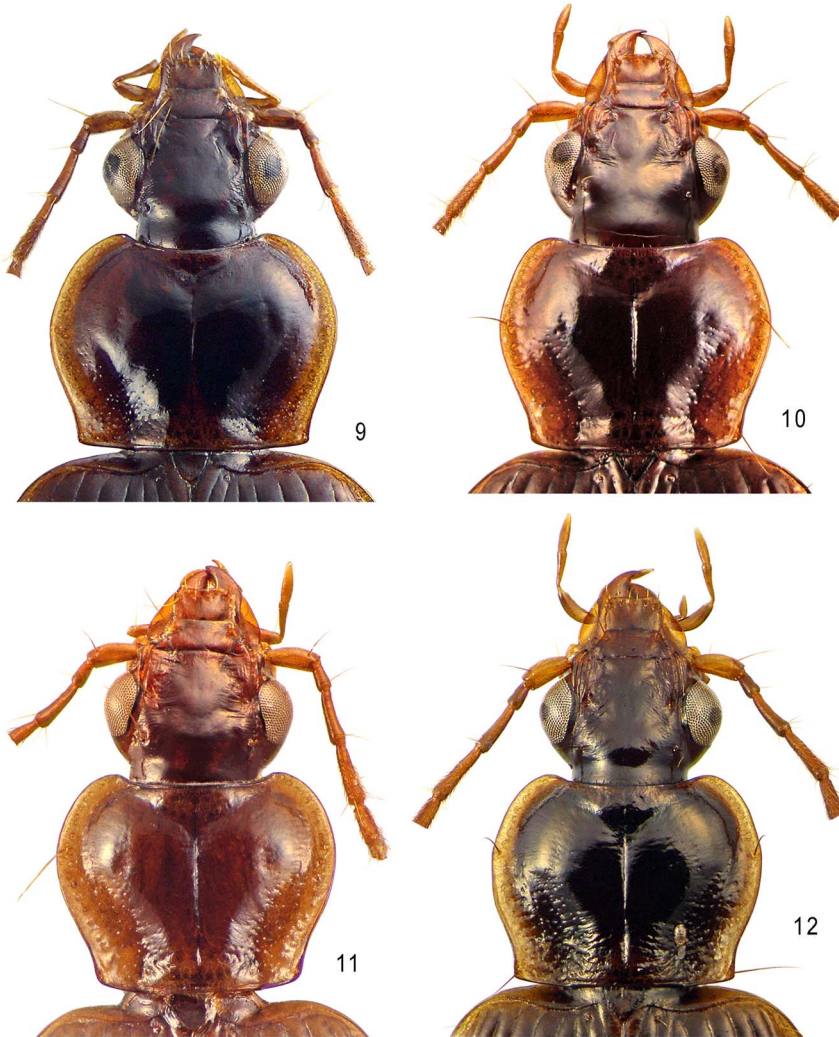
Figs. 5–8. *Praepristus* species, head and pronotum: 5. *Praepristus foveiceps* **new species**; 6. *Praepristus caviceps* **new species**; 7. *Praepristus depressus* **new species**; 8. *Praepristus tonkinensis* **new species**.



often obliterated medially, leaving a pair of round, rather shallow, lateral pits near anterior supraocular setae; a subtle oblong callosity often present between anterior and posterior supraocular setae. Antennae filiform, moderately long, with apices reaching approximately the basal third of elytra, pubescent from antennomere 4 onward; antennomeres 1–3 without additional setae; antennomeres 1, 3, and 4 subequally long, pedicel about half as long as scape. Mandibles moderately long, both scrobal ridges sharp, lower ridge conspicuously explanate and slightly dilated, upper ridge sinuate in dorsal view. Stipes bisetose at base (Fig. 2), penultimate maxillary palpomere distinctly or

much longer than terminal palpomere. Terminal labial and maxillary palpomere fusiform. Tooth of mentum large and simple, unbeaded, narrowly rounded apically, barely shorter than lateral lobes; base with 2 setae far apart; submentum quadrisetose (Fig. 1). **Pronotum** (Figs. 5–15) cordate to transverse, with sides mostly sinuate before base. Lateral margins moderately explanate, slightly reflexed, usually more explanate-reflexed towards the base. Basal foveae large and long, densely and fairly coarsely punctate to nearly smooth. Midline moderately deep. Apical and basal transverse impressions shallow to indistinct. **Elytra** flattened, rather wide, subquadrate, broadest

Figs. 9–12. *Praepristus* species, head and pronotum: 9. *Praepristus kabakovi* **new species**; 10. *Praepristus sulcifer* **new species**; 11. *Praepristus testaceus* **new species**; 12. *Praepristus similis* **new species**.



just behind middle, fully striate; intervals 2 and 3 mostly slightly wider than others; base nearly straight, moderately long, slightly wider than base of pronotum; shoulders widely rounded; sides slightly rounded; posterolateral angles indistinct, rounded off, or (rarely) very obtuse; preapical sinuation shallow, apices truncate or narrowly rounded, without spines or teeth (sutural interval may form a minute to indistinct apical tooth). Subbasal ridge entire, in a backward curve, humeral angle rounded or barely angulate just outside stria 6. Disc with 1 or 2 shallow or very shallow, sometimes indistinct, impressions just outside

discal pores, anterior impression longer than posterior impression. Interval 3 reaching apical margin, interval 10 (the explanate lateral margin except lateral bead) narrower than, or sometimes as wide as, interval 9. Three discal setigerous pores, evenly spaced along interval 3, d1 in stria 3, d2 and d3 touching stria 2. Two apical pores in stria 7. Apical sutural seta present. Parascutellar pore adjacent to stria 1 just behind basal bead, parascutellar striole long. Umbilical setae 16–20, arranged in an uninterrupted row more spaced around mid-length than elsewhere. **Legs.** Tarsi bisulcate, sulci weak, especially inner (posterior)

Figs. 13–15. *Praepriustus* species, head and pronotum: 13. *Praepriustus borneensis* **new species**; 14. *Praepriustus nepalensis*; 15. *Praepriustus grandis* **new species**.



sulci, but mostly distinct. Metacoxa bisetose (inner seta missing), metatrochanter with seta, metafemur bisetose posteroventrally. Protarsomere and mesotarsomere 4 with fairly small but distinct apical lobes, inner or outer lobe being longer in protarsi and mesotarsi, respectively; metatarsomere 4 shallowly emarginate. Tarsomeres 1–4 with lateroapical setae, tarsomeres 1 and 2 with dorsoapical setae. Tarsomere 5 glabrous ventrally. **Venter.** Metepisterna long, conspicuously longer than wide. Abdominal sterna IV–VI each with one pair of ambulatory setae; last visible abdominal sternite (VII) apically bisetose in male and quadrisetose in female. **Aedeagus**

(Figs. 16–54). Median lobe almost symmetrical, widely membranous dorsally except at base; apical lamella triangular and pointed in ventral view, often with a minute ventral beak at tip; internal sac mostly furnished with large spines or sclerites. **Female genitalia.** Gonosubcoxite IX with an irregular row of several setae along apical margin, gonocoxite IX subtriangular, with 1 dorsal and 2 ventral (lateral) ensiform setae (Fig. 3). Female reproductive tract as in Fig. 4.

Systematic considerations. *Praepriustus* was described as a member of the subtribe Pericalina (Lebiinii), keyed with and compared with the genera *Peripriustus* Chaudoir, 1869 and *Miscelus*

Klüg, 1834. Hence *Praeprius* had to show all distinctive features of the Lebiini, the Pericalina and the *Miscelus*-group. Erected by Kirschenhofer for the genera *Periprius*, *Praeprius*, *Meleagros*, and *Miscelus*, the latter group is certainly nonsense because *Praeprius* and *Meleagros* do belong to Platynini, whereas *Miscelus* fails to fit the group too well in showing a long, trapezoidal labrum which is much longer than wide while the clypeus is concave at its apical margin.

Apically truncate elytra leaving the last abdominal tergum or terga exposed define the Lebiini and the other Lebiitae (or Lebiinae). Apart from this feature, all members of the subtribe Pericalina are peculiar in having at least one pair of paragular setae. Furthermore, the tarsi are distinctly and irregularly pubescent over the dorsal surface (as are often the tibiae) and also lack lateral sulci or standard apical setae. Tarsomere 4 is truncate apically. The body is often sparsely pubescent or at least ciliate. The umbilical setae on the elytra are often widely interrupted at the middle. Finally, the aedeagus is particular in shape and structure, its median lobe being tubiform, strongly sclerotised throughout, with a well-defined apical orifice that is fairly small and rounded, and the right paramere small and often unciform at the base. For other characters, see also Ball (1975) and Shpeley and Ball (2000).

All these characters are totally absent from *Praeprius*: the paragular setae are absent; the tibiae are furnished with strong setae arranged in even rows; the tarsi are bisulcate laterally and glabrous on the dorsal surface, with a particular combination of standard setae, both dorso-apical and latero-apical; both protarsomere and mesotarsomere 4 are supplied with small, but distinct apical lobes. Furthermore, the body is glabrous, the umbilical seta series uninterrupted, the median lobe of aedeagus rather stout and widely membranous

dorsally, and the right paramere straight at the base. Additional characters are as follows: protibiae anisochaetous, mandibles without scrobal seta, procoxal and mesocoxal cavities closed, elytra without internal plica, antennae filiform, parameres glabrous, left paramere conspicuously smaller than right paramere, being devoid of a distinct angle between its base and apex. Lastly, the female genitalia are of the shape and structure characteristic of Platynini: gonosubcoxite IX is supplied with a row of strong setae along the apical margin, and the gonocoxite IX is subtriangular, with one ventral and two dorsal ensiform setae.

The character states listed above justify the transfer of *Praeprius* from Lebiini: Pericalina, to the tribe Platynini.

Natural history. The adults occur in leaf litter of monsoon broadleaf forests in lowlands as well as mountains. Most species are either vicarious or allotopic, each preferring or even confined to a particular altitudinal zone. For example, only *P. foveiceps* new species has been found in lowland forests of the Cat Tien National Park, southern Vietnam. In Bu Gia Map National Park, this species shares slightly higher altitudes (350–540 m) with *P. depressus* new species, while the latter has been found to occur at altitudes of 1000–1600 m in other localities. Out of the three sympatric species recorded in the Bi Doup-Nui Ba Nature Reserve, *P. depressus* has been taken at ~1500 m in numbers, while *P. sulcifer* new species is sympatrical with *P. grandis* new species at 1700–1900 m.

The species *P. foveiceps*, *P. depressus*, and *P. sulcifer* are abundant in spring, early in the wet season; the former two species come in numbers to lights at night.

Geographic distribution. Widespread in the Oriental region, north to Nepal, south to at least Borneo, Sumatra, and Java, in the Greater Sunda Islands.

Key to species of *Praeprius*

1. Elytral striae impunctate or very finely punctate. Elytra elongate, often with one or two, anterior and posterior, shallow yet distinct impressions just outside discal, setigerous pores. Vertex flat or with a transverse U-shaped impression. Elytral microsculpture reticulated or with transverse lines 2
- Elytral striae deep and conspicuously punctate. Elytra wide, about a third longer than wide, without impressions. Head flat, with almost indistinct lateral pits between eyes and nearly indistinct callosity in front of posterior supraorbital seta. Elytral microsculpture consisting of dense transverse lines 11. *P. nepalensis* Kirschenhofer, 1999

2. Venter impunctate or with several punctures at sides of mesothoracic peduncle only. Elytral disc with microsculpture of transverse lines to strongly transverse meshes or sides of pronotum straight in front of obtuse basal angles. 3
 — Mesovenrite and mesepisterna strongly punctate. Elytral microsculpture consisting of mixed transverse and isodiametric meshes. Sides of pronotum sinuate in front of rectangular and prominent basal angles (from the description). 12. *P. planus* (Landin, 1955)
3. Sides of pronotum clearly sinuate in front of basal angles. Body length under 8.5 mm 4
 — Sides of pronotum nearly straight in front of very obtuse basal angles; basal foveae almost smooth (Fig. 15). Body large, BL 8.6–9.2 mm. 9. *P. grandis* **new species**
4. Elytral microsculpture fine, consisting of dense transverse lines or very transverse meshes hardly visible on disc 5
 — Elytral microsculpture consisting of distinct transverse meshes. 10
5. Pronotum with basal foveae clearly punctate; basal angles mostly subrectangular to obtuse; microsculpture very superficial to obliterate on disc 6
 — Pronotum with basal foveae nearly impunctate, explanate lateral margin moderately wide anteriorly and only slightly wider posteriorly, sides distinctly sinuate in front of right basal angles, sides of base very slightly oblique (Fig. 13); microsculpture distinct 10. *P. borneensis* **new species**
6. Elytral interval 8 not sulcate 7
 — Elytral interval 8 deeply sulcate in apical half. 6. *P. sulcifer* **new species**
7. Outer four elytral intervals pale brown at least in apical third. Apterous 8
 — Pronotum and elytra black, each with a very narrow pale lateral margin (Fig. 8). Macropterous
 4. *P. tonkinensis* **new species**
8. Pronotum narrow, a third wider than long; basal foveae and explanate lateral margin coarsely and densely punctate in at least basal half of pronotum. Internal sac of median lobe of aedeagus without sclerites. . . . 9
 — Pronotum wide, about two fifths wider than long; in basal third of pronotum, only basal foveae finely and densely punctate. Internal sac of median lobe of aedeagus with a long tooth (Figs. 31–33).
 5. *P. kabakovi* **new species**
9. Pronotum (Fig. 11) at base narrow, with basal angles blunt, somewhat obtuse to subrectangular. Eyes conspicuously reduced. Body pale brown. Sclerotised bottom of median lobe of aedeagus in left lateral view broadened medially and gently sinuate before apical lamella (Fig. 40) 7. *P. testaceus* **new species**
 — Pronotum (Fig. 12) at base wider, with basal angles sharp and nearly right angled. Eyes slightly larger. Head and pronotum nearly black, elytra dark brown, paler apicad and laterad. Sclerotised bottom of median lobe of aedeagus in left lateral view straight and narrow throughout its length (Fig. 52) 8. *P. similis* **new species**
10. Elytral interval 9 distinctly wider than 10 (not counting the narrow lateral bead). At least anterior elytral impression distinct. Internal sac of median lobe of aedeagus in right lateral view with a large, tooth-like sclerite (occasionally absent) distal to a large and dark subtriangular fold (Figs. 22–27).
 3. *P. depressus* **new species**
 — Elytral intervals 9 and 10 of subequal width (not counting the narrow lateral bead). Impression(s) of elytral disc faint to indistinct. Internal sac of median lobe of aedeagus different, without dark subtriangular fold at middle 11
11. Head (Fig. 5) between eyes flat, with transverse impression reduced to a pair of shallow but distinct lateral pits near anterior supraocular seta. Pronotum with basal foveae and explanate lateral margin in basal half to three fifths coarsely and densely punctate; explanate lateral margin subequally wide throughout. Internal sac of median lobe of aedeagus with a large spiniform tooth (Figs. 16–18). 1. *P. foveiceps* **new species**
 — Head (Fig. 6) with a conspicuous transverse interocular impression and a pair of shallow lateral pits near anterior supraocular seta. Explanate lateral margin of pronotum much narrower anteriorly and moderately coarsely and moderately densely punctate in basal half, as are basal foveae. Internal sac of median lobe of aedeagus with three very large teeth, one proximal rising from a very large base, and two distal (Figs. 19–21). 2. *P. caviceps* **new species**

1. *Praepristus foveiceps* new species

(Figs. 5, 16–18)

Type material. Holotype ♂ (ZMMU): “S[outh] Vietnam, Dongnai Pr[ovince]/Nam Cat Tien Nat[ional Park]/Exped[ition]. Russ[ian].-Vietnamese/Tropical Centre/at light HQL450 10–11./leg.D.Fedorenko VI.2005”. Paratypes: 97 specimens, ♂♂, ♀♀ (ZMMU, SIEE, ZISP), same data, all taken between 17.v. and 12.vi.2005; ♀, “Vietnam, Binh Phuoc Prov./Bu Gia Map Nat. Park./12°11'37"N 107°12'21"E/h = 350–540 m/leg.D.Fedorenko 12.IV.2009”; ♂, same data, except for at light, 20–22.iv.2009.

Additional material. ♂ (collection of the Moscow State Pedagogical University): Vietnam, Lam Dong Prov., 75 km N of Phan Tiet, env. Gia Bac, 1100 m, 18.iv.2007, leg. P. Oudovichenko.

Diagnosis. Among the species with transversely reticulate microsculpture of the elytra, *P. foveiceps*, besides the aedeagus structure, is distinctive in the following combination of characters. Appendages paler in general; antennae uniformly pale; pale pronotal lateral margin slightly wider. Pronotum with basal foveae and explanate lateral margin densely and coarsely punctate, the punctation reaching or going beyond the pronotal mid-length. The explanate lateral margin is wider, especially in anterior half, than in other congeners.

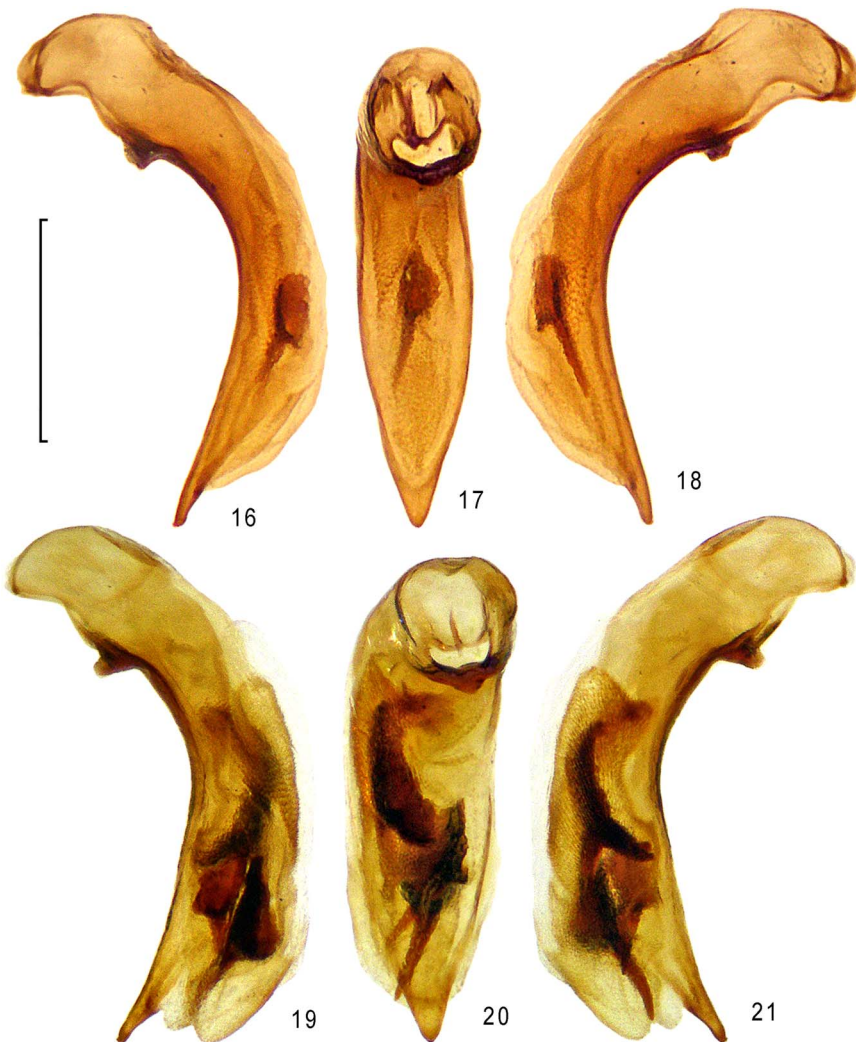
Description. Body length 6.3–7.7 mm. Very shiny, brown to dark brown, elytra slightly sericeous and iridescent; legs, antennae, mouthparts, labrum, clypeus and adjacent part of frons, lateral margins of pronotum rather widely and those of elytra narrowly (outside stria 9), as well as venter pale, yellow to reddish yellow; elytral interval 9 pale brown, paler than 8 but darker than 10; propleura and often also antennomere 3 brown to dark brown; base of pronotum and elytra along suture and in front of apex often slightly paler. Microsculpture obliterated on head, rather narrow transverse meshes indistinct to hardly visible on pronotum, elytra with fine microsculpture of narrow transverse meshes on disc and much more distinct transverse meshes mixed with isodiametric meshes on interval 10. **Head** (Fig. 5) flat, each side with a small but distinct round pit just inside the gentle callosity located between anterior and posterior supraorbital setae; the pits may be connected by a faint U-shaped impression

in some individuals. Eyes large and convex, smoothly extended into short genae, semicircular in outline; clypeus rather flat; frontal sulci long, mostly rather deep and wide, diverging backward from a level slightly behind frontoclypeal suture, reaching or almost reaching anterior supraorbital seta, anteriorly extending onto clypeus, curved outwards and ending just behind clypeal seta; a finely rugulose area outside the fovea. Neck constriction visible only at sides. **Pronotum** (Fig. 5) cordate, PW/PL 1.31–1.47 (1.38, $n = 8$), PW/HW 1.44–1.50 (1.47), finely beaded throughout, with basal bead interrupted just medially, base slightly oblique laterally, apex conspicuously emarginate, apical angles projecting forward and rather widely rounded; sides regularly rounded in apical two-thirds, conspicuously sinuate in front of subrectangular (slightly obtuse) and fairly sharp basal angles, moderately explanate anteriorly and widely explanate posteriorly, somewhat reflexed, more so in front of basal angles. Disc rather convex, median line deep, obsolete at both ends, anterior transverse impression moderately deep, obsolete at sides, basal transverse impression shallow to reduced. Basal foveae large, deep, shallower anterad and disappearing 1/2–3/5 from base. Basal foveae and explanate lateral margins coarsely and densely punctate. **Elytra** oval, EL/EW 1.38–1.47 (1.43), EW/PW 1.58–1.69 (1.64), without humeral angle, faintly sinuate before narrowly rounded apices. Disc flat, anterior impression shallow but distinct, on intervals 4–6 between d1 and d2 or slightly beyond d1 anteriorly; sometimes with a smaller, faint impression on intervals 4–7 outside posterior discal pore. Striae rather deep, very finely punctate to indistinctly crenulate; intervals nearly flat in general, slightly convex in apical third, interval 7 behind shoulder more convex than others; interval 10 as wide as 9. Umbilical setae: 15–17, mostly 16. Macropterous. **Aedeagus** (Figs. 16–18): median lobe with ventral margin strongly end evenly concave at about middle; apical lamella very gently curved upwards, regularly triangular and slightly blunt at tip in ventral view; internal sac with a large tooth-like sclerite rising from a wide base.

Etymology. The species name refers to the sculpture of the vertex.

Natural history. The vast majority of the specimens were taken at light at margins of tropical broadleaf semi-deciduous monsoon forests at

Figs.16–21. *Praeprius* species: 17, 20. Aedeagus, posterior ventral; 16, 19. Left lateral aspect; 18, 21. Right lateral aspect. 16–18. *Praeprius foveiceps* **new species**; 19–21. *Praeprius caviceps* **new species** (19–21). Scale bar 0.5 mm.



low altitudes of ~150 m; several hand-collected specimens in leaf litter of these habitats. Some specimens taken in similar habitats at higher altitudes (~500–1100 m).

Geographic distribution. Dongnai, Binh Phuoc and Lam Dong provinces, Vietnam.

2. *Praeprius caviceps* **new species**

(Figs. 6, 19–21)

Type material. Holotype ♂ (ZISP): “Vietnam Gialai/Contum [Province] Buonluoi/5 V 1995 Gorochov” [handwritten].

Diagnosis. Externally similar to *P. foveiceps* but has a very distinctive internal sac of the median lobe of aedeagus.

Description. As for *P. foveiceps*, except as follows: BL 6.5 mm. Antennomere 2 and apical two-thirds of antennomeres 3 and 4 vaguely infusate. **Head** between eyes with a distinct U-shaped impression instead of lateral pits (Fig. 6). Pronotum (Fig. 6), PW/PL 1.42, PW/HW 1.50, finely beaded throughout, with explanate lateral margin narrow anteriorly and punctation slightly less coarse and less dense. **Elytra:** EL/EW 1.43, EW/PW 1.56, anterior impression nearly indistinct; outer intervals subconvex, inner ones nearly flat on

disc, all rather convex in apical third. Umbilical setae: 16. **Aedeagus** (Figs. 19–21): median lobe with apical lamella slightly pointed at tip and internal sac supplied with three large teeth of which proximal one rising from a very large base.

Etymology. The species name refers to the concave vertex.

Geographic distribution. Known only from the type locality.

3. *Praepristus depressus* new species

(Figs. 7, 22–27)

Type material. Holotype ♂ (ZMMU): “S[outh] Vietnam, Lam Dong Prov./Bi Doup – Nui Ba [Nature] Res[erve]/env. Long Lanh, at light/12°10'44"N, 108°40'44"E/h = 1400–1600 m, 17–20.IV.2008/leg. D.Fedorenko”. Paratypes: 29 specimens (ZMMU, ZISP, SIEE), ♂♂, ♀♀, same data, but 30.III–20.IV.2008 and 4.VI.2009; 120 specimens, ♂♂, ♀♀, “Vietnam, Dak Lak Prov./Chu Yang Sin Natn. Park./12°23'48"N 108°20'59"E/Krong Kmar riv[er].upp[er].flow/h = 1000 m, at light 30.III–14./D. Fedorenko leg. IV.2012”.

Additional material (SIEE). 2 ♀♀: S Vietnam, Lam Dong Prov., 25 km NNW of Bao Loc, Loc Bao env., $h = 800$ m, 11°44'18"N/107°42'08"E, at light, 5–20.iv.2013, D. Fedorenko leg.; 3 ♀♀: Binh Phuoc Prov., Bu Gia Map National Park, 12°11'37"N/107°12'21"E, $h = 350$ –540 m, at light, 12–13 and 15.iv.2009, leg. D. Fedorenko.

Diagnosis. This species can be separated from other species with transversely reticulated elytral microsculpture (*P. foveiceps* and *P. caviceps*) by its larger, slightly darker body, narrow interval 10 and characters of the internal sac of median lobe of aedeagus.

Description. Similar to *P. foveiceps*, except as follows: Body slightly larger, 7.2–8.2 mm in length, colouration slightly darker in general, with antennomeres 2–4 entirely or at least apically infuscate and interval 9 barely paler than interval 8, antennomeres 1 and/or 5 sometimes infuscate; underside occasionally infuscate to dark brown. Pronotal microsculpture fine but distinct, consisting of narrow transverse meshes. **Head.** Clypeus somewhat convex in posterior half, frontal sulci slightly deeper laterally, forming a subcarinate elevation just inside supra-antennal carina. Frons between eyes

with a rather deep, transverse U-shaped impression and a distinct oblong callosity just in front of posterior supraorbital seta. **Pronotum** (Fig. 7) slightly longer and narrower relative to head, PW/PL 1.26–1.31 (1.29, $n = 6$), PW/HW 1.40–1.46 (1.43), with apex less strongly emarginate, apical angles somewhat less projecting and rather narrowly rounded, basal angles slightly blunt; explanate lateral margin narrow in anterior half, but wide behind middle; both basal and apical beads entire. Basal foveae slightly deeper, usually extending beyond middle or reaching the apical fourth of pronotum; punctation moderately coarse and moderately dense, much sparser laterally, missing in anterior half. **Elytra** longer, EL/EW 1.44–1.55 (1.48), EW/PW 1.65–1.72 (1.69), their apices mostly truncate, sometimes with a faint denticle at the level of interval 1; anterior impression distinct, usually extends from way basad of d1 to the level of d2 or slightly in front of it; posterior impression faint to indistinct; stria 6 deepening between base and d1; intervals usually slightly convex, more so in apical third; interval 7 at base very convex and a little narrower than interval 6, interval 10 distinctly narrower than interval 9. Umbilical setae: 16, rarely 17. **Aedeagus** (Figs. 22–27): median lobe with ventral margin concave closer to base; apical lamella more or less triangular and pointed in ventral view, with tip slightly curved upwards; internal sac with a large darker fold behind middle and a large, occasionally missing, spiniform tooth distal to it.

Etymology. The species name refers to the flat body.

Life history. This species inhabits broadleaf monsoon forests at altitudes of 350–1600 m, especially 1000–1600 m where it occurs in large numbers. Most specimens have been taken at light and only a few hand collected in leaf litter.

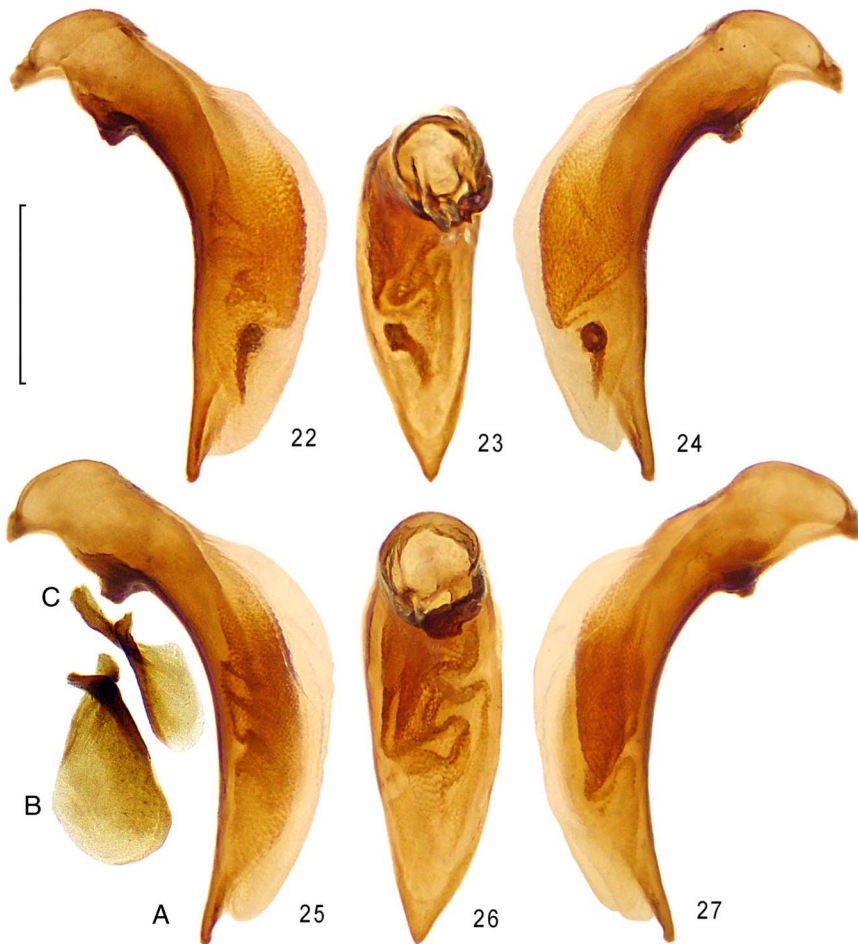
Geographic distribution. Widespread in the mountains of southern Vietnam, including at least the Dalat plateau and adjacent areas.

4. *Praepristus tonkinensis* new species

(Figs. 8, 28–30)

Type material. Holotype ♂ (ZMMU): “North Vietnam, Phu Tho Prov[ince]/Xuan Son Nat[io]n[al]. Park/h = 300–400 m/1–10.IX.2013/leg. A. Shchinov”.

Figs. 22–27. *Praeprius depressus* new species: 23, 26. Aedeagus, posterior ventral 22, 25A. Left lateral aspect; 24, 27. Right lateral aspects; 25B. Left paramere; 25C. Right paramere. Scale bar 0.5 mm.



Paratypes: ♂ (SIEE), “N-Vietnam, Phu Tho Prov./ ~90 km W of Hanoi/Xuan Son Natn. Park/ 21°07'52"N, 104°57'07"E/h = 400–470 m 6–15. VI./leg. D. Fedorenko 2014”; ♀, same data, but 21°07'29"N, 104°57'28"E/h = 400 m, at light.

Diagnosis. This species is very similar to *P. foveiceps* and *P. depressus*, can be separated from them by the structure of internal sac of the median lobe of aedeagus and subtle details of external morphology, such as very fine and highly transverse elytral microsculpture.

Description. Similar to *P. foveiceps*, except as follows: BL 7.1–7.5 mm. Dark brown, including clypeus, elytral interval 9 and underside; elytral epipleura pale brown, antennomeres 2–4 infuscate. Pronotal microsculpture slightly more distinct, that on elytral disc consisting of extremely fine and

narrow transverse meshes. **Head** (Fig. 8). Vertex with a shallow transverse impression reaching lateral pits. **Pronotum:** PW/PL 1.34–1.39 (1.36, $n = 4$), PW/HW 1.47–1.52 (1.50), disc rather flat, median line moderately deep, basal bead widely interrupted medially, lateral bead obliterate in basal fifth. Basal foveae and lateral groove moderately coarsely and moderately densely punctate. **Elytra** oval, EL/EW 1.42–1.45 (1.44), EW/PW 1.60–1.64 (1.63), with anterior impression almost indistinct between d1 and d2; intervals nearly flat on disc, slightly convex laterally, as well as in apical third; interval 10 narrower than 9. Umbilical setae 16. **Aedeagus** (Figs. 28–30): median lobe with ventral margin concave close to basal bulb; apical lamella very gently upcurved, subtriangular and very small in ventral view; internal sac with 2 large, tack-like teeth.

Figs.28–33. *Praeprius* species: 29, 32. Aedeagus, posterior ventral; 28, 31. Left lateral aspect; 30, 33. Right lateral aspect. 28–30. *Praeprius tonkinensis* **new species**; 31–33. *Praeprius kabakovi* **new species**. Scale bar 0.5 mm.



Etymology. The species name refers to the region where the holotype was collected, a historical name of northern Vietnam.

Geographic distribution. Known only from the type locality.

5. *Praeprius kabakovi* **new species**

(Figs. 9, 31–33)

Type material. Holotype and paratype 2♂♂ (ZISP), labelled [in Russian]: “VIETNAM mountains N [of]/HA-GIANG 800 m/6.7.1963 [O.N.] Kabakov”.

Diagnosis. The combination of apterous condition, rather pale elytra with very fine microsculpture, the slightly convex head (rather than flat or impressed, as typical for the genus), and the unique structure of the internal sac of median lobe of aedeagus separate this species well from other congeners.

Description. Body length 8.0–8.3 mm. Head almost black, pronotum dark brown, with both base and apex red, elytra rather dark brown, gradually paler posterad and laterad, leaving the apical third and at least four outer intervals (including lateral bead) pale brown; lateral margin of pronotum, legs, antennae, mouthparts, labrum,

clypeus, and frons just behind it ferruginous; antennomeres 2–4 slightly infuscate; venter pale brown. Dorsum shiny, elytra slightly iridescent. Microsculpture isodiametric on head, very fine on clypeus, distinct on frons, obliterated on vertex, faint at its sides and on neck; pronotal microsculpture consisting of very fine narrow transverse meshes distinct throughout or effaced medially; elytral microsculpture very fine on disc, consisting of mostly non-reticulate, dense, transverse lines; interval 10 with a more distinct microsculpture of wide transverse meshes mixed with scattered isodiametric meshes. **Head** (Fig. 9) as in *P. foveiceps*, but slightly convex, with a very shallow neck constriction; both lateral pits and callosities in front of posterior lateral setae faint. **Pronotum** (Fig. 9) cordate and fairly transverse, PW/PL 1.38–1.44, PW/HW 1.53–1.54, sides gently sinuate in front of slightly obtuse but angular basal angles; base almost straight, apex strongly and evenly concave; lateral margins moderately explanate anteriorly and widely explanate posteriorly, slightly reflexed, more so in front of basal angles; basal and apical beads interrupted medially, lateral bead missing in basal fourth. Disc slightly convex, median line moderately deep, obliterate at both ends, apical and basal impressions shallow to faint. Basal foveae rounded, rather small but very deep, confined to basal third, their forward extensions fainting about a third from apex. Basal foveae finely and very densely punctate, sparser punctures reaching middle of pronotum outside forward extensions of the foveae. **Elytra** as in *P. foveiceps*, but EL/EW 1.41–1.43, EW/PW 1.54–1.58, with no impressions. Striae well impressed, not or indistinctly crenulate, deeper at base and more so in apical third; intervals flat in the middle of disc, slightly convex basally, convex in apical third; interval 10 narrower than 9. Umbilical setae: 15–16, most specimens with 16. Apterous. **Venter**. Metaventre and abdominal sternite II finely and sparsely punctate at sides. **Aedeagus** (Figs. 31–33): median lobe with ventral margin concave close to basal bulb and before apex; apical lamella gently upcurved, triangular in ventral view, with sides slightly concave and obliquely truncate at the very tip; internal sac with a small to rather large, tack-like tooth.

Etymology. The species is named after the late Oleg N. Kabakov, the prominent geologist and entomologist who collected the type series.

Geographic distribution. Known only from the type locality, Ha Giang Province, northern Vietnam.

6. *Praeprius sulcifer* new species

(Figs. 10, 34–39, 41, 42)

Type material. Holotype ♂ (ZMMU): “S Vietnam, Lam Dong Prov./Bi Doup – Nui Ba Nat. Res./12°07'N, 108°39'20"E/Bi Doup Mt., N[orthern] slope P[itfall]T[raps]/h = 1700–1900 m 3–9./leg. D. Fedorenko IV.2008”. Paratypes, 95 specimens, ♂♂, ♀♀ (ZMMU, SIEE, ZISP), same data, but 12., 16., and 19–22.IV.2008 and 3–9. V.2009; ♀, env. Long Lanh/12°10'44"N, 108°40'44"E/h = 1400–1600 m 14–15./leg. D. Fedorenko IV.2008”.

Additional material. ♂ and ♀ (SIEE), S Vietnam, Dak Lak Prov., Chu Yang Sin National Park, 12°22'40"N/108°21'11"E, 1.5 km W of Chu Pan Phan Mt., *h* = 1650 m, 19.iii.–2.iv.2013, D. Fedorenko leg.

Diagnosis. Laterally sulcate elytral interval 8 and the structure of internal sac of the median lobe of aedeagus differentiate this species well from its congeners.

Description. As compared with *P. foveiceps*: BL 6.7–8.0 mm. Body tends to be slightly paler, mostly brown with pronotum slightly paler than head and disc of elytra; pale lateral margins of both pronotum and elytra rather wide, gradually darkening towards disc, intervals 9 and 10 both pale; antennomeres 1–3 occasionally slightly infuscate at apices. Elytra slightly iridescent. Microsculpture obliterated on head, sometimes with isodiametric meshes on frons; pronotum with no microsculpture or with very faint, rather wide transverse meshes; elytral disc with very fine microsculpture of dense transverse lines forming extremely narrow meshes, rather faint throughout, hardly visible in apical third. **Head.** Eyes smaller, genae longer, maximum width of eye tubercle usually well in front of its mid-length (Fig. 10), frontal sulci slightly deeper anteriorly. Frons and vertex often slightly impressed in addition to lateral interocular impressions, with a distinct oblong callosity just in front of posterior supraorbital seta. **Pronotum** (Fig. 10): PW/PL 1.30–1.37 (1.33, *n* = 7), PW/HW 1.44–1.52 (1.47), with base almost straight to slightly oblique and somewhat rounded laterally, sides gently sinuate in front of (more) obtuse and slightly blunt

Figs. 34–39. *Praeprius sulcifer* new species: 35, 38. Aedeagus, posterior ventral; 34, 37. Left lateral aspect; 36, 39. right lateral aspect. Scale bar 0.5 mm.



basal angles; explanate lateral margins moderately wide and evenly reflexed all along, slightly wider in basal half; basal bead entire, apical bead rather widely interrupted at middle. Basal foveae rather finely and moderately densely to rather sparsely punctate, with or without fairly dense transverse rugosities, lateral groove sparsely punctate in basal half, with occasional punctures anterad of mid-length. **Elytra:** EL/EW 1.39–1.48 (1.43), EW/PW 1.56–1.71 (1.62); both discal impressions more or less distinct; posterolateral angles obtuse but distinct, preapical sinuation conspicuous, apices truncate or rounded separately. Intervals 8 and 9 usually impressed, mostly from basal fifth to apical third. Striae deep and

impunctate; intervals distinctly convex in basal fourth and apical third, flat in middle of disc. Interval 8 in third fourth with a very deep furrow abruptly ending at both ends and sometimes extending forward beyond middle of elytron; interval 10 narrower than 9. Umbilical setae: 16–20, mostly 18–19. Wings polymorphic, usually strongly reduced. **Aedeagus** (Figs. 34–39, 41, 42): median lobe with ventral concavity closer to basal bulb; apical lamella triangular, with a small, rounded and slightly reflexed capitulum; internal sac with 2 large and long, dorsal and ventral, spines (Figs. 33–35), the latter occasionally being split into 2 (Figs. 37–39) or reduced apically (Figs. 41, 42).

Figs. 40–45. *Praeprius* species: 41, 44. Aedeagus, posterior ventral; 40, 43. Left lateral aspect; 42, 45. Right lateral aspect. 40. *Praeprius testaceus* new species; 41–42. *Praeprius sulcifer* new species; 43–45. *Praeprius grandis* new species. Scale bar 0.5 mm.



Etymology. The species name refers to the sulcate elytral interval 8.

Natural history. This species dwell in leaf litter of broadleaf forests at 1650–1900 m, rarely descending to 1400–1600 m. All specimens were collected using pitfall traps.

Geographic distribution. The Dalat Plateau within Lam Dong and Dak Lak provinces, southern Vietnam.

7. *Praeprius testaceus* new species

(Figs. 11, 40)

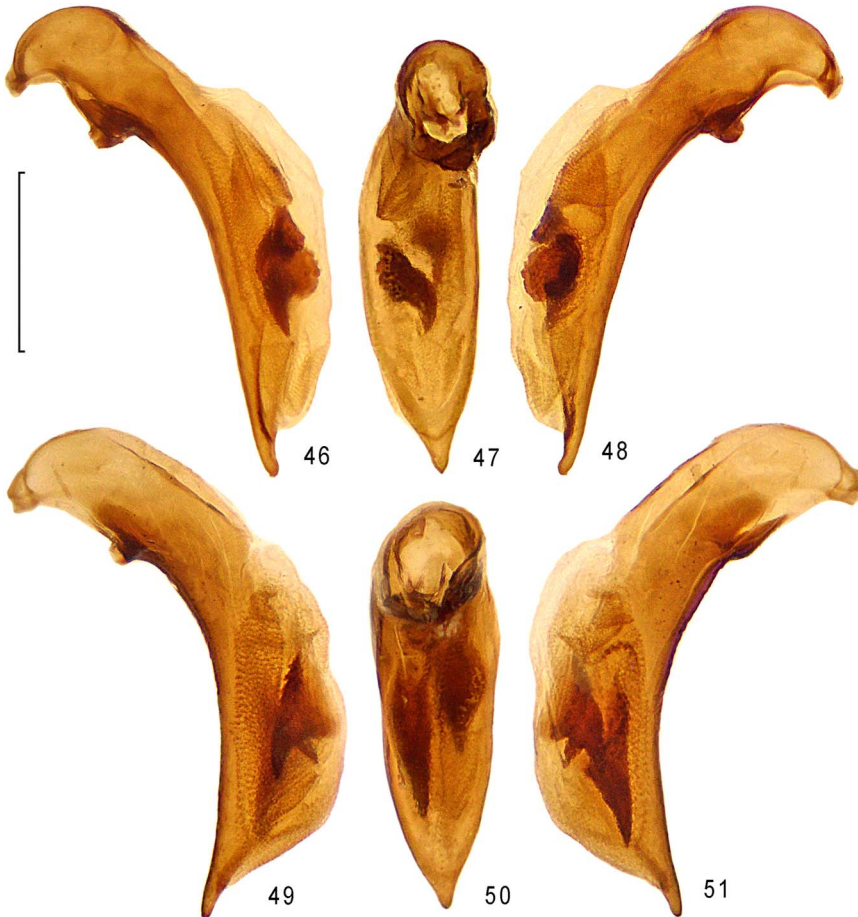
Type material. Holotype ♂ (ZMMU) and paratype ♂ (SIEE): “Central Vietnam./Kon Tum Province, 2–3 km/W of Ngoc Linh Mt./15°05'N,

107°57'E, 2150 m [a.s.l.], pitfall traps,/leg. A. Anichkin V.2006”.

Diagnosis. Distinguishable from its congeners by the combination of apterous condition, pale body colour, obsolescent or faint dorsal microsculpture, conspicuously reduced eyes and the structure of the internal sac of median lobe of the aedeagus.

Description. Similar to the preceding, except as follows: BL 7.2–7.4 mm. Uniformly pale brown. Head without microsculpture; pronotum with very faint, moderately wide transverse meshes; elytral microsculpture consisting of fine and dense transverse lines on disc; interval 10 with fine, slightly transverse to isodiametric, meshes. **Head.** Eyes (Fig. 11) slightly smaller (much smaller than in most other congeners). Frons and vertex with or without impression. **Pronotum** (Fig. 11): PW/PL 1.32–1.33, PW/HW

Figs. 46–51. *Praeprius* species: 47, 50. Aedeagus, posterior ventral; 46, 49. Left lateral aspect; 48, 51. Right lateral aspect. 46–48. *Praeprius borneensis* new species; 49–51. *Praeprius nepalensis*. Scale bar 0.5 mm.



1.46–1.47, sides gently to conspicuously sinuate in front of basal angles; explanate lateral margin moderately wide in apical half and wide behind middle; both basal and apical beads entire. Basal foveae and lateral margin behind anterolateral setigerous pore coarsely and rather densely punctate. **Elytra:** EL/EW 1.41–1.44, EW/PW 1.58–1.60; both anterior and posterior impressions very faint; intervals rather flat medially, convex in apical fourth, intervals 4–6 rather strongly convex in basal third, interval 10 narrower than 9. Umbilical setae 17–18. Apterous. **Aedeagus** (Fig. 40): median lobe slightly concave ventrally; apical lamella subcylindrical, rounded at tip; internal sac with no sclerites.

Etymology. Refers to the body colour.

Natural history. Both specimens collected in pitfall traps in a broadleaf forest.

Geographic distribution. Known only from the type locality.

8. *Praeprius similis* new species

(Figs. 12, 52–54)

Type material. Holotype ♂ (ZMMU) and two paratypes ♂♀ (SIEE): “N[orth]-Vietnam, ~45 km N of Hanoi, Ba Vi Nat[ional]n. Park, 21°04'N 105°21'38"E/leaf-litter/h = 1050–1100 m 18.VI./D. Fedorenko leg. 2014”.

Diagnosis. The species is similar to *P. foveiceps* in body shape while to *P. kabakovi* in the elytral microsculpture and body colour, but the aedeagus is different in structure. *Praeprius similis* and *P. testaceus* share unarmed internal sac of the median lobe of aedeagus, as well as transversely

Figs. 52–54. *Praeprius similis* new species: 53. Aedeagus, posterior ventral; 52. Left lateral aspect; 54. Right lateral aspect. Scale bar 0.5 mm.



lined microsculpture of the elytra, differing well by many other characters specified in the key from each other.

Description. As for *P. foveiceps*, except as follows: BL 7.4–7.7 mm. Dorsum very shiny, elytra conspicuously iridescent. Ground colour of head and pronotum almost black; elytra dark brown on disc and gradually paler both laterad and apicad, with suture still paler in apical half, so that outer elytral intervals have almost the same colour as reflexed lateral margin; venter brown rather pale, mesoventrite and prosternum slightly infuscate; antennomere 2, as well as apical half of antennomere 3 or antennomere 4, more or less infuscate. Microsculpture obliterate on both head and pronotal disc, narrow transverse meshes hardly traceable on sides of pronotum; elytra with highly superficial microsculpture consisting of dense transverse lines. **Head** flat, each side with a rather shallow to almost indistinct round pit, without callosity. Eyes smaller, genae longer; frontal sulci deep. Neck constriction very shallow, but uninterrupted. **Pronotum** (Fig. 12) barely longer, PW/PL 1.29–1.34 (1.31, $n = 3$), hardly longer relative to head, PW/HW 1.47–1.52 (1.50), finely beaded throughout, with both basal and apical beads interrupted medially; sides sinuate before base and slightly diverging towards nearly right basal angles. Basal foveae larger and anteriorly

deeper than in *P. foveiceps*, disappearing 3/5–2/3 from base. **Elytra** oval, EW/EL 1.39–1.45 (1.42), EW/PW 1.62–1.65 (1.63). Disc flat, both anterior and posterior impression distinct, albeit faint. Striae deep, almost indistinctly crenulate, deeper just behind base and before apex, inner 3–5 shallow on disc; intervals convex, more so behind d3, inner 4–5 intervals absolutely flat on disc. Umbilical setae: 15–17. Apterous. **Aedeagus** (Figs 52–54): median lobe almost same as in *P. testaceus*, but its sclerotised (ventral) part in lateral view subequally narrow throughout its length, instead of being much wider medially; besides, apical lamella shorter and narrower in lateral view.

Etymology. The Latin adjective *similis* means similar.

Natural history. The species has been collected by hands in leaf-litter of a montane broad-leaf forest.

Geographic distribution. Known only from the type locality.

9. *Praeprius grandis* new species

(Figs. 15, 43–45)

Type material. Holotype ♂, (ZMMU): “S[outh] Vietnam, Lam Dong Prov./Bi Doup – Nui Ba Nat. Res./12°07'N, 108°39'20"E/Bi Doup

Mt., N[orthern] slope P[itfall]T[raps]/h = 1700–1900 m 3–9./leg. D Fedorenko V.2009”. Paratypes (SIEE), ♀, same data; ♂, “Vietnam, Lam Dong Prov. & distr./env. Bi Doup Mt./V.2002/leg. M. Kalyakin”.

Diagnosis. This species is distinctive in its large size, somewhat reduced eyes, subhexagonal pronotum, almost impunctate basal foveae, and a peculiar structure of the internal sac of the median lobe of aedeagus.

Description. As compared to *P. foveiceps*: Body large, 8.6–9.2 mm in length. Antennomeres 2, 3 and apex of 1 barely infuscate, venter entirely red. Microsculpture meshed, fine, and isodiametric on head, obsolete in middle of vertex only, conspicuous, formed by small moderately transverse meshes on pronotum; elytra with very fine sculpticells of which slightly transverse sculpticells prevail over strongly transverse and isodiametric cells; interval 10 with isodiametric meshes. **Head** (Fig. 15) flat, very finely and closely longitudinally strigose outside frontal sulci, with no interocular impressions or callosities near posterior supraorbital seta. Neck constriction distinct throughout, albeit weak medially. Eyes slightly reduced, genae fairly long. **Pronotum** (Fig. 15) subhexagonal, PW/PL 1.37–1.40 (1.39, $n = 3$), wide relative to head, PW/HW 1.56–1.59 (1.57), with only base and apex finely beaded, sides nearly straight in front of obtuse and blunt basal angles; sides of base slightly oblique, straight or somewhat rounded; explanate lateral margins rather narrow anteriorly but wide behind anterolateral setigerous pore, rather uniformly reflexed throughout. Basal foveae large and almost smooth, extended anterad to the anterior fourth; punctation fine and very sparse, confined mostly to area between lateral groove and basal fovea in basal third of pronotum. **Elytra** rather elongate, EL/EW 1.52–1.62 (1.58), EW/PW 1.51–1.63 (1.55), with a conspicuous preapical sinuation, a faint humeral angle, a faint posterior impression, and no anterior impression. Striae moderately deep, impunctate, slightly deepening in front of apex; stria 6 deepening behind humerus; intervals flat, interval 10 narrower than interval 9. Umbilical setae: 19, occasionally 18. Macropterous. **Aedeagus** (Figs. 43–45): median lobe ventrally concave closer to basal bulb; apical lamella regularly triangular and pointed in ventral view, straight ventrally, gently concave just

before apex dorsally; internal sac with 2 semi-circular clusters of small teeth.

Etymology. The species name refers to the large body size.

Natural history. Same as in *P. sulcifer*.

Geographic distribution. Known only from the type locality.

10. *Praepristus borneensis* new species

(Figs. 13, 46–48)

Type material. Holotype ♂ (ZMMU): “E Malaysia, Sabah/Mt. Kinabalu N[ational]. P[ark]/1700 m, 16–30.07.[20]02/Kurbatov & Zimina”.

Diagnosis. The species is distinctive in having the head impressed between eyes, a cordiform pronotum with sides strongly sinuate in front of the rectangular basal angles and nearly impunctate basal foveae, and the structure of the internal sac of median lobe of aedeagus.

Description. Similar to *P. foveiceps*, except as follows: BL 7.7 mm. Dark brown, elytra slightly iridescent, with a faint brassy luster; explanate lateral margins of pronotum and elytra (along interval 10 and the very narrow lateral bead) rather narrowly pale (red); antennomeres 1–3 almost faintly infuscate at apices. Head without microsculpture, pronotum with very fine but distinct, rather narrow transverse meshes; elytra with very dense transverse lines on disc, mixed with fairly sharp and wide to almost isodiametric transverse meshes on interval 10. **Head** (Fig. 13) with a deep transverse impression between eyes. Neck constriction very shallow, slightly deeper at sides, callosity near posterior supraorbital seta indistinct. **Pronotum** (Fig. 13) cordate and slightly less transverse, PW/PL 1.29, PW/HW 1.44, sides strongly sinuate and a little divergent in front of rectangular, sharp basal angles, both basal and apical beads rather widely interrupted at middle; sides of base oblique and straight; explanate lateral margins rather narrow just behind apical angles, thence moderately wide, slightly reflexed, more so in basal half. Disc slightly convex, median line and apical transverse impression moderately deep, basal transverse impression very shallow. Basal foveae reaching about middle. Both basal foveae and lateral grooves nearly smooth, with several fine punctures in basal half.

Elytra longer, EL/EW 1.52, EW/PW 1.64, with a slight but distinct preapical sinuation and narrowly rounded apices. Anterior impression short and shallow, limited to intervals 3–6 around and outside anterior discal pore. Striae moderately deep, indistinctly crenulate in basal half, stria 6 deepened behind shoulder; intervals nearly flat, slightly convex in apical third, interval 10 narrower than 9. Umbilical setae 17. Macropterous. **Aedeagus** (Figs. 46–48): median lobe with almost straight ventral margin, its concavity situated close to basal bulb; apical lamella distinctly curved upwards, subtriangular in ventral view, with sides slightly concave medially but straight before a strongly pointed tip; internal sac with 2 large, tack-like sclerites.

Etymology. The species name refers to the island of the only known specimen.

Geographic distribution. Sabah, Borneo, Malaysia.

11. *Praeprius nepalensis* Kirschenhofer, 1999

(Figs. 14, 49–51)

Kirschenhofer (1999: 68).

Type material. Holotype ♂ (CW), with labels: “hind wings fully developed”, “C-Nepal, Kathmandu -Valley, PHUL CHOK I, 1500–2700 m./leg. Probst, 4.6.1986”, red “Holotypus/Praeprius gen.n./nepalensis sp.n./det. Kirschenhofer (1999)”, “Coll. Wrase/Berlin”.

Diagnosis. Apart from the sculpture of the internal sac of median lobe of aedeagus, this species can be easily separated from other congeners by its wide elytra with conspicuously punctate striae, no impression on disc, and no impression on vertex.

Redescription. Body length 6.9 mm. Shiny, dark brown, elytra slightly sericeous; legs, antennae, mouthparts, labrum, clypeus, frons just behind it, as well as lateral margins of pronotum rather widely and those of elytra narrowly (along interval 10 and fine lateral bead) pale, reddish yellow; propleura and probably venter brown; pronotal base and apex, as well as elytral suture slightly red. Microsculpture absent from head, faint on pronotum, consisting of narrow transverse meshes; elytra with fine microsculpture of dense transverse lines on disc and of fine

transverse meshes on interval 10. **Head** (Fig. 14) as in *P. foveiceps*, but vertex with both lateral pits and callosities in front of posterior supraorbital setae almost indistinct. **Pronotum** (Fig. 14) cordate, PW/PL 1.41, PW/HW 1.66, sides conspicuously sinuate just in front of subrectangular, sharp basal angles; base almost straight, apex rather strongly and evenly concave; lateral margins moderately explanate anteriorly and widely explanate behind, slightly reflexed, more so in front of basal angles; all margins finely beaded, lateral bead obsolete just in front of basal angles. Disc rather convex, median line deep, obliterate at both ends, apical and basal impressions shallow. Basal foveae large and deep, reaching middle of pronotum, moderately coarsely and densely punctate as are explanate lateral margins behind anterolateral setae. **Elytra** oval and wide, EL/EW 1.35, EW/PW 1.70, with faint preapical sinuation, apices slightly pointed, apical bead entire. Disc rather convex, flattened in basal half, without impressions. Striae deep, moderately coarsely punctate; intervals slightly convex. Umbilical setae: 16. Macropterous. **Aedeagus** (Figs. 49–51): median lobe ventrally rather evenly concave; lamella very slightly upcurved, triangular in ventral view, gently concave at sides; internal sac with 2 very large conical sclerites, of which the dorsal 1 bifid.

Geographic distribution. Known only from the type locality.

12. *Praeprius planus* (Landin, 1955), new combination

Landin (1955: 436) (*Colpodes*; Burma [= Myanmar]).

Comments. The species was described from a single female. Here is a brief summary of relevant characters extracted from the original description (Landin 1955): BL 8 mm. Colour pattern typical for the genus: dorsum brown, without metallic luster; mouthparts, antennae, legs, lateral margins of both pronotum and elytra, as well as elytral suture, pale. Head and pronotum shiny, elytra alutaceous. Head without impressions. Based on figures, eyes project beyond gena. Pronotum cordate, with apical margin straight, basal angles rectangular and sharp, both basal foveae and explanate lateral margin densely and coarsely punctate in basal half (according to Fig. 19, in

basal third). Elytral striae deep and impunctate, intervals flat. Mesoventrite and mesepisterna strongly punctate, metaventrite sparsely punctate at sides, metepisterna finely and sparsely punctate. Elytral microsculpture is a mix of isodiametric and transverse meshes. PW/PL 1.35, PW/HW 1.64, EL/EW 1.37, EW/PW 1.70 (all based on Landin 1955; Fig. 13).

All these characters combined, including quite appropriate shape, size, colouration and proportions of the body, shape of eye and gena combined, as well as flat elytra justify placing of this species in *Praeprius*.

13. *Praeprius rugifoveatus* (Louwerens, 1955), new combination

Louwerens (1955: 51) (*Notagonum*; West Java).

Comments. The species was well described from two specimens, the holotype from Java and the paratype from Sumatra. The principal characters noted in the original description are as follows: Macropterous, 7 mm in length. Colouration as in *P. planus*. Head with large eyes and a fine, U-shaped impression on vertex. Pronotum cordate and almost flat, PW/PL 1.26, PW/HW 1.41; apex shallowly emarginate between rounded and almost indistinct apical angles; sides gently sinuate in front of subrectangular, blunt basal angles; lateral margin moderately explanate and moderately reflexed behind; transverse impressions superficial, median line deep; basal foveae large, reaching the middle, rugose, with a few punctures (Louwerens 1955; Fig. 8 shows basal foveae coarsely and densely punctate in basal half), their forward extensions declining one-fourth from apex. Elytra half longer than wide, EW/PW 1.60, with apex rounded. Striae moderately deep and extremely finely punctate, intervals subconvex. Microsculpture absent on head, moderately to strongly transverse on elytra and along sides of pronotum. Mesotarsi and metatarsi with only traces of lateral sulci.

Based on the description, *P. rugifoveatus* is closest to *P. foveiceps*, *P. caviceps*, and *P. impressus*, all sharing a markedly transverse reticulate elytral microsculpture. A narrower pronotum (PW/PL 1.26 versus 1.31–1.47) with basal foveae extending farther forward best differentiate *P. rugifoveatus* from *P. foveiceps* and *P. caviceps*;

P. impressus, the third species of this group, is slightly larger, darker, and with genae slightly longer.

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