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A new genus and species of brontine Silvanidae from Australia
(Coleoptera: Cucujoidea)

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A new genus and species of brontine Silvanidae from Australia
(Coleoptera: Cucujoidea)

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Abstract. *Notophanus bellicilifer* Thomas, **n. gen., n. sp.**, is described and illustrated from Australia. A key is provided to all of the species of the tribe Brontini known to occur in Australia.

Introduction

Examination of specimens from the Australian National Insect Collection (ANIC) revealed a single specimen in the silvanid subfamily Brontinae from Victoria different from any known Australian genus. Further searching of the collection produced additional specimens from Victoria and South Australia. Interestingly, the first specimen examined possessed hind wings, while all the other specimens lacked hind wings. There appear to be no differences other than the lack of metathoracic wings and concomitant lack of humeral angle on the elytra. Male genitalia of the two forms could not be compared since the only available winged specimen is female.

Although this beetle has similar facies as members of the tribe Telephanini Thomas and Nearn (2008), it has all of the diagnostic characters of the Brontini (Thomas 2004) and is so placed.

***Notophanus* Thomas, new genus**

Type species. *Notophanus bellicilifer* Thomas, **new species**, here designated.

Description. With characteristics of Brontinae: Brontini as described by Thomas (2004), plus: Surface without incrustation, distinctly pubescent. Head with frontoclypeal suture represented by a vague, transverse impression, with short, inconspicuous longitudinal grooves on each side of the clypeus (Fig. 9); gular area arcuately impressed (Fig. 15); mandibles without a protheca, dorsally with large mycangium bounded anterolaterally with a tubercle (Fig. 7); labial palps securiform (Fig. 6); maxillary palps slender (Fig. 8); temples very short, head abruptly constricted behind eyes (Fig. 2); basal line distinct; eyes small, abruptly hemispherical (Fig. 2-3); antennal scape shorter than head (Fig. 2). Prothorax slightly transverse, anterior angles lobed, lateral margin denticulate, hind angles obtuse. Scutellum without posterior marginal groove (Fig. 13). Elytra with a scutellary striole; in cross section evenly curved to the moderately explanate margin; striae with large shallow punctures; humerus rounded. Legs rather short, femora robust; tarsi "*Dendrophagus* type" (Fig. 4-5). Prosternal process subequal in width to procoxal cavity, slightly expanded apically (Fig. 16); intercoxal process of mesosternum narrow, measured at junction with metasternum about 0.5x width of mesocoxal cavity (Fig. 17); metasternum, measured at midline, shorter than mesocoxal cavity (Fig. 17); hind wings absent; epipleura broad and complete almost to apex.

Etymology. The genus name is composed from the Greek *notos* for "south" referring to the distribution in southern Australia and in the Southern Hemisphere, and *phanos* for "bright" to indicate its superficial resemblance to members of the Telephanini.

***Notophanus bellicilifer* Thomas, new species**

Description. Holotype, female, deposited in ANIC, with the following label data: "STH. AUSTRALIA Ferrier MacDonald"/"30-I-70 P.J.M. GREENSLADE 1000" [dissected with genitalia mounted on card below specimen].



Figure 1. *Notophanus bellicilifer* Thomas, dorsal habitus.

Body. Length, 4.5mm. Color dark testaceous, with mouthparts, distal region of tibiae, and tarsi paler (Fig. 1).

Head. Triangular in shape, 1.75x wider than long, measured across eyes; abruptly constricted behind eyes, temple very short (Fig. 3); eyes located basally, about 0.5x length of head, with long setae that arise from temples and curve forward over eyes (Fig. 2-3); antennae elongate, filiform, attaining basal third of elytra (Fig. 1), scape elongate, 0.6x length of head, 3x length of pedicel; surface sculpture basally and laterally strongly rugose punctate with a long suberect seta arising from within each puncture (Fig. 12); sculpture of clypeus and frons conspicuously different from rest of head (Fig. 2), smooth with minute punctures each subtending a suberect seta (Fig. 9).

Pronotum. Slightly transverse, 1.15x wider than long; broadest near midpoint, slightly narrowed basally, lateral margins denticulate and heavily setose (Fig. 2); surface sculpture and pubescence as on head, conspicuously smooth are a longitudinal area at the midline (Fig. 11) and the lobate anterior angles (Fig. 10).

Elytra. Elongate, somewhat ovate, 1.7x longer than wide, widest at about midpoint; apices conjointly rounded; elytra with punctate striae, each puncture with a fine pale seta arising at the anterior margin; intervals with a single row of fine punctures, each subtending a slightly thicker dark seta; lateral margins moderately explanate and translucent, with long, stout setae (Fig. 1).

Paratypes. 9, as follows: 2, same data as holotype (ANIC, FSCA); 3, “34.21S 139.29E SA Brookfield Con. Pk. 3-12 Sept. 1991 Campsite J. Lawrence, T. Weir, W. Dressler”/”Berlesate ANIC 1174 litter under mallee” (ANIC); 2, “Vic. Wyperfield NP. 1km. N. of Frew’s Pln 8.ii.1970 R.W.T.” (ANIC); 1, “(33.30S 135.54E) Hambridge Nat. Pk. Eyre Peninsula, S.A. 17.xii.70. Britton, Misko & Pullen” (ANIC); 1, “S. Aust. 3.2km W. Sherlock 12 Jan. 1970 R.W. Taylor”/”ANIC Berlesate No. 182 Mallee” (ANIC).

Other material examined. A single individual with hind wings was examined with the label data: “34.35S 132.46E VIC Robinvale 25 Oct-3 Nov 1988 T. Weir, J. Lawrence & M. Hansen”/”Berlesate ANIC 1085 red gum litter” (ANIC). It is provisionally assigned to *N. bellicilifer*. The discovery of a winged male and comparison of genitalia is necessary to clarify its status.

Etymology. The species epithet is combination of the Latin *bellus* (beautiful) and *cilium* (eyelash), meaning “bearing beautiful eyelashes.”

Discussion. There is no noticeable sexual dimorphism. The male genitalia (Fig. 14) are most similar to New Zealand’s *Brontopriscus pleuralis* (Sharp) in the apparently immovable parameres, and short, broad shape of the basal strut of the median lobe and C-shaped structure basally (Thomas 2004). The apex of the median lobe is acuminate in *N. bellicilifer* while it is not in *Brontopriscus* Sharp, and the armature of the internal sac is much more complex in the former than the latter.

Key to the genera and species of the tribe Brontini of Australia

- | | | |
|-------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 1. | Frontal lines of head long and conspicuous, reaching the anterior margin of the eye | <i>Australodendrophagus australis</i> (Erichson) |
| — | Frontal lines of head short and inconspicuous or absent | 2 |
| 2(1). | Elytra fused; hind wings absent | 3 |
| — | Elytra not fused; hind wings present | 5 |
| 3(2). | Elytral apices conjointly rounded | <i>Brontoliota indivisipennis</i> Thomas |
| — | Elytra apices divaricate | 4 |
| 4(3). | Head and pronotum impunctate, or nearly so; body less elongate, elytra 2.5x or less longer than wide | <i>Brontoliota intermedius</i> Thomas |
| — | Head and pronotum with large, conspicuous ocellate punctures; body more elongate, elytra more than 2.5x longer than wide | <i>Brontoliota monteithi</i> Thomas |

- 5(2). Antennal scape with erect setae, some of which are longer than diameter of scape *Australohyliota macleayi* (Olliff)
 — Antennal scape with depressed or subdepressed setae, which are much shorter than diameter of
 scape 6
- 6(5). Body without encrustation 7
 — Body with encrustation *Macrohyliota lucia* (Pascoe)
- 7(6). Antennal scape longer than head; tibiae strongly curved 8
 — Antennal scape shorter than head; tibiae not curved
 *Notophanus bellicilifer* Thomas, n. gen., n. sp.
- 8(7). Body black; elytra black with red basal fascia; all pronotal spines long and acute
 *Macrohyliota militaris* (Erichson)
 — Body red; elytra sometimes black, but without fascia; pronotal spines short and broad
 *Macrohyliota bicolor* (Arrow)

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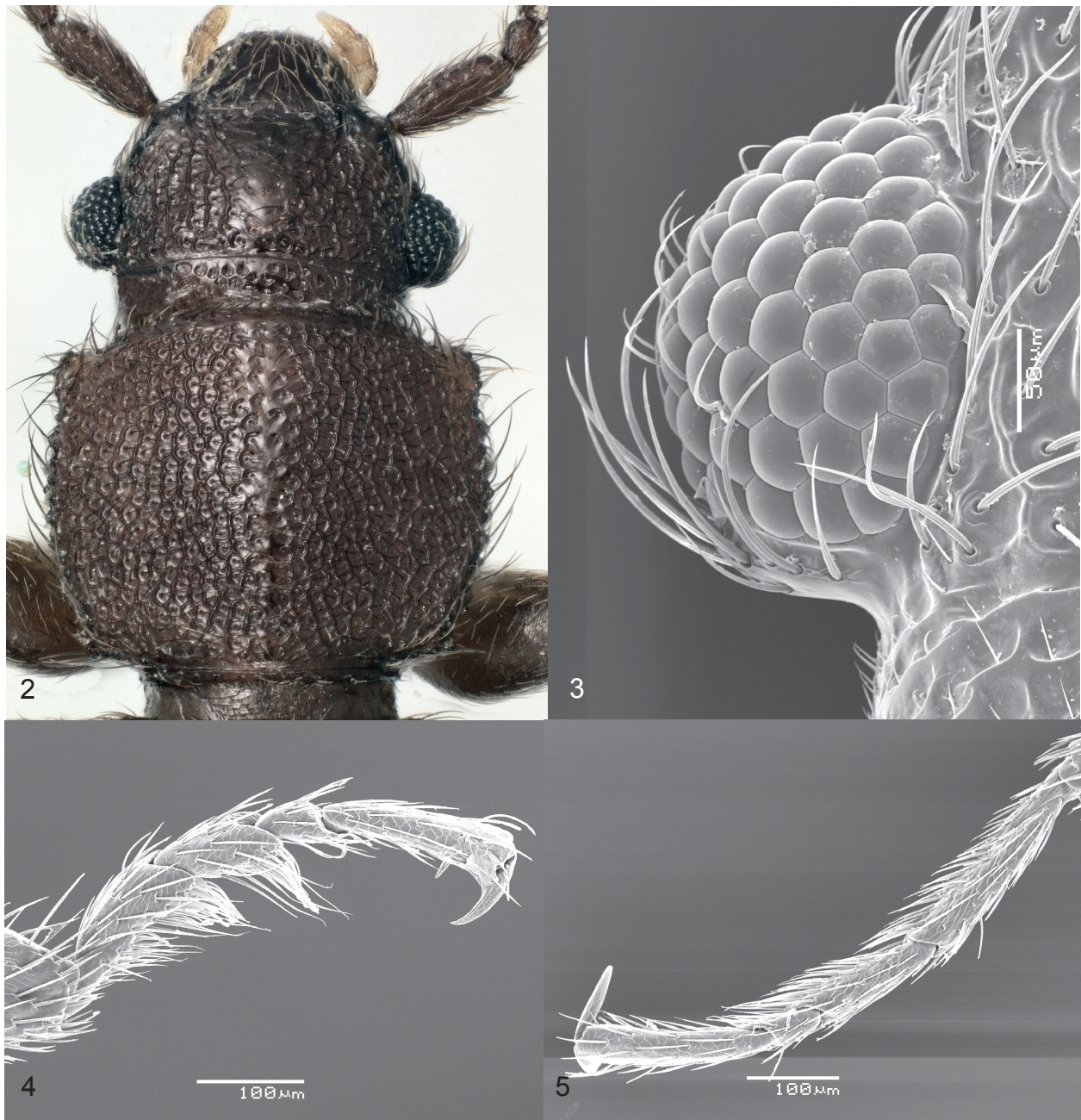


Figure 2-5. *Notophanus bellicifer* Thomas. 2) Head and pronotum. 3) Eye. 4) Front tarsus. 5) Hind tarsus

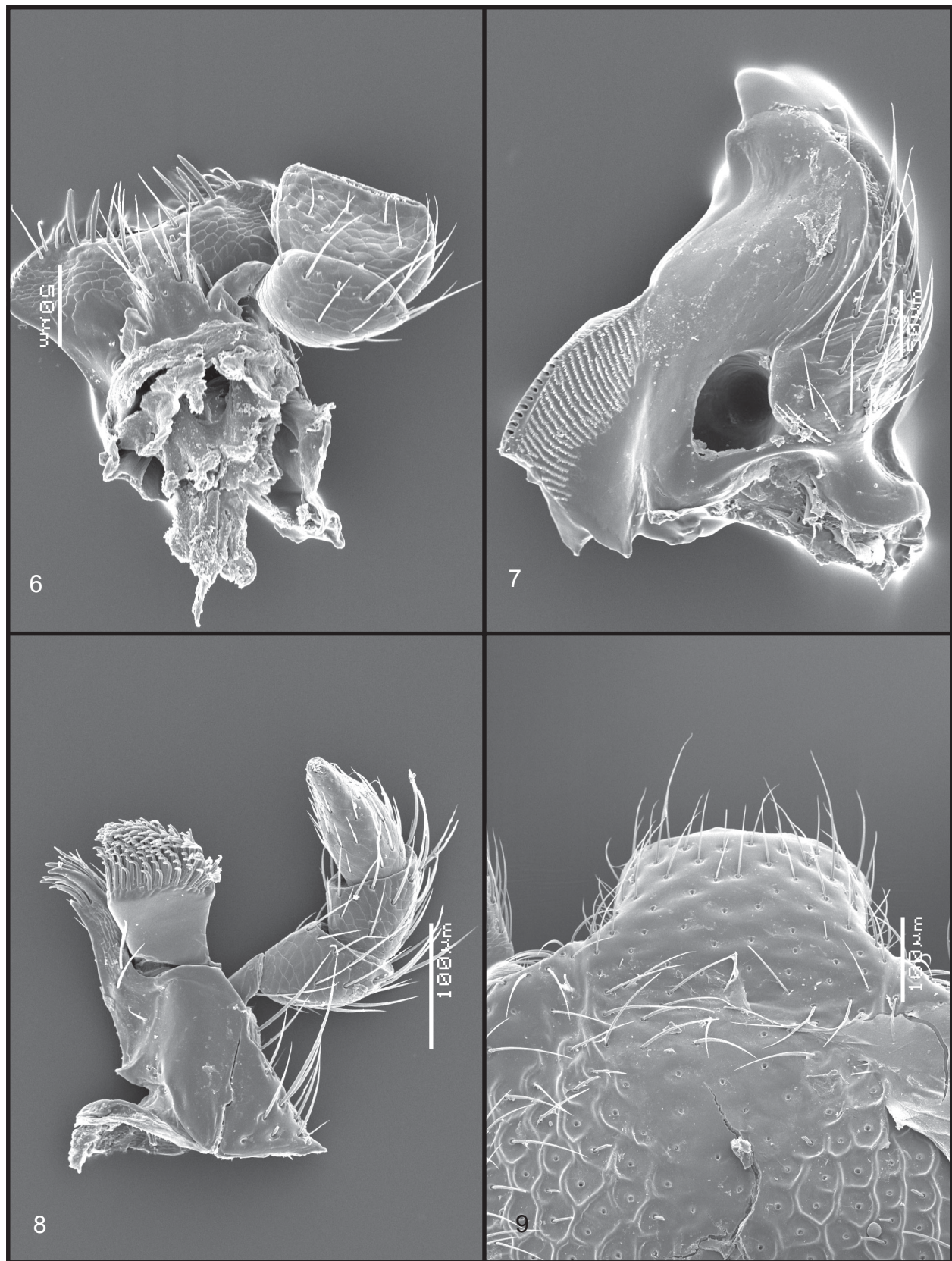


Figure 6-9. *Notophanus bellicilifer* Thomas. 6) Labium. 7) Right mandible. 8) Maxilla. 9) Clypeus.

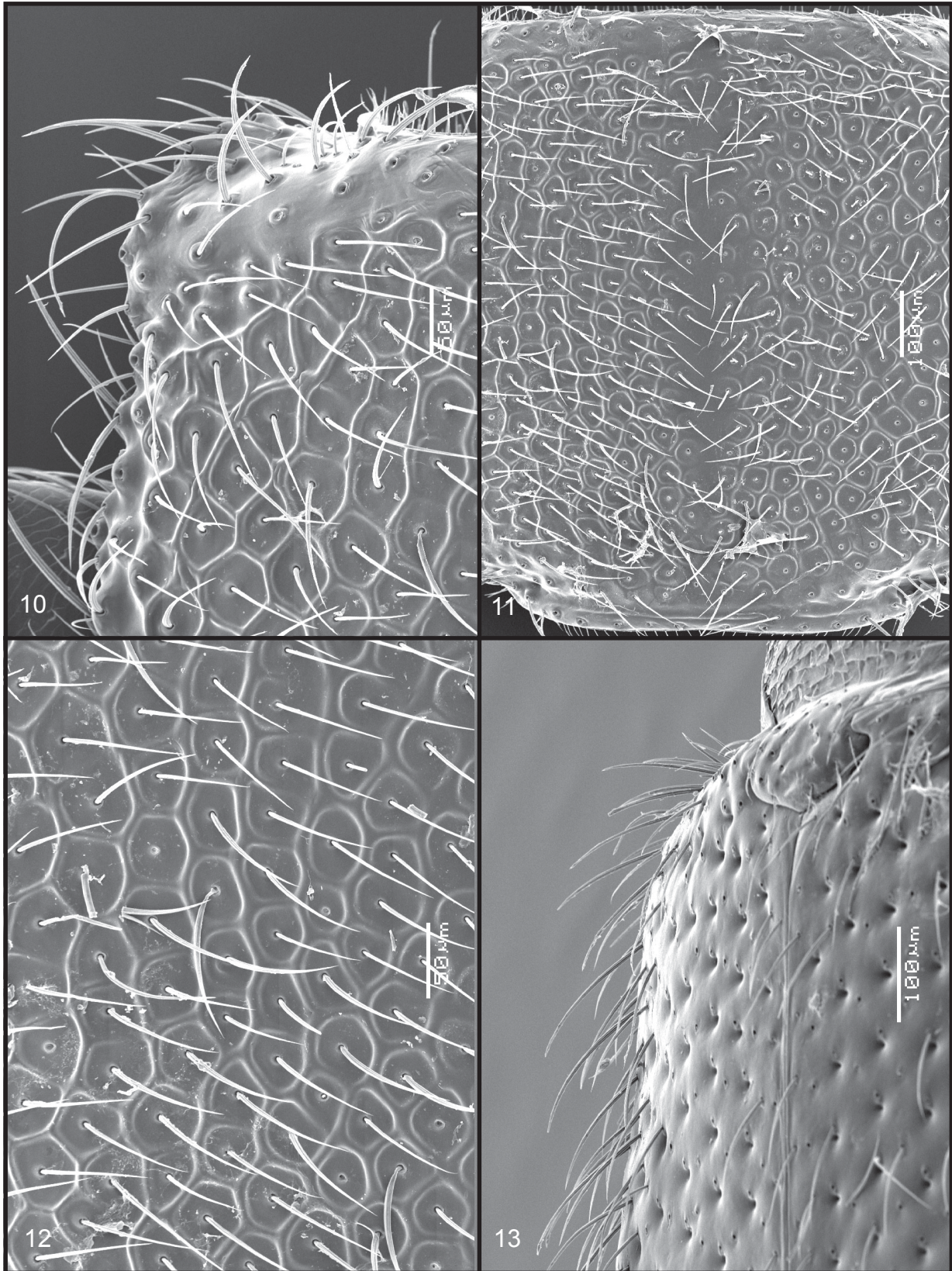


Figure 10-13. *Notophanus bellicifer* Thomas. **10)** Pronotum, anterior angle. **11)** Pronotum, disc. **12)** Head, surface sculpture. **13)** Scutellum, oblique view.

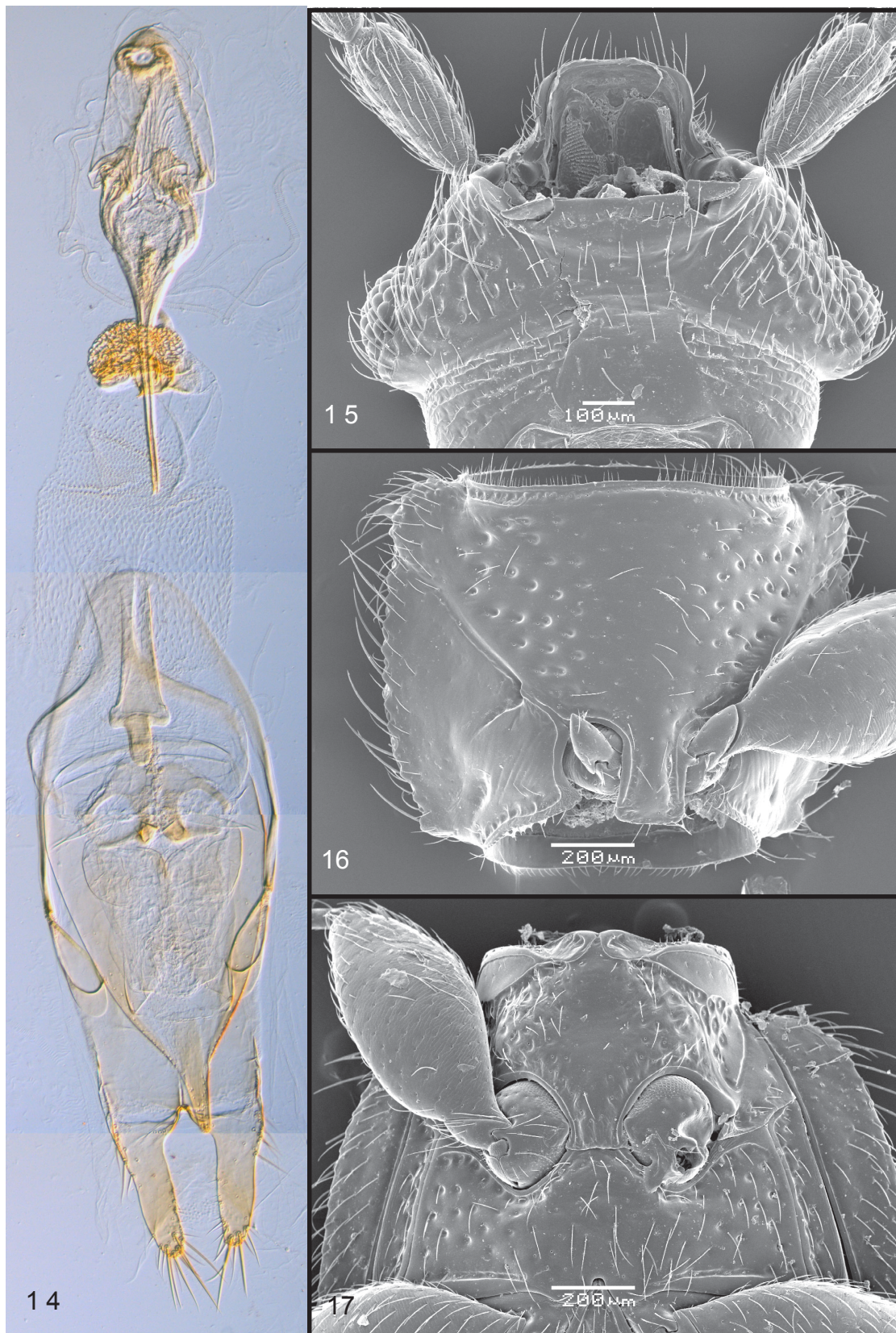


Figure 14-17. *Notophanus bellicifer* Thomas. 14) Male genitalia. 15) Head, ventral view. 16) Prosternum. 17) Meso- and metasternum.