

**ADDITION OF SIX NEW SPECIES  
TO *NEOSTROMBOCEROS* ROHWER FROM INDIA  
(HYMENOPTERA, SYMPHYTA, TENTHREDINIDAE: SELANDRIINAE)**

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**Abstract**

The systematic descriptions and illustrations of six new species viz. *Neostromboceros punjabica*, *N. balbiri*, *N. mandalensis*, *N. tarloki*, *N. nigricans* and *N. malaisei*, are provided. A key to the Indian species of this genus is provided.

**Key words**

*Neostromboceros, punjabica, balbiri, mandalensis, tarloki, nigricans, malaisei*

**Abbreviations**

EL - eye length  
ICD - inter cenchri distance  
ITD - inter tegular distance  
MB - metabasitarsus  
OCL - ocellooccipital line  
POL - postocellar line

IATS - inner apical tibial spur  
IDMO - interocular distance at level of median ocellus  
LID - lower interocular distance  
OATS - outer apical tibial spur  
OOL - oculoocellar line

**Introduction**

Relevant literature concerning this group reveals that so far this genus is recorded from Oriental region including South China only. Rohwer (1912) was the first to describe this genus based on *Strombeceros metallica* from Singapore. To this date nine species are known from Indian faunistic limits, out of which six are described by Cameron (1888, 1899, 1902, 1907) viz. *N. rothneyi*, *N. caeruleiceps*, *N. fuscinervis*, *N. pilicornis*, *N. trifoveatus*, and *N. basilineatus*; whereas, of the remaining three, one by Konow (1898) i.e. *N. laevis*; and two by Malaise (1944) i.e. *N. indobirmanus* and *N. speciosus*. In 1919 Enderlein described a genus *Stypoza* taking *Stypoza cyanea* as its type species, but Malaise (1944) brought this genus under *Neostromboceros* Rohwer. Different workers of the world such as Konow (1901, 1908), Rohwer (1912, 1916), Enslin (1912), Enderlein (1919), Takeuchi (1929), Forsius (1925, 1931, 1933), Benson (1935), and Malaise (1944) added 28 species to this genus from the Oriental region (excluding India). Malaise (1944) was the first to compile the entire scattered work on this genus in the form of a key from the Oriental region.

The present text deals with the addition of six new species from India which are described and illustrated on a uniform systematic pattern. The terminology used in the text is after Ross (1937, 1945) and Malaise (1945). A key to the Indian species of this genus is provided. The type materials of the new species are housed at Division of Entomology, Pusa National Collections, Indian Agricultural Research Institute, New Delhi, India.

**Genus *Neostromboceros* Rohwer**

*Neostromboceros* Rohwer, 1912: 236; Malaise, 1944: 26-29; Abe & Smith, 1991: 56.

Type species: *Neostromboceros metallica* Rohwer.

*Stypoza* Enderlein, 1919: 367.

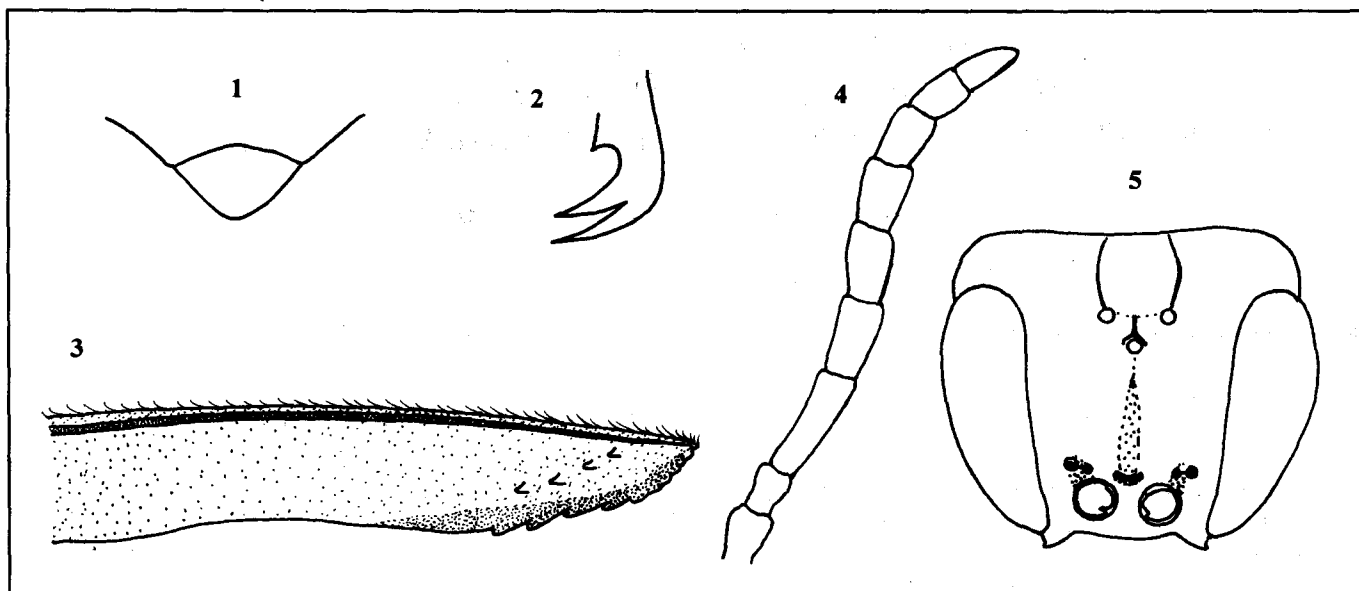
Type species: *Stypoza cyanea* Enderlein.

**Distribution:** Oriental region including South China.

**Diagnosis:** Front wings with two radial and three or four cubital cells, first cubital crossvein frequently obliterate. Basal vein mostly subparallel to first recurrent vein and joining the subcosta a distance from the base of the cubitus shorter than the first cubital crossvein or, if wanting, its equivalent length. Anal cell

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Figures 1 - 5. *Neostromboceros punjabica* sp. nov. 1. Clypeus and labrum; 2. Tarsal claw; 3. Lancet; 4. Antenna; 5. Head (front view)

without crossvein. Hind wings with two closed middle cells and always sessile anellan cell. Venation and stigma dark brown to black; front wings hyaline, the apical half sometimes infumate or brownish infuscate, rarely the entire wing strongly infuscate. General colour black and sometimes also reddish with whitish markings. Head strongly narrowing behind eyes, very rarely subparallel. The hind orbits carinate a short length from the base of mandibles but rarely as far as halfway to the postocellar area. Post ocellar area mostly subconvex, and lateral furrows frequently deepest sunken close behind the lateral ocelli, strongly diminishing backwards and then disappearing before reaching the hind margin of head. Interocellar furrow deep and sharp, very rarely wanting. Frontal area somewhat roundly elevated and the frontal depression, when present, mostly surrounded by indistinct and very blunt ridges. The middle supra-antennal pit large and mostly semicircularly curved around a tubercle from above; the lateral ones are each subdivided into twin-pits of variable size. Inner margins of eyes subparallel in middle, converging below in female and distinctly converging along the entire length in male and sometimes likewise in female. Malar space linear or shorter than half the diameter of median ocellus. Clypeus truncate or submarginate. Antennal joint three mostly distinctly longer than four but some times may be equal or shorter than fourth one; flagellum may be filiform, incrassate or distinctly compressed; scape longer than pedicel. Epicnemeum separated from mesopluron by fine, deep or distinct furrow. Scutellum subconvex, the limit to appendage with isolated coarse and deep punctures. Metabasitarsus mostly subequal in length to following tarsal joints combined. Claws with a large basal lobe, subapical tooth may be shorter, equal or frequently longer than apical one and placed some what lateral to it.

*Neostromboceros punjabica* sp. nov.

(Figs. 1 - 5)

**Material examined:**

**Holotype:** Female, Arunachal Pradesh: Lazu, 2200m, 5.5.1994, coll. V. Vasu.

**Distribution:** Arunachal Pradesh, India

**Etymology:** Species name is a noun as a genitive of Punjab, the state of India, where the laboratory carrying out this revisionary work on sawflies taxonomy is situated.

**Diagnostic features:** *N. punjabica* is distinct from rest of the species discussed under this genus having entire abdomen fulvous except propodeum, and proximal 2/3 of antennal segment 3 pale.

**Female:**

**Colour:** Body black, pale are: apex of scape and pedicel; 2/3 proximal end of antennal segment 3; tegula except apex; parapterum, apex of procoxa; distal half of mesocoxa and metacoxa except extreme base; all trochanters; bases of pro and mesofemora; proximal half of metafemur; longitudinal stripe on outer sides of pro and mesotibiae; proximal end of metatibia; proximal three tarsal segments of pro and mesoleg, rest of tarsal segments of all legs piceous. Labrum fuscus; abdomen except propodeum fulvous. Wings hyaline; venation including costa, subcosta and stigma dark brown.

**Structure:** Length 7mm. Antenna (Fig. 4) subincrassinated from

4-8 segments, 1.6x head width, scape slightly longer than pedicel, both are longer than their apical width; segment 3 longer than 4 as 3:2. Anterior margin of clypeus subtruncate (Fig. 1). Labrum broader than long as 3:2 with acuminate anterior margin. Malar space 0.3x diameter of median ocellus. LID:IDMO:EL = 2.0:2.4:2.1; OOL:POL:OCL = 1.9:1.0:2.4. Frontal area at level of eyes. Lateral supraantennal pits divided into twin-pits and connected by fine furrow with one another, anterior one of these connected by a distinct furrow with antennal socket. Middle supraantennal pit transverse, almost straight and depressed laterally. Median fovea in form of shallow medial depression. Frontal ridges insignificant. Circum- and interocellar furrows distinct, postocellar furrow absent. Lateral furrows excurved, deep, distinct and ending a little more than half-way to hypothetical posterior margin of head. Postocellar are subconvex broader than long as 6:5. Head subparallel behind eyes. Hind orbits short and carinated behind. Inner margins of eyes subparallel in middle but faintly converging downwards (Fig. 5). Mesoscutellum subconvex, appendage not carinate. ITD:ICD = 3.0:1.0. Epicnemium subconvex, separated from mesopleuron by almost distinct furrow. Mesepisternum obtusely raised without carina or acute apex. Abdomen narrow at base making a petiole. Subapical tooth of tarsal claw stronger but slightly shorter than apical one (Fig. 2), basal lobe distinct. Metabasitarsus almost equal to following tarsal joints combined. IATS:MB:OATS = 2.0:4.2:1.8. Lancet (Fig. 3) with 7 serrulae.

**Sculpture and pubescence:** Head and thorax smooth, shining and impunctate except posterior slope of mesoscutellum that bears double row of distinct isolated punctures. Abdomen impunctate, subshining. Body covered with minute silvery pubescence.

**Male:** Yet to be discovered.

*Neostromboceros balbiri* sp. nov.  
(Figs. 6-11)

**Material examined:**

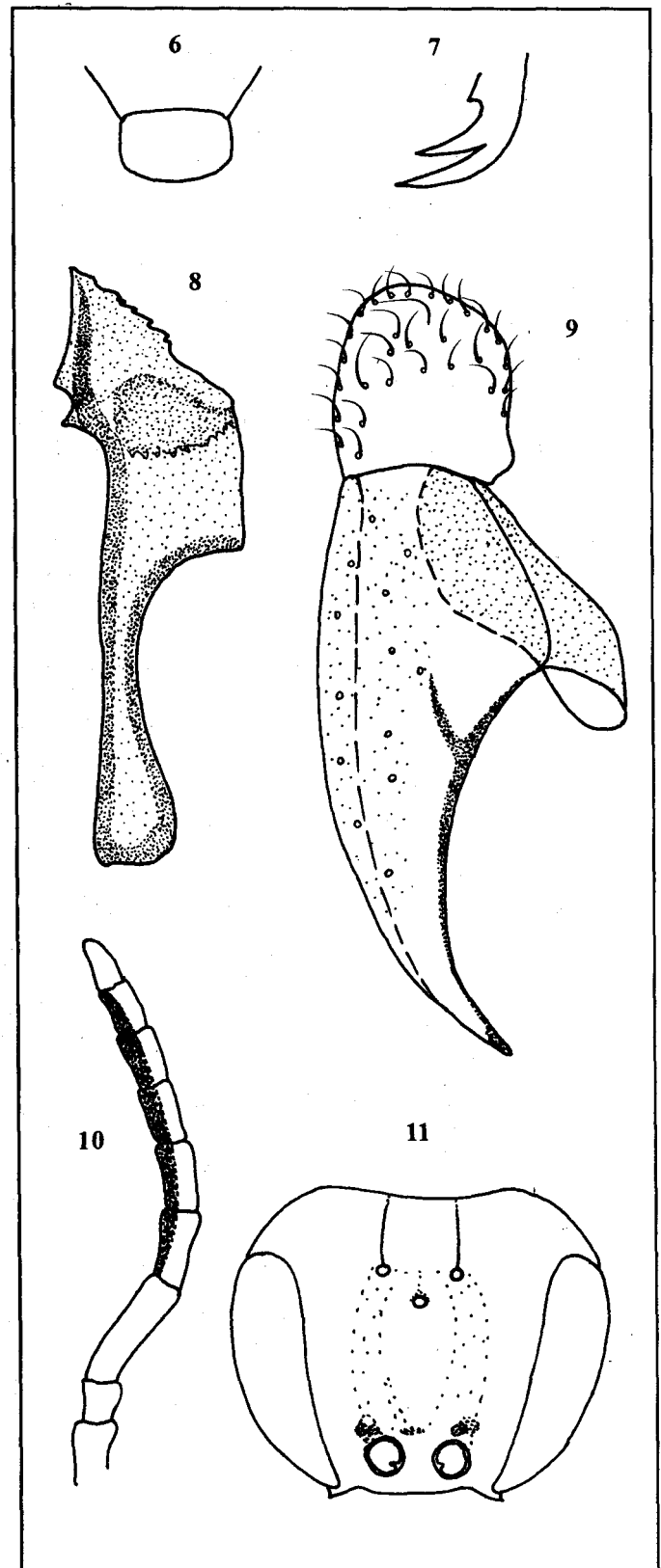
**Holotype:** Male, Arunachal Pradesh: Jorumtop, 2000m, 19.5.1992, coll. V. Vasu.

**Paratypes:** 1 ♂ with same data as holotype. Nagaland, Akiuto, 1700m, 2 ♂, 10.5.1994, coll. T. P. Saini.

**Population variation:** All specimens are alike.

**Distribution:** Arunachal Pradesh and Nagaland, India

**Diagnostic features:** On the basis of some broad key characters, *N. balbiri* comes close to *N. pilicornis* (Cameron), but some other significant characters which distinguish the two are: wings hyaline, malar space linear, antenna distinctly compressed from 4-8 segments, head wrinkled or distinctly punctured on and



Figures 6 - 11. *Neostromboceros balbiri* sp. nov.  
6. Clypeus and labrum; 7. Tarsal claw; 8. Penis valve;  
9. Gonoforceps; 10. Antenna; 11. Head (front view)

around frontal area in *balbiri*, but apical half of forewings strongly infuscated, malar space 0.3x diameter of median ocellus, antenna distinctly incrassated in middle and head smooth and shining in *pilicornis*.

**Etymology:** This species has been named in honour of Dr. Balbir Singh who did a basic work on the sawfly taxonomy.

**Male:**

**Colour:** Body black, pale whitish are: labrum; narrow upper pronotal angle; mesotrochanter more or less; extreme apex of metacoxa; metatrochanter; longitudinal stripe on outer sides of pro and mesotibia; 2/3 proximal end of metatibia; tarsal segments of pro and mesoleg fuscus. Abdominal segments 2, 3 and posterior margin of 4 reddish yellow. Wings hyaline; venation including costa, subcosta and stigma dark brown.

**Structure:** Average length 7mm. Antenna (Fig. 10) compressed from 4-8 segments, 1.9x head width, scape longer than pedicel and somewhat shorter than double of its apical width, segment 3 longer than 4 as 3:2. Clypeus truncate anteriorly (Fig. 6). Labrum broader than long as 2:1 with subaccumbent anterior margin. Malar space linear LID:IDMO:EL = 2.0:3.3:3.0; OOL:POL:OCL = 2.2:1.0:2.5. Frontal area touching the tangent of eyes and indistinct. Frontal area indistinct. Lateral supraantennal pits almost distinct but not divided into twin-pits. Median fovea flat. Circum-, inter- and postocellar furrows indistinct. Lateral furrows straight behind, continue as fine seams to hypothetical hind margin of head. Postocellar area flat, as long as broad. Head narrowing behind eyes. Hind orbits carinated at base of mandibles. Inner margins of eyes distinctly converging downwards (Fig. 11). Mesoscutellum subconvex, appendage not carinate. ITD:ICD = 4.0:1.0. Epicnemium subconvex, separated from mesopleuron by almost indistinct furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth of tarsal claw stronger and equal to apical one and placed lateral to it (Fig. 7), basal lobe distinct. Metabasitarsus shorter than following tarsal joints combined as 6:7. IATS:MB:OATS = 2.0:5.8:2.0. Genitalia: Penis valve (Fig. 8), Gonoforceps (Fig. 9).

**Sculpture and pubescence:** Head profusely and irregularly wrinkled and grooved on and around frontal area, hind orbits have some scattered punctures. Thorax smooth, shining and impunctate except posterior slope of mesoscutellum that bears some large scattered punctures and mesepisternum having large dense punctures on its anterior side. Abdomen impunctate, subshining. Body covered with silvery pubescence.

**Female:** Yet to be discovered.

***Neostromboceros nigricans* sp. n.**

(Figs. 12 - 15)

**Material examined:**

**Holotype:** Female, Uttar Pradesh, Chakori, 2000m, 23.6.1991, coll. M. S. Saini.

**Paratypes:** Arunachal Pradesh, Bomdila, 2500m, 1 ♂, 24.5.1993, coll. V. Vasu; Dirang, 1500m, 1 ♀, 2 ♂♂, 19.9.1991, coll. M.S. Saini. Himachal Pradesh, Chail, 2350m, 1 ♀, 3 ♂♂, 26.6.1994 coll. V. Vasu; Choapta, 3000m, 2 ♂♂, 25.6.1992, coll. T. P. Saini; Kalatop, 2400m, 6 ♂♂, 28.7.1982, coll. M.S. Saini, 2 ♂♂, 10.7.1983, coll. M.S. Saini, 1 ♀, 9 ♂♂, 11.7.1991, coll. V. Vasu; Kasol, 1600m, 4 ♂♂, 29.6.1993, coll. V. Vasu; Malana, 3000m, 1 ♂, 28.6.1993, coll. T.P. Saini; Shojha, 3000m, 1 ♀, 1 ♂, 25.6.1990, coll. M.S. Saini. Nagaland, Pftusero, 2134m, 2 ♂♂, 19.5.1993, coll. V. Vasu; Vizho-Razho, 1600m, 1 ♂, 11.5.1993, coll. T.P. Saini. Sikkim, Ranipool, 1400m, 1 ♀, 2 ♂♂, 15.5.1988, coll. M.S. Saini; Singhik, 1500m, 12 ♂♂, 14.5.1985, coll. M.S. Saini. Uttar Pradesh, Auli, 2700m, 1 ♂, 27.6.1992, coll. V. Vasu; Binayak, 2250m, 1 ♂, 22.6.1991, coll. V. Vasu; Chakori 1 ♀, 6 ♂♂, 24.6.1991, coll. V. Vasu; Dhanoulti, 2000m, 1 ♂, 25.7.1993, coll. T.P. Saini; Gini, 2050m, 2 ♂♂, 26.6.1991, coll. V. Vasu; Gobind Dham, 3100m, 2 ♂♂, 26.7.1993, coll. V. Vasu; Gobind Ghat, 1500m, 2 ♂♂, 18.6.1983, coll. M.S. Saini; Gwaldham, 1900m, 1 ♂, 18.6.1995, coll. V. Vasu; Kalamunitop, 2700m, 3 ♂♂, 26.6.1991, coll. V. Vasu; Mandal, 2200m, 13 ♂♂, 15.6.1983, coll. M.S. Saini; Mastura 1800m, 1 ♂, 24.6.1992, coll. T.P. Saini; Mohna, 1500m, 1 ♀, 18.6.1992, coll. T.P. Saini; Mukteshwar, 2700m, 1 ♂, 20.6.1991, coll. V. Vasu; Munsyari, 2200m, 6 ♂♂, 19.6.1993, coll. T.P. Saini; Ramgarh, 1800m, 3 ♂♂, 19.6.1991, coll. V. Vasu; Ranikhet, 2200m, 2 ♀♀, 5 ♂♂, 1.9.1987, coll. M.S. Saini.

**Population variation:** Antennal segment 3 slightly longer than 4 in some specimens.

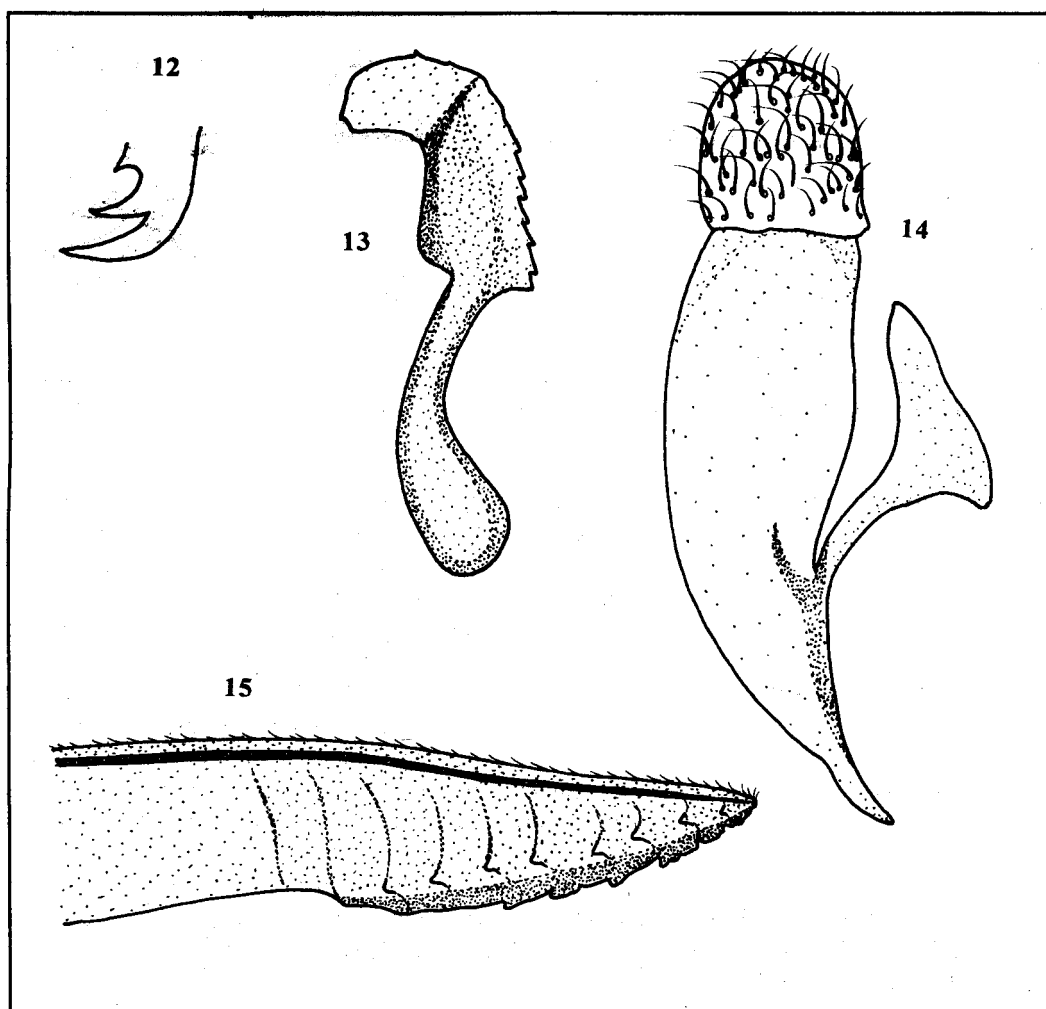
**Distribution:** Arunachal Pradesh, Himachal Pradesh, Nagaland, Sikkim and Uttar Pradesh, India

**Diagnostic features:** Postocellar area longer than broad brings this new species close to *N. basilineatus* (Cameron) and *N. fuscinervis* (Cameron), but it can be separated from the both known species on taking the following characters: lateral supraantennal pits distinct, but not divided into twin-pits (divided into twin-pits and connected by a straight furrow in *basilineatus* and *fuscinervis*); labrum, parapterum, narrow pronotal margin and trochanters black (whitish in *basilineatus* and *fuscinervis*).

**Etymology:** Species name pertains to general black colour of body.

**Female:**

**Colour:** General colour of body black, pale whitish are: apex of metacoxa, metatrochanter along with adjoining parts of metafemur; extreme apex of profemur; stripe on outer sides of



Figures 12 - 15.  
*Neostromboceros*  
*nigricans* sp. nov.  
12. Tarsal claw;  
13. Penis valve;  
14. Gonoforceps;  
15. Lancet

pro and meso tibia more or less and proximal half of outer side of metatibia. Wings clear; venation including costa, subcosta and stigma dark brown to black.

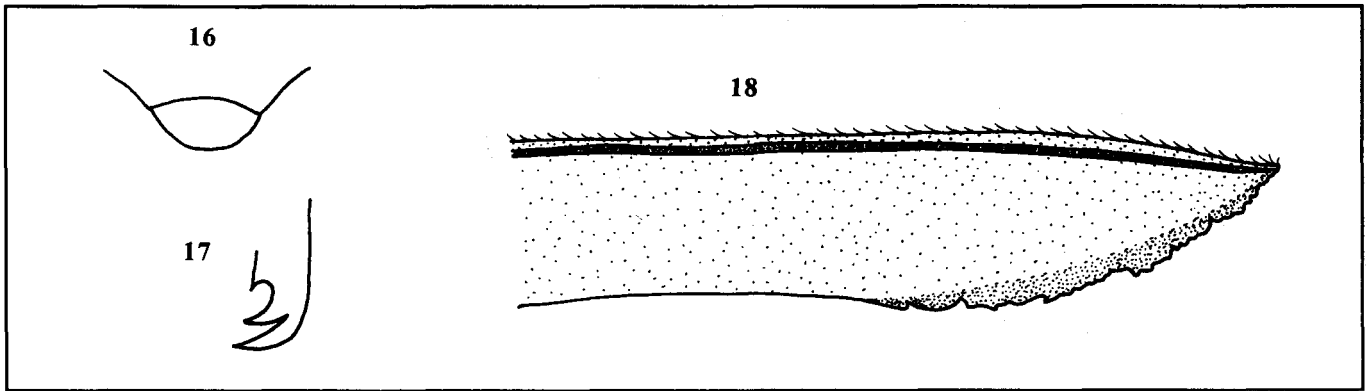
**Structure:** Length 9mm. Antenna compressed in middle and tapering towards apex, 2.3x head width, scape longer than pedicel, both are longer than their apical width; segments 3 and 4 equal. Anterior margin of clypeus subtruncate as in *N. balbiri* (Fig. 6). Labrum broader than long as 2:1 with acuminate anterior margin. Malar space 0.3x diameter of median ocellus. LID:IDMO:EL=2.0:2.2:1.9; OOL:POL:OCL=2.0:1.0:3.3. Frontal area raised to level of eyes. Lateral supraantennal pits distinct but not divided into twin-pits; median fovea in form of shallow medial depression making a furrow in front of median ocellus. Frontal ridges blunt and almost indistinct. Circum- and interocellar furrows distinct while postocellar furrow indistinct. Lateral furrows deep, distinct and almost parallel behind and abruptly ending a little more than halfway from hypothetical posterior margin of head. Postocellar area subconvex, longer than broad as 6:5. Head subparallel behind eyes. Hind orbits

carinated below. Inner margins of eyes subparallel in middle. Mesoscutellum subconvex, appendage not carinate. ITD:ICD = 4.0:1.0. Epicnemium subconvex, separated from mesopleuron by fine furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth of tarsal claw placed at middle shorter than apical one (Fig. 12), basal lobe present. Metabasitarsus longer than following tarsal joints combined as 7:6. IATS:MB:OATS = 2.0:5.0:1.6. Lancet (Fig. 15) with seven serrulae.

**Sculpture and pubescence:** Head and thorax smooth, shining and impunctate except posterior slope of mesoscutellum that bears a row of large shallow punctures. Abdomen impunctate and subshining. Body covered with minute silvery pubescence.

**Male:**

Length 9mm. Similar to female except following differences: mesotibia black; apex of front wing slightly infuscated. Genitalia: Penis valve (Fig. 13), Gonoforceps (Fig. 14).



Figures 16 - 18. *Neostromboceros mandalensis* sp. nov. 16. Clypeus and labrum; 17. Tarsal claw; 18. Lancet;

*Neostromboceros mandalensis* sp. nov.  
(Figs. 16 - 18)

**Material examined:**

**Holotype:** Female, Uttar Pradesh, Mandal, 2200m, 21.6.1985, coll. M.S. Saini.

**Paratypes:** Uttar Pradesh, Mandal, 2200m, 1 ♀, 15.6.1985, coll. M.S. Saini, 1 ♀, 16.7.1994, coll. V. Vasu.

**Population variation:** All specimens are alike.

**Distribution:** Uttar Pradesh, India.

**Diagnostic features:** *N. mandalensis* is closely related to *N. trifoveatus* (Cameron) in having body entirely black except whitish legs. However, it can clearly be separated from its allied one on the basis of following characters: antennal segments 3 and 4 as 5:4 (as 3:2 in *trifoveatus*), legs yellow except fuscous extreme bases of coxae and distal two tarsal segments (legs white, apex of metatibia and tarsal segments black in *trifoveatus*).

**Etymology:** The species name has been taken from its type locality.

**Female:**

**Colour:** General body colour black, legs pale yellow except extreme base of coxae and distal two tarsal segments which are fuscous. Wings clear; venation including costa, subcosta and stigma brown.

**Structure:** Average length 4.7mm. Antenna tapering towards apex, 2x head width, pedicel subequal to scape and both are longer than their apical width; segment 3 longer than 4 as 5:4. Anterior margin of clypeus subtruncate (Fig. 16). Labrum broader than long as 2:1 with rounded anterior margin. Malar space 0.5x diameter of median ocellus. LID:IDMO:EL = 2.0:2.3:1.7; OOL:POL:OCL = 1.6:1.0:2.0. Frontal area slightly above level of eyes. Lateral supraantennal pits distinct but not divided into twin-pits. Frontal area distinct. Median fovea divided into two halves by presence of transverse carina almost of magnitude of

blunt frontal ridges, upper part of median fovea is U-shaped having flat bottom whereas lower one is with a distinct pit. Circum-, inter- and postocellar furrows distinct. Lateral furrows deep, distinct, diverging backwards and ending a little more than half-way from hypothetical posterior margin of head. Postocellar area subconvex, distinctly broader than long as 4:3. Head narrowing behind eyes. Hind orbits short and distinctly carinated. Inner margins of eyes subparallel. Mesoscutellum subconvex, appendage not carinate. ITD:ICD = 4.0:1.0. Epicnemium subconvex, separated from mesopleuron by almost distinct furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth of tarsal claw shorter than apical one (Fig. 17), basal lobe distinct. Metabasitarsus shorter than all following tarsal joints combined as 6:7. IATS:MB:OATS = 2.0:4.8:1.9. Lancet (Fig. 18) with 5 serrulae.

**Sculpture and pubescence:** Head and thorax smooth, shining and impunctate except mesoscutellum that bears some scattered punctures on its posterior side. Abdomen impunctate, subshining. Pubescence almost negligible.

**Male:** Yet to be discovered.

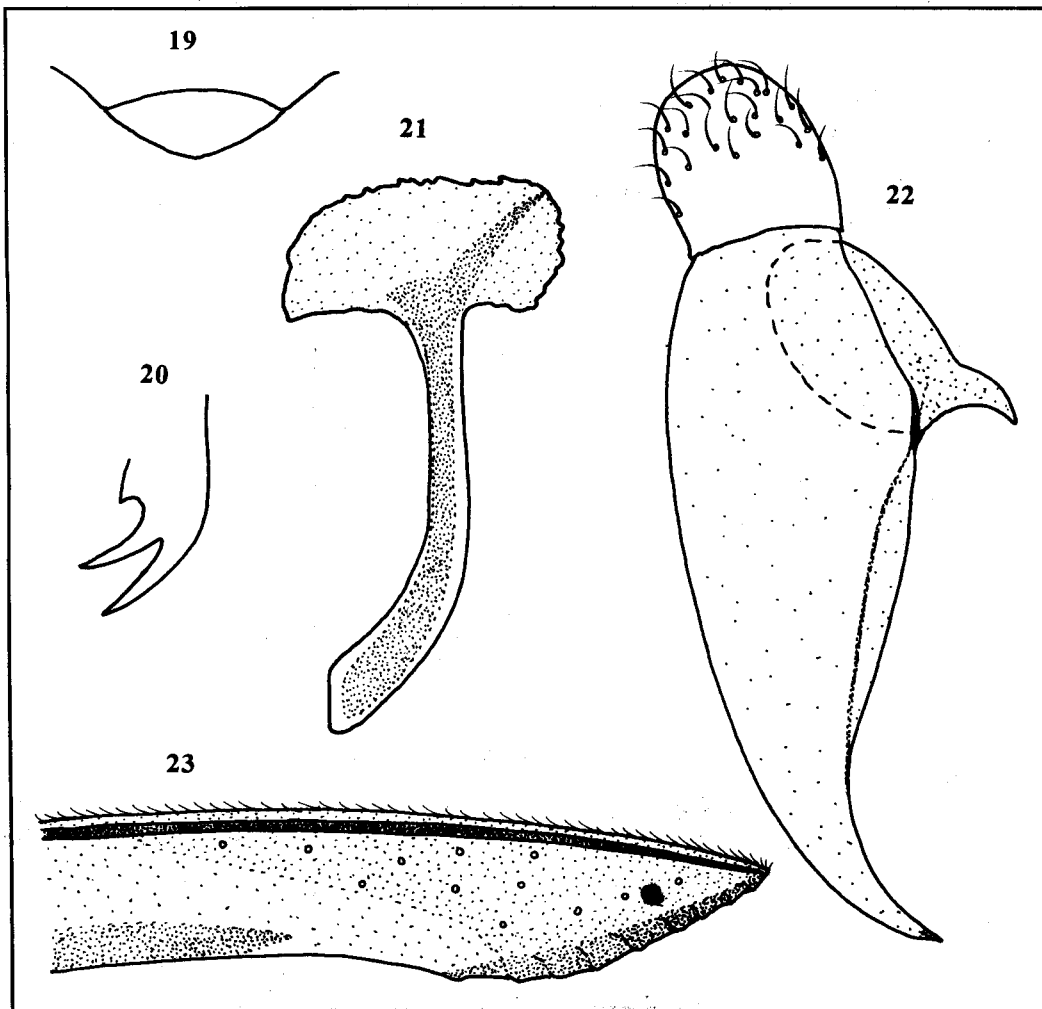
*Neostromboceros tarloki* sp. nov.  
(Figs. 19 - 23)

**Material examined:**

**Holotype:** Female, Uttar Pradesh, Mandal, 2200m, 20.6.1983, coll. M.S. Saini.

**Paratypes:** Uttar Pradesh, Chopta, 3000m, 2 ♀♀, 10 ♂♂, 25.6.1992, coll. V. Vasu, 3 ♂♂, 15.6.1994, coll. T.P. Saini; Gini, 2050m, 3 ♀♀, 5 ♂♂, 26.6.1991, coll. V. Vasu; Gobindghat, 1500m, 3 ♂♂, 18.6.1983, coll. M.S. Saini; Mandal, 2200m, 4 ♀♀, 37 ♂♂, 15.6.1983, coll. M.S. Saini, 1 ♀, 4 ♂♂, 20.6.1983, coll. M.S. Saini; Sonparyag, 1700m, 1 ♂, 14.6.1994, coll. V. Vasu.

**Population variation:** Shape of antenna varies from subincrassinate to filiform.



Figures 12 - 15.  
***Neostromboceros tarloki***  
*sp. nov.*  
 19. Clypeus and labrum  
 20. Tarsal claw;  
 21. Penis valve;  
 22. Gonoforceps;  
 23. Lancet

**Distribution:** Uttar Pradesh, India

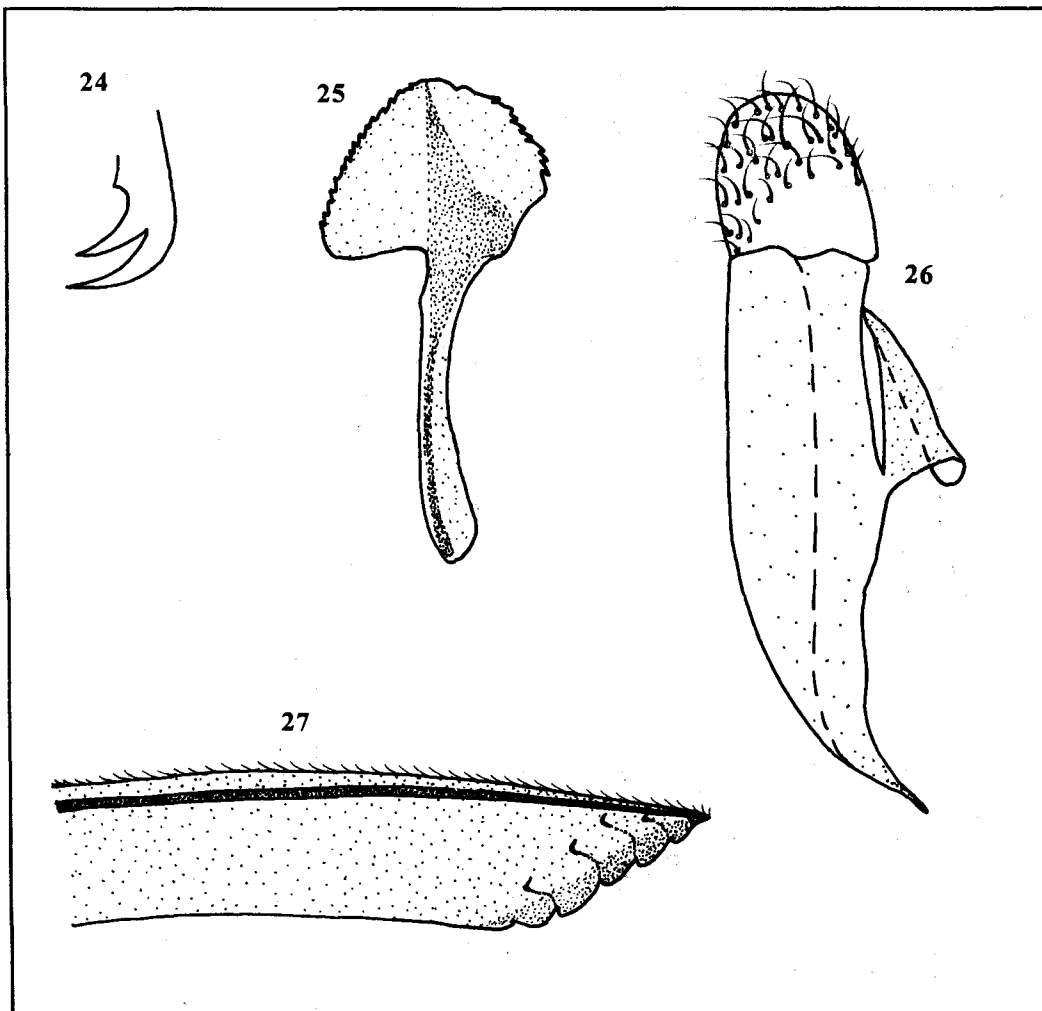
**Diagnostic features:** On the basis of colour pattern, this species goes close to *N. malaisei* sp. nov. but can be distinguished from it by antennal segment 3 longer than 4 as 7:6 (as 5:4 in *malaisei*); clypeus subtruncate (truncate in *malaisei*), and basal lobe distinct (almost indistinct in *malaisei*).

**Etymology:** This species is named in honour of Prof. Tarlok Singh, a renowned entomologist working at Punjabi University, Patiala.

**Female:**

**Colour:** Body black, pale are: labrum; narrow upper pronotal angle; parapterum; extreme apices of coxae; trochanters along with adjoining parts of femora; extreme apices of femora; stripe on outer sides of 1/3rd proximal end of protibia and 2/3rd proximal end of mesotibia; metatibia except distal end; apex of basal 2 tarsal segments; rest of tarsal segments fuscus. Wings hyaline; venation including costa, subcosta and stigma black.

**Structure:** Average length 8.5mm. Antenna subincrassate in middle and tapering towards apex, 2x head width, pedicel somewhat shorter than scape and both are almost as long as broad; segment 3 longer than 4 as 7:6. Anterior margin of clypeus subtruncate (Fig. 19). Labrum broader than long as 2:1, with subacuminated anterior margin. Malar space 0.3x diameter of median ocellus. LID:IDMO:EL= 2.0:2.4:2.0; OOL:POL:OCL= 2.0:1.0:2.5. Frontal area raised to level of eyes. Lateral supraantennal pits divided into twin-pits almost of equal in size and connected by fine furrow. Middle supraantennal pit deep, distinct and large. Frontal depression surrounded by U-shaped almost indistinct and blunt frontal ridges. Supraantennal tubercles indicated but not connected with frontal ridges. Median fovea in form of narrow furrow in front of median ocellus. Circumocellar furrow distinct, inter- and postocellar furrows at least indicated. Lateral furrows deep, distinct, diverging backwards, abruptly ending a little more than half-way from hypothetical hind margin of head. Postocellar area subconvex and subquadrate. Head narrowing behind eyes. Hind orbits carinate a short length from base of mandibles. Inner margins of



Figures 24 - 27.  
***Neostromboceros malaisei***  
*sp. nov.*  
 24. Tarsal claw;  
 25. Penis valve;  
 26. Gonoforceps;  
 27. Lancelet

eyes subparallel in middle, converging downwards. Mesoscutellum subconvex, appendage not carinate. ITD:ICD = 3.5:1.0. Epicnemium subconvex, separated from mesopleuron by distinct furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth of tarsal claw somewhat shorter than apical one (Fig. 20), basal lobe distinct. Metabasitarsus shorter than following joints combined as 6:7. IATS:MB:OATS = 2.0:5.3:1.8. Lancelet (Fig. 23) with 7 serrulae.

**Sculpture and pubescence:** Head and thorax smooth, shining and impunctate except mesonotum and posterior slope of mesoscutellum that bears few isolated punctures. Abdomen impunctate, subshining. Body covered with minute silvery pubescence.

**Male:** Average length 7mm. Similar to female except following differences: stripe on outer sides of pro- and mesotibiae; metatibia entirely pale whitish. Inner margins of eyes distinctly converging downwards. Genitalia: Penis valve (Fig. 21), Gonoforceps (Fig. 22).

***Neostromboceros malaisei* sp. nov.**  
 (Figs. 24 - 27)

**Material examined:**

**Holotype:** Female, Arunachal Pradesh, Bomdila, 2800m, 7.5.1992, coll. V. Vasu.

**Paratypes:** Arunachal Pradesh, Bomdila, 2800m, 1 ♀, 4 ♂♂, 31.5.1989, coll. M.S. Saini, 8 ♂♂, 9.5.1992, coll. T.P. Saini, 2 ♀♀, 26.5.1993, coll. V. Vasu; Dirang, 1500m, 1 ♂, 30.5.1993, coll. M.S. Saini. Nagaland, Pfitsero, 2134m, 1 ♀, 19.5.1993, coll. M.S. Saini. West Bengal, Darjeeling, 2300m, 1 ♂, 26.5.1989, coll. M.S. Saini.

**Population variation:** All specimens are alike.

**Distribution:** Arunachal Pradesh, Nagaland, West Bengal, India

**Diagnostic combinations:** *N. malaisei* exhibits some resemblance with *N. tarloki*, but can be separated from it on account of some structural differences already discussed under the latter.

**Etymology:** The species name has been named in honour of late Dr. Rene Malaise, the most outstanding sawfly worker, who constructed a generic key for world Selandriinae, and contributed a lot towards the sawfly taxonomy of South-east Asia.

#### Female:

**Colour:** General body coal black, pale whitish are: labrum; narrow upper pronotal margin; parapterum; apex of coxae; all trochanters along with their adjoining parts of femora and apices of femora; longitudinal stripe on outer sides of pro- and mesotibiae; metatibia; proximal two tarsal segments of pro- and mesoleg and metabasitarsus; rest of tarsal segments fuscus. Wings hyaline; venation including costa, subcosta and stigma dark brown to black.

**Structure:** Average length 7mm. Antenna subincrassate in middle and pointed towards apex, 1.75x head width, scape globular, longer than disc-shaped pedicel, both are as long as their apical widths; segment 3 longer than 4 as 5:4. Anterior margin of clypeus almost truncate. Labrum broader than long as 2:1 with bluntly pointed anterior margin. Malar space 0.2x diameter of median ocellus. LID:IDMO:EL = 2.0:2.4:2.0; OOL:POL:OCL = 2.0:1.0:2.0. Frontal area raised to level of eyes and indistinct. Lateral supraantennal pits divided into twin-pits and connected by a fine furrow. Median fovea in form of shallow medial depression. Supraantennal tubercles and frontal ridges indistinct. Interocellar furrow distinct, circum- and postocellar furrows indistinct. Lateral furrows deep, distinct, excurved, ending just before hypothetical posterior margin of head. Postocellar area subconvex, broader than long as 5:4. Head subparallel behind eyes. Hind orbits carinated below. Inner margins of eyes subparallel in middle and faintly converging downwards. Mesoscutellum subconvex, appendage not carinate. ITD:ICD = 4.0:1.0. Epicnemium subconvex, separated from the mesopleuron by indistinct furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth of tarsal claw shorter than apical one (Fig. 24), basal lobe almost indistinct. Metabasitarsus shorter than following tarsal joints combined as 6:7. IATS:MB:OATS = 2.0:4.8:1.8. Lancet (Fig. 27) with 5 serrulae.

**Sculpture and pubescence:** Head smooth, shining, having minute scattered punctures; thorax smooth, shining, impunctate except posterior slope of mesoscutellum that bears a row of some isolated punctures. Abdomen impunctate, subshining. Body covered with almost negligible silvery pubescence.

**Male:** Average length 6.5mm. Similar to female except following differences. Yellow are: longitudinal stripe on dorsal side of distal 2/3 pro- and mesofemora and metafemur almost entirely. Inner margins of eyes distinctly converging downwards. Genitalia: Penis valve (Fig. 25), Gonoforceps (Fig. 26).

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**Key to the Indian species of Genus *Neostromboceros* Rohwer**

1. Abdomen entirely black .....5
- 1A. At least the middle tergites almost entirely fulvous or whitish .....2
2. Only 4-5 basal abdominal segments fulvous or whitish; 3rd antennal segment black .....3
- 2A. Abdomen except propodeum fulvous; 2/3 proximal end of 3rd antennal segment pale .....*N. punjabica* sp. nov.
3. Antennal segment 3 longer than 4 (Fig. 4); clypeus, scape and pedicel black .....4
- 3A. Antennal segment 3 shorter than 4 (Fig. 28); clypeus, scape more or less and pedicel whitish.....*N. speciosus* Malaise, 1944
4. Wings hyaline; malar space linear; antenna distinctly compressed from 4-8 segments (Fig. 10); head wrinkled or distinctly punctured on and around frontal area .....*N. balbiri* sp. nov.
- 4A. Forewing with apical half strongly infuscate; malar space 0.3x diameter of median ocellus; antenna distinctly incrassated in middle (Fig. 4); head smooth and impunctate .....*N. pilicornis* (Cameron, 1899)
5. Frontal area coarsely rugose with subopaque lustre; head and thorax entirely black (Lateral furrows of the postocellar area deep sharp, hardly diminishing backwards, and abruptly ending a little more than half-way from the hind margin of the head; both very short, obliquely diverging, indistinct, and sometimes probably altogether wanting furrows and a similar carina between them directed forward from the middle ocellus) .....*N. rothneyi* (Cameron, 1888)
- 5A. Frontal area smooth and shining or with only hardly conspicuous setigulous punctures .....6
6. Postocellar area distinctly longer than it is broad in the female, sometimes subquadrate in the male .....7
- 6A. Postocellar area subquadrate or broader than it is long .....9
7. Lateral supraantennal pits double and thus ensued twin-pits connected by a straight furrow; labrum, parapterum, narrow pronotal margin, narrow posterior margin of most tergites if not otherwise stated, all trochanters whitish .....8
- 7A. Lateral supraantennal pits distinct but not divided into twin-pits; labrum, parapterum, narrow pronotal margin, posterior margins of tergites, pro- and mesotrochanters black .....*N. nigricans* sp. nov.
8. The brim of each antennal socket strongly raised into an acute carina above as high as the diameter of an ocellus, and these two carinas separated by a semicircular inter-antennal incision; postocellar area longer than it is broad as 3:2 and its lateral furrows reduced to a punctiform pit behind each ocellus and almost imperceptibly fine and faintly curved seams from these pits to hind margin of head .....*N. basilineatus* (Cameron, 1907)
- 8A. The minutely raised brim of antennal sockets with a narrow furrow along its base; postocellar area longer than it is broad as 5:4; lateral furrows of postocellar area reaching to hind margin of head .....*N. fuscinervis* (Cameron, 1899)
9. Antenna distinctly compressed in both sexes, and more or less distinctly triangular in cross-section; in male apex of each flagellar joint, except the last one, with a rather distinct hair-brush on median side; general black colour with distinct bluish tinge .....10
- 9A. Antenna not or hardly compressed; in cross- section more or less rounded; flagellar joints without hair brushes; coal black, almost without any blue tinge .....11
10. Inner margins of eyes distinctly converging downwards (Fig. 11); clypeus impunctate; black dot on extreme apex of tibiae present if not otherwise stated .....*N. laevis* (Konow, 1898)
- 10A. Inner margins of eyes subparallel (Fig. 5); clypeus distinctly punctured; apical half of tibiae black .....*N. caeruleiceps* (Cameron, 1899)
11. Head, thorax and abdomen entirely black; only legs with pale markings .....12
- 11A. White are at least if not otherwise stated: labrum, pronotal margin and parapterum .....13
12. Legs white, the apex of the metatibia and tarsal segments black; antenna not quite so long as abdomen; antennal segment 3 longer than 4 as 3:2 .....*N. trifoveatus* (Cameron, 1902)
- 12A. Legs yellow except extreme bases of coxae and distal two tarsal segments fuscous; antenna somewhat longer than abdomen, segment 3 longer than 4 as 5:4 .....*N. mandalensis* sp. nov.
13. Clypeus at least anteriorly white (Anterior margin of clypeus with an extremely shallow, triangular emargination, the middle of which sometimes with a rather indistinct incision; postocellar area broader than long as 5:4; antennal segments 3 and 4 as 6:5; apical half of forewings somewhat infumate) .....*N. indobirmanus* Malaise, 1944
- 13A. Clypeus entirely black .....14
14. Antennal segment 3 longer than 4 as 7:6; postocellar area subquadrate; clypeus subtruncate; tarsal claw with distinct basal lobe .....*N. tarloki* sp. nov.
- 14A. Antennal segment 3 longer than 4 as 5:4; postocellar area broader than long as 5:4; clypeus truncate; tarsal claw with indistinct basal lobe .....*N. malaisei* sp. nov.