

# Two new species of *Neostromboceros* from India (Hymenoptera: Tenthredinidae: Selandriinae)

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*Abstract:* *Neostromboceros albisclerite* and *N. varicolor* are described from the Indian subcontinent. Details of their genitalia are illustrated and the species are compared with other regional taxa.

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## Introduction

The Oriental genus *Neostromboceros* Rohwer is thus far represented by 37 species, nine of which are known from within the Indian faunistic limits (Malaise, 1944). Its members are characterized as follows. Forewings with two radial and three or four cubital cells, first cubital crossvein frequently obliterate; basal vein mostly subparallel to first recurrent vein; anal cell without cross-vein; hind wings with two closed middle cells and always with sessile anellus cell. Head with frontal area somewhat roundly elevated and the frontal depression, when present, mostly surrounded by indistinct and very blunt ridges. Malar space linear to distinct. Clypeus truncate to emarginate. Antennal joint 3 mostly distinctly longer than 4, flagellum filiform, incrassate or distinctly compressed; scape longer than pedicel. Epicnemium separated from mesopleuron by fine, deep or distinct furrow. Claws with a large basal lobe and subapical tooth shorter, equal or frequently longer than apical one and placed lateral to it.

The present text deals with the addition of two new species from India. The terminology used in the text follows Ross (1937, 1945) and Malaise (1945). The type material of the new species is housed at Division of Entomology, Pusa National Collections, Indian Agricultural Research Institute, New Delhi, India.

## *Neostromboceros albisclerite* spec. nov. (fig. 1, 3, 5, 6, 9, 11, 13)

### Type material

Holotype: ♀, Nagaland, Chuchuyimlang, 900 m, 9.v.1994, leg. M. S. Saini.

Paratypes: 2 ♂ with same data as holotype; 2 ♂, Nagaland, Zunheboto, 1870 m, 14.v.1993, leg. V. Vasu; 1 ♂, Meghalaya, Shillong, 1500 m, 25.v.1992, leg. V. Vasu; 1 ♀, 2 ♂, Cheerapunji, 1450 m, 27.v.1992, leg. V. Vasu; 1 ♂, Arunachal Pradesh, Tissa, 700 m, 7.v.1994, leg. M. S. Saini.

## Description

Female: Body length 8 mm.

Colour: Body black, dorsal margin of pronotum, outer margin of tegula, parapteron, extreme posterior margin of tergite 7, medial spot on tergites 8 and 9, trochanters and adjoining parts of coxae and femora, apical half of anterior aspect of tibia 1 and 2, basal half of metatibia whitish. Wings hyaline; venation including costa, subcosta and stigma fuscous.

Head: Antenna incrassate in middle, 1.7 x head width, flagellum with apical 6 segments distinctly compressed, segment 3 one third longer than 4. Clypeus (fig. 1) shallowly emarginate, labrum (fig. 1) two times as broad as long with rounded anterior margin and linear malar space; two supra antennal pits distinctly connected, anterior one smaller. LID:IDMO:EL = 1:1.3 :1, POL:OCL:OOL = 1:1.5:1. Frontal area at level of eyes. Median fovea in form of a distinct pit above supra-

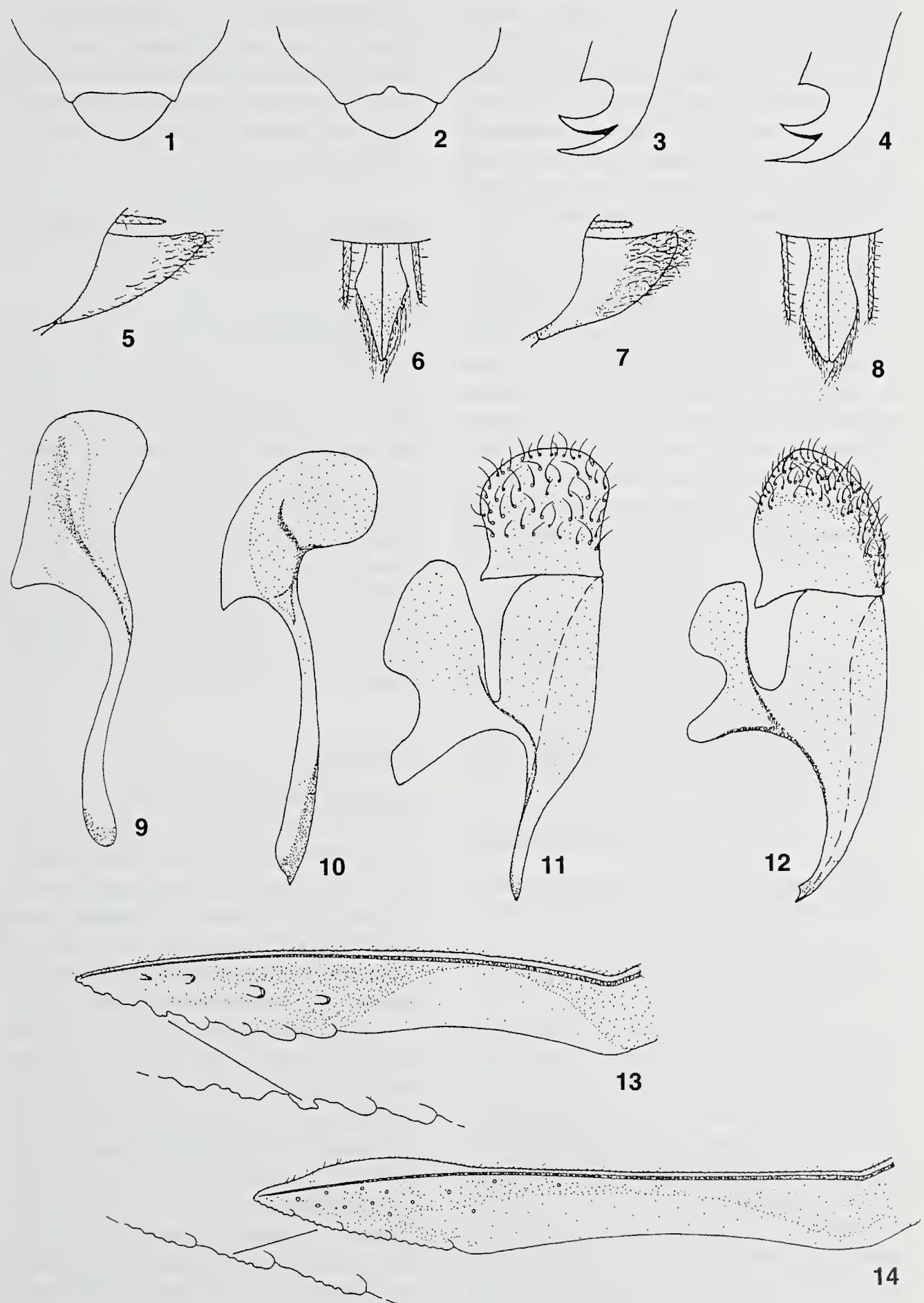


Fig. 1-14. *Neostromboceros albisclerite* spec. nov.: 1, clypeus and labrum; 3, tarsal claw; 5, ovipositor sheath (lateral view); 6, ovipositor sheath (dorsal view); 9, penis valve; 11, gonoforceps; 13, lancet. *Neostromboceros varicolor* spec. nov.: 2, clypeus and labrum; 4, tarsal claw; 7, ovipositor sheath (lateral view); 8, ovipositor sheath (dorsal view); 10, penis valve; 12, gonoforceps; 14, lancet.

clypeal area and in form of a crescent shaped pit anterior to median ocellus. Postocellar furrow absent, inter- and circumocellar furrows distinct, lateral furrows distinct, bulging medially, ending just before hypothetical hind margin of head, postocellar area convex, broader than long as 7:4. Head narrowing behind eyes, and impunctate, shining. Pubescence silvery, 0.4x scape length.

Thorax: Hindwing with vein 1r-m joining Rs beyond the junction with R+Sc. ICD:ITD = 1:4; mesoscutellum subconvex, appendage not carinate. Tarsal claw (fig. 3) with subapical tooth at most equal to apical one, basal lobe broad; basitarsus 3 1.5 times as long as following 3 joints together, IATS:MB:OATS = 1:2.5:0.9. Thorax impunctate except posterior border of mesoscutellum that bears deep, confluent punctuation. Pubescence silvery, 0.4 x scape length.

Abdomen: Ovipositor sheath as in fig. 5 (lateral view) and fig. 6 (dorsal view). Lancet (fig. 13) with 7 serrulae. Abdomen with faint microstriations. Pubescence sparse, silvery, 0.4x scape length.

Male: Average length 6 mm. Similar to female. Genitalia: penis valve as in fig. 9, gonoforceps as in fig. 11.

Distribution: India (Nagaland, Meghalaya, Arunachal Pradesh).

Etymology: The species is named after its whitish parapterum.

## Discussion

*Neostromboceros albisclerite* is a species of mainly low altitude, confined to the North-eastern states hill slopes with comparatively low amounts of precipitation. In distribution, flight period, diurnal activities, food plants and population density, this species is somewhat similar to *N. rugifrons* (Konow) and *N. basilineatus* (Cameron). It lives on ferns growing in semixeric conditions. With the onset of monsoon showers it quickly disappears.

*Neostromboceros albisclerite* is most similar to *N. trifoveatus* (Cameron) from which it can be distinguished as follows: parapterum whitish (black in *trifoveatus*), postocellar area

broader than long (as long as broad in *trifoveatus*), antennal segments 3 and 4 as 4:3 (3:2 in *trifoveatus*), abdomen with medial spot on tergites 8 and 9 (entirely black in *trifoveatus*), and pubescence silvery (black in *trifoveatus*).

## *Neostromboceros varicolor* spec. nov.

(fig. 2, 4, 7, 8, 10, 12, 14)

### Type material

Holotype: ♀, Assam, Jatinga, 900 m, 18.v.1994, leg. V. Vasu.

Paratypes: 5 ♀, 3 ♂ with same data as holotype; 1 ♂, Sikkim, Gangtok, 1500 m, 7.v.1986, leg. M. S. Saini; 4 ♀, Ranipool, 1400 m, 5.v.1988, leg. M. S. Saini; 1 ♂, Ranipool, 1400 m, 5.v.1995, leg. M. S. Saini; 6 ♂, Namchi, 1500 m, 17.ix.1993, leg. M. S. Saini; 1 ♂, Phodong, 1500 m, 15.v.1995, leg. M. S. Saini; 1 ♂, Mangan, 1700 m, 17.v.1995, leg. M. S. Saini; 1 ♂, Assam, Kaliranga, 600 m, 20.v.1995, leg. V. Vasu; 1 ♂, Meghalaya, Nangpoh, 900 m, 28.iv.1994, leg. M. S. Saini; 3 ♂, Arunachal Pradesh, Bhalukpong, 600 m, 26.ix.1992, leg. M. S. Saini; 1 ♂, Khonsa, 900 m, 4.v.1994, leg. V. Vasu; 2 ♀, 1 ♂, Manipur, Ukhrul, 1700 m, 9.v.1995, leg. M. S. Saini.

### Description

Female: Body length 7.5 mm.

Colour: Body black; labrum, clypeus except extreme base, broad dorsal margin of pronotum, parapterum, posterior margin of propodeum and tergites 2-7, posterior margins of sternites 2-5, apex of coxa 1, coxae 2 and 3 except extreme bases, trochanters and adjoining parts of femora, apical 1/4 of femur 1 and 2, femur 3 except basal 1/3 of posterior aspect, tibiae except extreme apices, tarsi of front and middle leg, and basal 1/3 of basitarsus 3 whitish; apical 2/3 basitarsus 3 and following tarsi brownish. Wings hyaline with infuscated apices; venation including costa, subcosta and stigma fuscous.

Head: Antenna subincrassate in middle, 1.6x head width, flagellum not compressed, segment 3 1.5 times as long as 4. Clypeus (fig. 2) shallowly emarginate with median invagination, labrum (fig. 2) 1.5 times as broad as long with roundly pointed anterior margin and linear malar space, supra-antennal pit single,

deep crescent-shaped. LID:IDMO:EL = 1:1.4:1.2, POL:OCL:OOL = 1:1:1. Frontal area at level of eyes; median fovea in form of deep transverse pit above supraclypeal area and broad shallow pentagonal depression anterior to median ocellus; postocellar furrow absent, inter- and circumocellar furrows distinct; lateral furrows distinct, diverging posteriorly, shallowly reaching hypothetical hind margin of head; postocellar area convex, 1.5 times as broad as long. Head narrowing behind eyes, and impunctate, shining. Pubescence silvery, 0.5x scape length.

**Thorax:** Hindwing with vein 1r-m joining Rs beyond the junction with R+Sc. ICD:ITD = 1:3.5, mesoscutellum subconvex, appendage not carinate. Tarsal claw (fig. 4) with subapical tooth shorter than apical one, basal lobe distinct, basitarsus 3 longer than following three joints combined as 4:3, IATS: MB:OATS = 1:2:0.8. Thorax impunctate except posterior border of mesoscutellum that bears a row of shallow, isolated punctures. Pubescence silvery, 0.5x scape length

**Abdomen:** Ovipositor sheath as in fig. 7 (lateral view) and fig. 8 (dorsal view). Lancet (fig. 14) with 4 serrulae. Abdomen almost impunctate. Pubescence sparse, silvery, 0.5x scape length.

**Male:** Body length 6.5 mm. Similar to female except that the dark black parts of femora of female are fuscoferruginous in the male, while the whitish parts are brownish with a reddish tinge. Genitalia: penis valve as in fig. 10, gonoforceps as in fig. 12.

**Individual variations:** Antenna 10-segmented in one male. Basal 1/3 of femora fuscoferruginous, whereas the remainder ferruginous, and apical 1/3-1/2 of metatibia brownish to fuscous in males only.

**Distribution:** India (Assam, Meghalaya, Arunachal Pradesh, Sikkim, Manipur).

**Etymology:** The species is named after the variable colour pattern of the legs.

## Discussion

*Neostromboceros varicolor* is widely dis-

tributed in the North-eastern states where it usually occurs in large numbers. Almost every gorge with ferns, irrespective of altitude and other environmental conditions, is inhabited by this species. In flight period and distributional pattern it is quite close to *N. pilicornis* (Cameron) and *N. indobirmanus* (Malaise). *Neostromboceros varicolor* can be separated from *N. indobirmanus* (Malaise) by the following characters: hind femur with broad black markings (entirely whitish in *indobirmanus*), hind tibia with apical 1/3 black (extreme apex black in *indobirmanus*), antennal segment 3 1.5 times as long as 4 (1.2 times in *indobirmanus*), postocellar area 1.5 times as broad as long (1.25 times in *indobirmanus*), postocellar furrow absent (distinct in *indobirmanus*), and hind basitarsus longer than following three joints together (equal in length in *indobirmanus*).

## Acknowledgements

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## Abbreviations

EL = eye length; IATS = inner apical tibial spur; ICD = inter cenchri distance; IDMO = interocular distance at level of median ocellus; ITD = inter tegular distance; LID = lower interocular distance; MB = basitarsus 3; OATS = outer apical tibial spur; OCL = ocello-occipital line; OOL = oculo-ocellar line; POL = postocellar line.

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