

A new species of the genus *Cornuscoparia* (Jordan, 1894) (Coleoptera: Cerambycidae, Lamiinae, Monochamini) from Papua (Indonesia) and Papua New Guinea

Vadim Voitsekhovskii

Parshina Street 35-2-20, Moscow 123154, Russian Federation
email: memotver@inbox.ru

Suara Serangga Papua (SUGAPA digital) 13(1): 47-56.
urn:lsid:zoobank.org:pub: 99F64D29-2854-458D-A5D0-341476DD5E8C

Abstract: A new species of the genus *Cornuscoparia* Jordan, 1894 (Coleoptera: Cerambycidae, Lamiinae, Monochamini), *C. barsevskisi* **spec. nov.**, is described and figured. A comparison is given with allied species. Three taxa are synonymized: *Jonthophana hirticornis* Heller, 1910 **syn. nov.** is synonymized with *Cornuscoparia ochracea* Jordan, 1894, *C. annulicornis wollastoni* Gahan, 1915 **syn. nov.** and *C. meeki* Breuning, 1980 **syn. nov.** are synonymized with *C. annulicornis* (Heller, 1897).

Rangkuman: Spesies baru dari genus *Cornuscoparia* Jordan, 1894 (Coleoptera: Cerambycidae, Lamiinae, Monochamini), *C. barsevskisi* **spec. nov.**, dideskripsi dan disertai dengan gambar. Perbandingan diberikan dengan spesies yang sekerabat. Tiga taxa yang bersinonim: *Jonthophana hirticornis* Heller, 1910 **syn. nov.** sinonim dengan *Cornuscoparia ochracea* Jordan, 1894, *C. annulicornis wollastoni* Gahan, 1915 **syn. nov.** dan *C. meeki* Breuning, 1980 **syn. nov.** sinonim dengan *C. annulicornis* (Heller, 1897). [translation by Daawia Suhartawan]

Keywords: longhorn beetles, Cerambycidae, Lamiinae, *Cornuscoparia*, taxonomy, Papua, Indonesia, Papua New Guinea, new species, new synonyms

Introduction

The genus *Cornuscoparia* Jordan, 1894 (Cerambycidae, Lamiinae) is insufficiently studied. At present it is represented by three species which are distributed in the province Papua (Indonesia) and Papua New Guinea: *C. annulicornis* (Heller, 1897), from Bongu, Astrolabe Bay at the north coast of Madang Province (Papua New Guinea); *C. ochracea* Jordan, 1894, from Dorey (= Manokwari), Dutch New Guinea (now West Papua, Indonesia); and *C. schlaginhaufeni* (Heller, 1910), from Papua New Guinea, found at an altitude of 900 meters but without further specific locality.

In this present study a fourth species of the genus *Cornuscoparia* Jordan, 1894 is described which was discovered at Genyum Jaya Village, District Jayapura, Papua province (Indonesia), and is compared with related species.

Checklist of *Cornuscoparia* Jordan, 1894

ochracea Jordan, 1894

hirticornis (Heller, 1910) **syn. nov.**

annulicornis (Heller, 1897)

wollastoni Gahan, 1915 **syn. nov.**

meeki Breuning, 1980 **syn. nov.**

schlaginhaufeni (Heller, 1910)

barsevskisi **spec. nov.**

Material and methods

All types are deposited in the private collection of the author. They will be reassigned in different collections named as below and in the future they will be assigned to natural history collections. The specimens have been collected in the province Papua (Indonesia) by local collectors. The illustrations were made by using a Canon 600D camera equipped with a 2x 50mm Sigma macro-lens. Measurements were taken with a XTL-3400 Zoom Stereo Microscope. All images were processed to improve quality on Photoshop CC software.

Argumentation of the new synonyms

***Jonthophana hirticornis* Heller, 1910:** In its type description Heller (1910) noted "Body length 40mm. Type locality: Neu Guinea, Sattelberg". Breuning (1961) considered *hirticornis* to be a subspecies of *C. annulicornis* (Heller, 1897). The pale cinnamon colour with median line and humeral granulosa, in the diagnosis by Heller, indicates that it concerns *ochracea* rather than *annulicornis*. Study of his work and illustrations furthermore showed that this female has long hairs around the 2nd, 3rd and 4th antennal segments, and on the distal segments long hairs ventrally only, which is also characteristic for *C. ochracea*. Therefore, it is concluded that *Jonthophana hirticornis* Heller, 1910 is conspecific with and a junior synonym of *Cornuscoparia ochracea* Jordan, 1894.

***Cornuscoparia wollastoni* Gahan, 1915:** In his report on the Coleoptera collected during the English Wollaston Expedition in Dutch New Guinea, Gahan (1915) illustrates a female of *Cornuscoparia wollastoni*. Study of his work and illustrations showed that in this female the elongated elytra have black humeral borders parallel to the middle of the seam. The humeri are distinctly square, raised towards the top, with the lateral humeral spines quite sharp. The elytra are patterned with bands, which form a double arrow, and an oblique band each in the second third of the elytra. From the 1st to the 4th antennal segment there is pubescence along the perimeter, the subsequent ones are pubescent only on the lower side which is characteristic for *C. annulicornis*. Breuning (1961) already concluded that it is conspecific with *annulicornis* and downgraded the taxon *wollastoni* Gahan, 1910 to subspecies level, but there is no reason to assume that it is any different from the nomotypical *annulicornis* and therefore *Cornuscoparia wollastoni* Gahan, 1915 is considered to be a junior synonym of *Jonthophana annulicornis* Heller, 1897.

***Cornuscoparia meeki* Breuning, 1980:** Male holotype with type locality Owgarrar, Papua New Guinea. Breuning (1980) only compares the type of *C. meeki* with *C. annulicornis*. The very brief diagnosis at least includes the existence of the lower lobes of the eyes which are five times longer than the cheeks, the suture apical angle of the elytra are distinct but not spiny, the marginal apical angle is rounded, the cheeks are bare and black, the temples with white and green pubescence and the antennae articles 7 to 11 entirely blackish, but all these characters are also typical for *C. annulicornis*. The type of *C. meeki* is not examined yet and because Breuning (1980) did not illustrate this type an examination of the genitalia might be necessary to fully confirm that *Cornuscoparia meeki* Breuning, 1980 is indeed a junior synonym of *Jonthophana annulicornis* Heller, 1897. For the time being it is considered to be so.

Systematical part

***Cornuscoparia barsevskisi* spec. nov.** (Figs 1-3, 4-7, 12-13, 19, 23)

urn:lsid:zoobank.org:act: 7265D1B4-3C4A-49E1-9B44-7477FA4BFFBF

Holotype: ♂, Indonesia, Papua Province, Jayapura district, Genyem Jaya Village, x.2020. Local collector leg. [handwritten on white label]; HOLOTYPUS:/ *Cornuscoparia barsevskisi* sp. n., / V.Voitsekhovskii descr. 2020 [handwritten on red label].

Allotype: ♀, same as holotype; ALLOTYPUS:/ *Cornuscoparia barsevskisi* sp.n./ V.Voitsekhovskii descr. 2020 [handwritten on red label].

Paratype: 1♀, same as holotype; PARATYPUS:/ *Cornuscoparia barsevskisi* sp.n./ V.Voitsekhovskii descr. 2020 [handwritten on red label].

Diagnosis: Based on the shape and proportions of the body, the new species is similar to *Cornuscoparia schlaginhaufeni* (Heller, 1910) (fig. 18), but differs from it by the following characters: the new species has a smaller size than *C. schlaginhaufeni*. *Cornuscoparia barsevskisi* **spec. nov.** has lateral thorns on pronotum shorter than in *C. schlaginhaufeni* (figs 19-22). Legs and ventral side of the entire body of this new species covered by grey pilosity while in *C. schlaginhaufeni* it is covered by brick-red pilosity. From *C. annulicornis* (fig. 27) and *C. ochracea* (fig. 28) *C. barsevskisi* **spec. nov.** differs by the brick-red pilosity while *C. annulicornis* is covered by pale ochre-grey pilosity and *C. ochracea* by pale ochre-brown pilosity. *Cornuscoparia ochracea* has from the 1st to the 3rd antennal segments long pubescence while *C. barsevskisi* **spec. nov.** has long pubescence on the lower side only, and differs from *C. annulicornis* which has antennal segments with very short pubescence. *Cornuscoparia barsevskisi* **spec. nov.** bears on the elytra at the base of the arrow a spot which is covered by whitish ochre pilosity which is not present in *C. annulicornis* and *C. ochracea*.

Description: Holotype male (fig. 1): length 31.0 mm (measured from vertex to elytral apices), width 10.1 mm (measured across humeri). Head with frontal brick-red with black eyes, eyes elongated along the entire length of the cheeks, 2/3 of the cheek width. The cheeks are white. Mandibles massive, black. Antennae 2.4 times as long as total body length (measured from vertex to elytral apices). From the 1st to the 4th antennal segment there is pubescence along the perimeter, the subsequent ones are pubescent only on the lower side, the last one is smooth. The scape is equal to half the length of the third segment, subtriangular, the second is very short, the third and subsequent segments at the end have a smooth black ring, the last segment is completely black. Pronotum frontal brick-red coloured with glabrous shiny black tubercles, sparse dispersed at closer to the base of the elytra, lateral from thorns of pronotum to ventral covered by grey pilosity. Pronotum base 6.3 mm, height 4.8 mm. Lateral thorns parallel to humeri, barely noticeable and sharp. Pronotum wider than head, and narrower than elytra. Scutellum covered by the same brick-red pilosity that covers the elytra. Elytra elongated, brick-red coloured below the shoulders and has black border parallel of the middle of the seam, covered by whitish ochre pilosity below. Humeri distinctly square, raised towards the top, with lateral humeral spines quite sharp. Elytra are banded which form a pattern of a double arrow, and an oblique band each in the second third of the elytra, bare and black. At the base of the arrow is a spot which is covered by whitish ochre pilosity. Legs covered by grey pilosity. Thorax ventrally completely covered by grey pilosity. Abdomen covered by the same grey pilosity that covers the thorax and legs.

Male genitalia with lateral lobes almost parallel, rounded to apex. Penis sharpened on apex (figs 4-7).

Allotype female (fig. 2): length 31.0 mm (measured from vertex to elytral apices), width 10.2 mm

(measured across humeri). Head frontal brick-red with black eyes, eyes elongated along the entire length of the cheeks, 2/3 of the cheek width. The cheeks are white. Mandibles massive, black. Antennae 2.4 times as long as total body length (measured from vertex to elytral apices). From the 1st to the 4th antennal segment there is pubescence along the perimeter, the subsequent ones are pubescent only on the lower side, the last one is smooth. The scape is equal to half the length of the third segment, subtriangular, the second is very short, the third and subsequent segments at the end have a smooth black ring, the last segment is completely black. Pronotum frontal brick-red coloured with glabrous shiny black tubercles sparsely dispersed at closer to the base of the elytra, lateral from thorns of pronotum to ventral covered by grey pilosity (figs 23-24). Pronotum base 6.3 mm, height 4.8 mm. Lateral thorns parallel to humeri, barely noticeable and sharp. Pronotum wider than head, and narrower than elytra. Scutellum covered by the same brick-red pilosity that covers the elytra. Elytra elongated, brick-red coloured below the shoulders and black border parallel of the middle of the seam, covered by whitish ochre pilosity below. Humeri distinctly square, raised towards the top, with lateral humeral spines quite sharp. Elytra banded which form a double arrow pattern, and an oblique band each in the second third of the elytra, bare and black. At the base of the arrow a spot which is covered by whitish ochre pilosity. Ala (fig. 3) vestigial, length 19.0 mm, 0.76 length of elytron. Legs covered by grey pilosity. Thorax ventrally completely covered by grey pilosity. Abdomen covered by the same grey pilosity that covers the thorax and legs. Female genitalia with ovipositor elongate, narrow, apically with short styli. Vagina narrow, with pair of vaginal plates. Bursa copulatrix small (fig. 12-13).

Distribution: The species has been found in Genyem village in the Northeast of Province Papua, Indonesia.

Etymology: The species is named in honour of Prof. Dr. Arvīds Barševskis (Daugavpils, Latvia) in appreciation of his contribution in the study of entomology, cooperation, and useful advices.

Acknowledgements

I wish to express my gratitude to God who gave me the opportunity to practice entomology in my life. I am grateful for the help and comments of Rob de Vos (Naturalis Biodiversity Center, Leiden, The Netherlands) in the manuscript of this publication.

References

- Jordan, K., 1894. On some new genera and species of Coleoptera in the Tring Museum. *Novitates zoologicae* 1: 484-503.
- Gahan, C.J., 1915. Report on the Coleoptera collected by the British Ornithologists Union Expedition and the Wollaston Expedition in Dutch New Guinea. *The Transactions of the Zoological Society of London* 20 (6-7) 1: 38-58.
- Breuning, S., 1961. *Catalogue des Lamiinae du Monde*. Verlag des Museums G. Frey, Tutzing bei München (5): 287-382.
- Breuning, S., 1980. Nouveaux Lamiinae de Nouvelle-Guinée. *Bulletin de la Société Entomologique de France*, Paris 85(5-6): 130-134.
- Heller, K.M., 1896. Neue Käfer von Célebes gesammelt von den Herren Dr. P. und Dr. F. Sarasin. *Abhandlungen und Berichte des königlichen zoologischen und anthropologisch-ethnographischen Museums zu Dresden* 6 (3): 1-26, 1 pl.
- Heller, K.M., 1910. Nr. 3. Fünfter Beitrag zur Papuanischen Käferfauna hauptsächlich auf Grund der Ausbeute von Dr. Schlaginhaufen. *Abhandlungen und Berichte des königlichen zoologischen und anthropologisch-ethnographischen Museums zu Dresden* 13 (3): 1-42, pl. I.



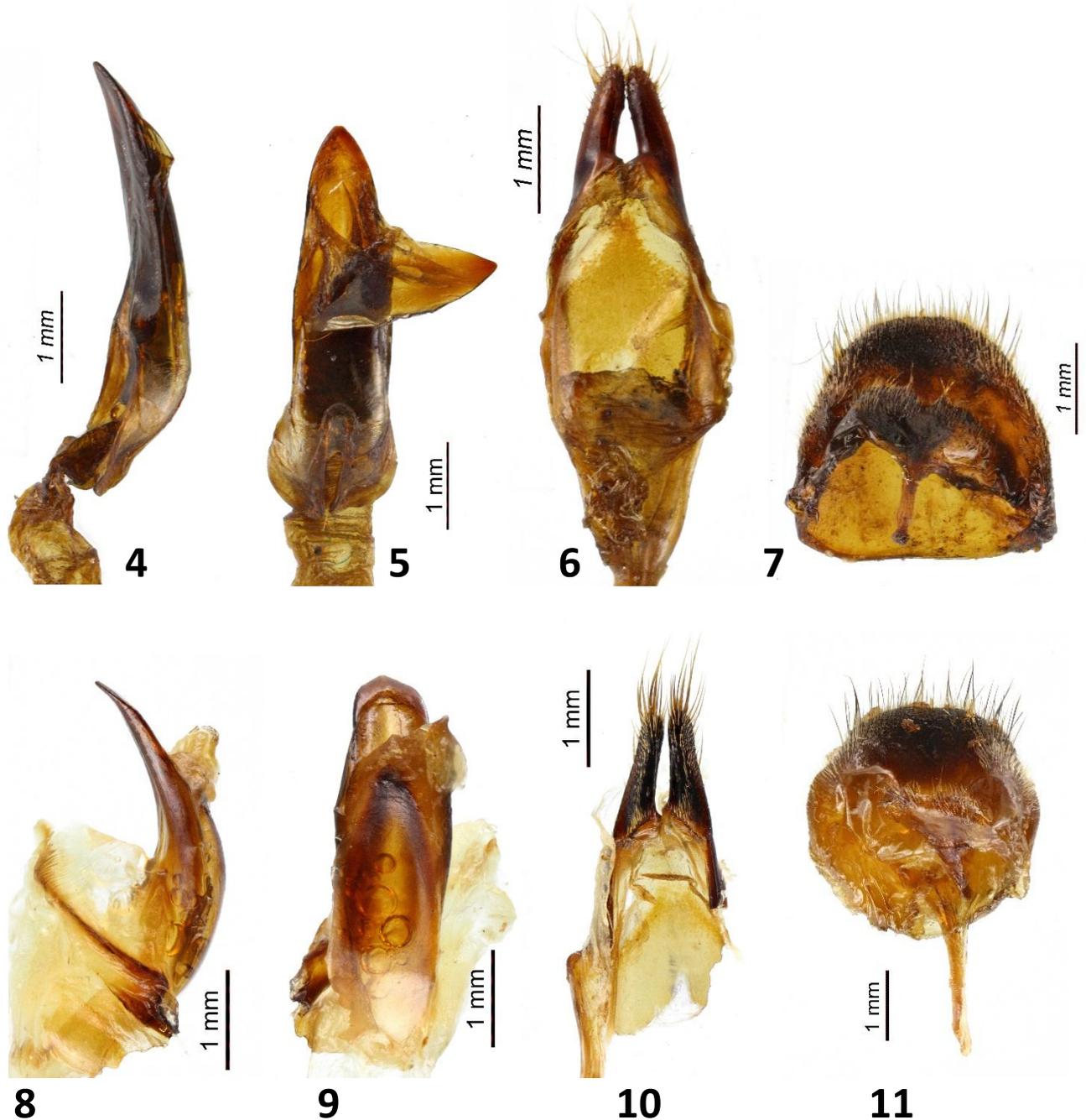
Fig. 1. *Cornuscoparia barsevskisi* spec. nov., ♂ holotype (coll. V.Voitsekhovskii)



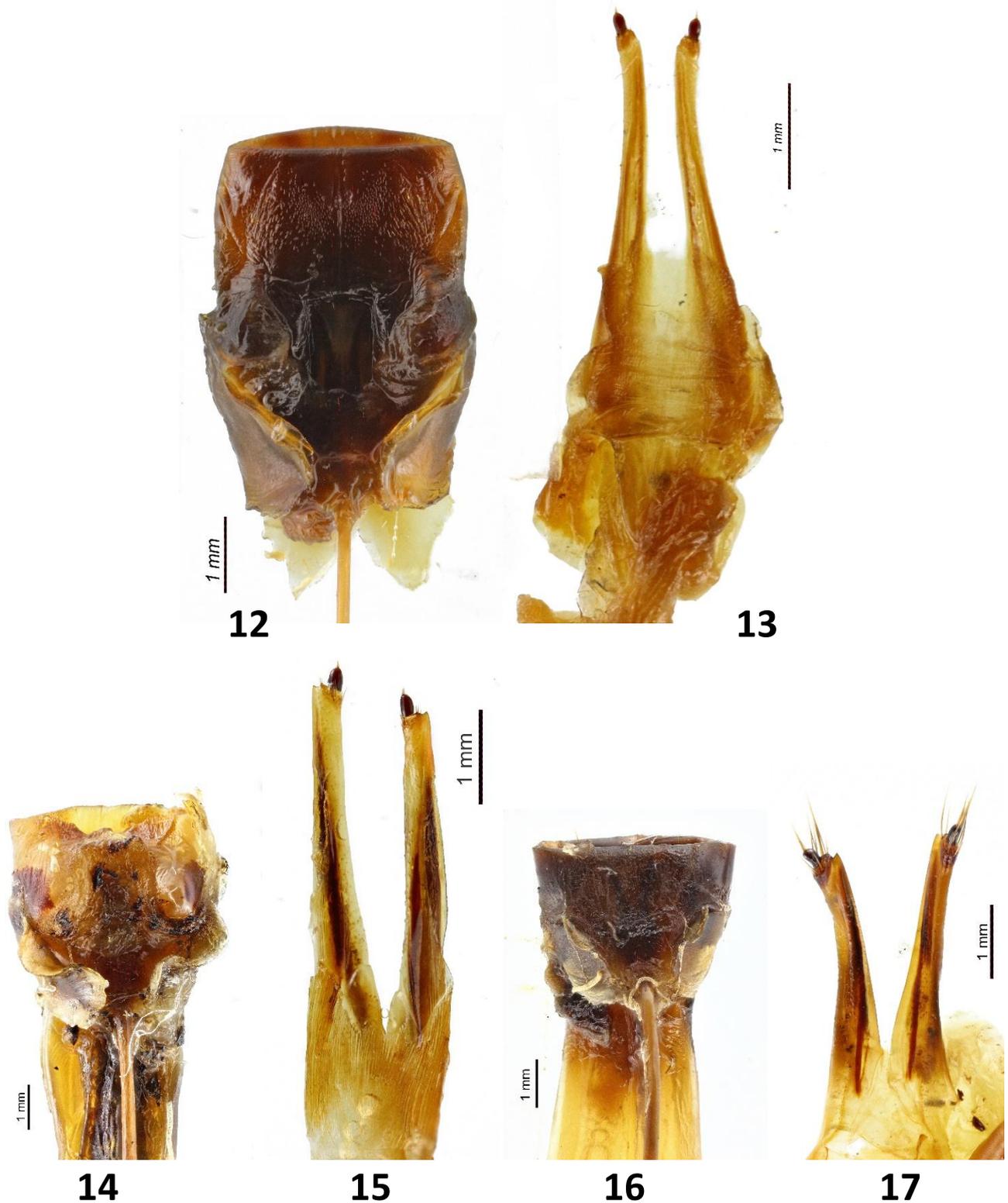
Fig. 2. *Cornuscoparia barsevskisi* spec. nov., ♀ allotype (coll. V.Voitsekhovskii)



Fig. 3. *Cornuscoparia barsevskisi* spec. nov., ♀ allotype: right wing



Figs 4-11. Genitalia of *Cornuscoparia* species: 4-7. Genitalia of ♂ holotype, *C. barsevskisi* spec. nov.: 4. Ventral view of penis; 5. Dorsal view of penis; 6. Dorsal view of proctiger; 7. Tergite VIII and ventrites VIII & IX in ventral view; 8-11. Genitalia of ♂ *C. annulicornis* (Heller, 1897) (coll. V. Voitsekhovskii): 8. Ventral view of penis; 9. Dorsal view of penis; 10. Dorsal view of proctiger; 11. Tergite VIII and ventrites VIII & IX in ventral view.



Figs 12-17. Abdominal segments of *Cornuscoparia* species: **12-13.** Abdominal segments of ♀ allotype, *Cornuscoparia barsevskisi* **spec. nov.**: **12.** VIII abdominal segment; **13.** Ovipositor dorsal view; **14-15.** Abdominal segments of ♀ *C. schlaginhaufeni* (Heller, 1910) (coll. V. Voitsekhovskii): **14.** VIII abdominal segment; **15.** Ovipositor dorsal view; **16-17.** Abdominal segments *C. annulicornis* (Heller, 1897) (coll. V. Voitsekhovskii): **16.** VIII abdominal segment; **17.** Ovipositor dorsal view.

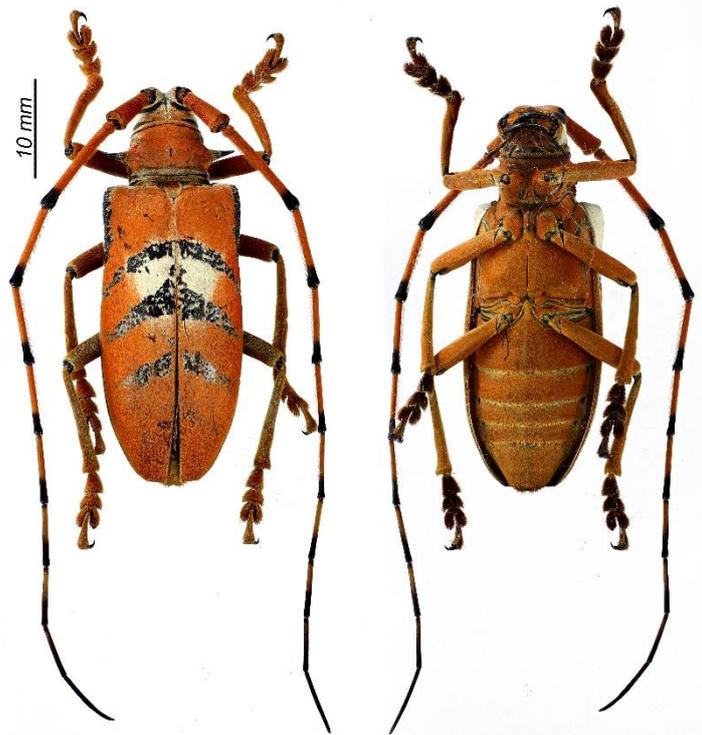
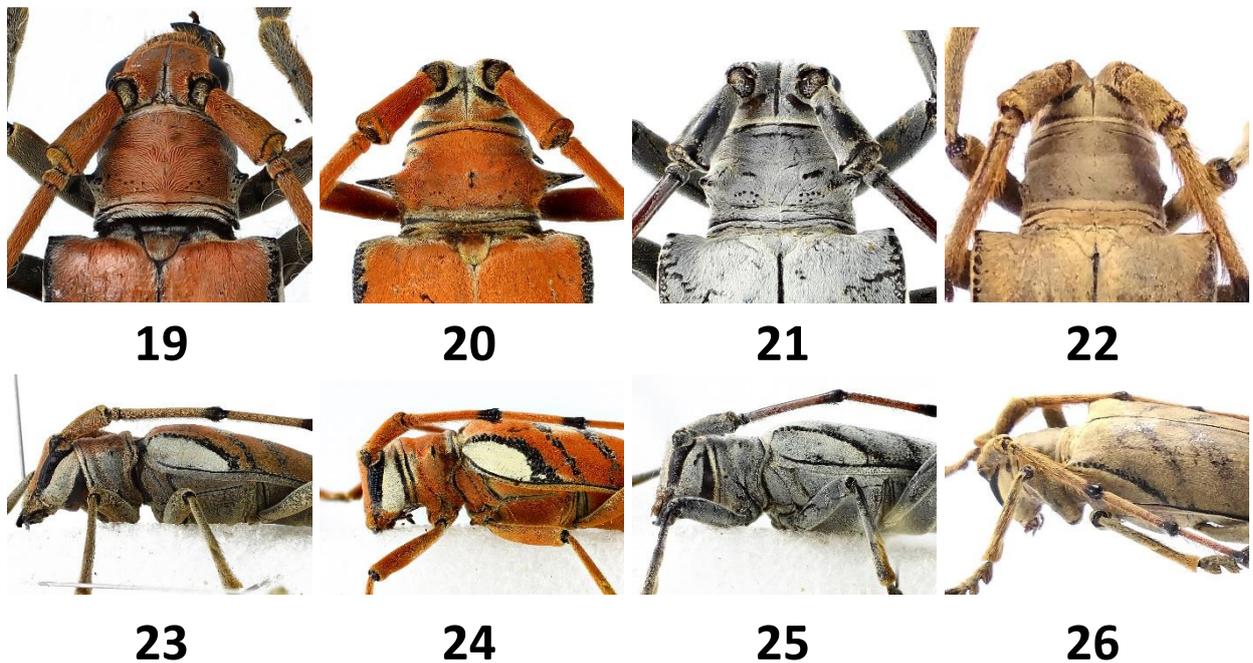


Fig. 18. *Cornuscoparia schlaginhaufeni* (Heller, 1910), ♀ (coll. V. Voitsekhovskii).



Figs 19-22. Pronotum of *Cornuscoparia* species: 19. *C. barsevskisi* **spec. nov.**, ♀ allotype; 20. *C. schlaginhaufeni* (Heller, 1910), ♀ (coll. V. Voitsekhovskii); 21. *C. annulicornis* (Heller, 1897) ♀ (coll. V. Voitsekhovskii); 22. *C. ochracea* Jordan, 1894, ♀ (coll. V. Voitsekhovskii).

Figs 23-26. Head, pronotum, elytral humeri of *Cornuscoparia* species: 23. *C. barsevskisi* **spec. nov.**, ♀ allotype; 24. *C. schlaginhaufeni* (Heller, 1910), ♀ (coll. V. Voitsekhovskii); 25. *C. annulicornis* (Heller, 1897), ♀ (coll. V. Voitsekhovskii); 26. *C. ochracea* Jordan, 1894, ♀ (coll. V. Voitsekhovskii).



Fig. 27. *Cornuscoparia annulicornis* (Heller, 1897), ♂ (coll. V. Voitsekhovskii).



Fig. 28. *Cornuscoparia ochracea* Jordan, 1894, ♀ (coll. V. Voitsekhovskii).



Fig. 29. Distribution of *Cornuscoparia barsevskisi* spec. nov. (dark blue dot), *C. schlaginhaufeni* (Heller, 1910) (pale blue dot), *C. annulicornis* (Heller, 1897) (red dots), *C. ochracea* Jordan, 1894 (yellow dot).