

Sawflies from Meghalaya, India (Hymenoptera: Tenthredinidae)

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HARIS A. & ROLLER L.: *Sawflies from Meghalaya, India (Hymenoptera: Tenthredinidae)*.

Abstract: A new sawfly species is described from Meghalaya, India: *Anapeptamena khasiensis* spec. nov. Key for the Oriental *Anapeptamena* and redescription of *Beleses stigmatalis* (Cameron, 1876) are given.

Key words: *Anapeptamena khasiensis* spec. nov., Hymenoptera, Tenthredinidae, Meghalaya, India, new species.

Introduction

Meghalaya is a small state at North-western India, formed by the separation of two districts of the state Assam: the United Khasi and Jaintia Hills, and the Garo Hills in 1972 after 2 years semi-autonomous status. The Khasi, Garo, and Jaintia tribes each had their own kingdoms, until they came under the British colonisation in the 19th century. Later, Meghalaya was incorporated into Assam in 1835 by the British administration. When Bengal was partitioned in 1905, Meghalaya became a part of the new province of Eastern Bengal and Assam. The Assam Reorganisation (Meghalaya Act in 1969) ensured an autonomous status to the state of Meghalaya. Meghalaya is one of the three states of India having Christian majority. In its population, the Khasis tribe is the dominant followed by the Garos tribe. Further tribes are the Jaintias, the Koch, the Hajong, the Dimasa, the Lakhar, the Mikir and the Rabha tribes. Geographically, the State of Meghalaya is also known as the "Meghalaya Plateau". The elevation of the plateau ranges between 150 m to 1961 m. Its central part comprises the Khasi Hills, followed by the eastern section comprising the Jaintia Hills Region. The highest point in Meghalaya is the Shillong Peak (1961 m).

Method and material

Recently Singh, Saini and Vasu studied the sawfly fauna of Meghalaya province: SAINI and SINGH 1987, SAINI and VASU 1997, VASU and SAINI 1997. Earlier, Rohwer and Konow reported sawflies from the area when Meghalaya was part of Assam (ROHWER 1913 and 1915, KONOW 1898).

The elaborated material, 23 specimens of 12 species was captured by Dr. Eduard Jendek and Dr. Ondrej Šauša, Slovak coleopterologists during their expedition to Meghalaya, in 1996.

Both authors are authors of the new taxa, i.e., Haris and Roller.

Results

Sawflies from Meghalaya

Athlophorus perplexus (Konow, 1898): 1 female, Meghalaya, West Garo Hills, Nokrek National Park, 09-17. 05. 1996, 1100 ± 150 m, N 25° 29.6', E 90° 19.5'.

Birmindia albipes Malaise, 1947: 4 males, Meghalaya, Khasi hills, Mawphlang village, N 25° 26.7', E 91° 45.2', 02-10. 06. 1996, 1700 ± 50 m; 1 male, Meghalaya, West Garo Hills, Tura, 05-07. 05. 1996, 700 ± 100 m, N 25° 30.7', E 90° 13.9'; 1 male, Meghalaya, Khasi hills, Ghillong peak, N 25° 32.8', E 91° 52.5', 04-05. 06. 1996, 1850 ± 50 m.

Eutomostethus falcatus Saini and Vasu, 1996: 2 females, Meghalaya state, Khasi hills, Shillong peak, 04-05. 06. 1996, alt. 1860 m ± 50 m., N 25° 32.8', E 91° 52.5'.

Eutomostethus minutus Saini and Vasu, 1996: 1 female, Meghalaya, West Garo Hills, Tura, 05-07. 05. 1996, 700 ± 100 m, N 25° 30.7', E 90° 13.9'.

Eutomostethus sikkimensis (Forsius, 1931): 1 male, Meghalaya state, Khasi hills, Shillong peak, 04-05. 06. 1996, alt. 1860 m ± 50 m., N 25° 32.8', E 91° 52.5'.

Neostromboceros caeruleiceps (Cameron, 1899): 1 male, Meghalaya, West Garo Hills, Balphakram Nat. Park, 22-26. 05. 1996, 700 ± 100 m, N 25° 30.7', E 90° 13.9'; 2 females, Meghalaya, Jaintia hills, Jowai, 06-08. 05. 1996; 1 female, Meghalaya, West Garo Hills, Nokrek peak, 10. 05. 1996, 1100 ± 150 m., N 25° 29.6', E 90° 19.3'.

Neostromboceros indobirmanus Malaise, 1944: 1 female, Meghalaya, West Garo Hills, Nokrek peak, 09-17. 05. 1996, 1100 ± 150 m., N 25° 29.6', E 90° 19.3'.

Nesoselandria leucopoda Rohwer, 1916: 1 female, Meghalaya, Jaintia hills, Jowai, 06-08. 05. 1996; 4 males, Meghalaya, West Garo Hills, Nokrek peak, 09-17. 05. 1996, 1100 ± 150 m., N 25° 29.6', E 90° 19.3'.

Nesoselandria sulciceps Malaise, 1944: 1 male, Meghalaya, West Garo Hills, Tura, 05-07. 05. 1996, 700 ± 100 m, N 25° 30.7', E 90° 13.9'.

Tenthredo pompilina Malaise, 1945: 1 female, Meghalaya, West Garo Hills, Nokrek peak, 10. 05. 1996, 1300 ± 100 m., N 25° 27.6', E 90° 19.3'.

Description of the new species

Anapeptamena khasiensis **spec. nov.**

(Fig. 3)

Male. Body black including antennae with followings white: entire legs (except narrow bases of coxae), palpi, cenchri and abdominal segments 2-5 but tergites 4-5 medially with large blackish brown middle spots. Head without hind carina, with very fine and shallow punctures, shiny. Head narrowed behind eyes. Frontal area hardly marked, nearly smooth. Middle supraantennal pit rounded, deep and about as large as front ocellus. Lateral supraantennal pits shallow, rounded and about as large as front ocellus. Ratios of

antennal segments: 7 : 6 : 19 : 16 : 13 : 11 : 11 : 10 : 9. Antenna about as long as head and thorax (including propodeum) combined. OOL : POL : OCL: 8 : 3 : 8. Inner margins of eyes subparallel, hardly converging below. Clypeus truncate, roughly punctured. Malar space linear. Mesopleuron with distinctly separated presterna. Mesonotum with very fine, shallow, hardly visible punctures, shiny. Mesoscutellum with minute sporadic punctures, shiny. Mesoscutellar appendage and metanotum smooth and shiny. Mesopleuron densely punctured with small, moderately deep punctures, shiny. Mesoscutellum flat. Wings subhyaline, hardly infumate. Costa, stigma and venation dark brown. Fore wing with 3 cubital cells, first cubital crossvein missing only its track visible. Basal vein faintly bent, strongly converging with first recurrent vein. Hind wing with 2 closed middle cells, anal cell sessile, nervellus meets apex of anal cell. First tergite smooth and shiny. Other tergites with small sporadic punctures, shiny. Ratio of hind tarsal segments without claw: 32 : 15 : 14 : 11. Length of inner hind tibial spur : length of hind basitarsus : apical width of hind tibia: 11 : 32 : 11. Claws without basal lobe, inner tooth of claw about as long as apical tooth (Fig. 3). Length: 5.0 mm. Female unknown.

Holotype: male. Meghalaya, Khasi hills, Ghillong peak, N 25° 32.8', E 91° 52.5', 04-05. 06. 1996, 1850 ± 50 m. The holotype is deposited in the hymenoptera collection of the Hungarian Natural History Museum.

Key to the Oriental *Anapeptamena* Konow, 1898 species according to SAINI, SMITH and SAINI 2003.

1. Abdomen black and richly coloured with brown or white.....2
 - Abdomen black without brown or white.....3
2. First tergite black with 2 basal brown spots, 2nd tergite with brown triangle, 3rd and 4th tergites brown, 5th and 6th tergites with lateral brown spots. Sternites black. Wings infusate.....*A. achterbergiana* Haris, 2006
 - Abdominal segments (tergites and sternites) 2-5 white but tergites 4-5 medially with large blackish brown middle spots. Wings subhyaline.....*A. khasiensis* spec. nov.
3. Malar space half diameter of front ocellus. Labrum black, tegula white.
 -*A. albipes* Konow, 1898
 - Malar space nearly linear. Labrum and tegulae either both white or both black.....4.
4. Undersurface of scape and pedicel, basis of third antennal joints yellowish. Apices of femora, tibiae and basal segments of tarsi yellow. Clypeus slightly emarginate. (according to Malaise, 1944, this species probably a member of genus *Nesoselandria*).....*A. pendleburyi* Forsius, 1933 (?)
 - Antenna entirely black.....5.
5. Labrum and tegula white to yellow. Clypeus subtruncate. Middle and hind legs dominantly yellow to whitish.....*A. darjeelingensis* Saini, Smith and Saini, 2003
 - Labrum and tegula black. Clypeus shallowly and roundly emarginate. Only tibiae yellow.....*A. dhanoultinensis* Saini, Smith and Saini, 2003

Beleses stigmaticalis (Cameron, 1876)
(figs. 1,2 and 4)

Female. Body dark yellow (Fig. 4). Whitish: abdominal sternites, deflexed sides of tergites and basal part of sawsheath. Black: apex of mandible, flagellum (antennal joints 3-9), tergites 6-9, most of sawsheath (except whitish basal part), hind tarsus and apical ring

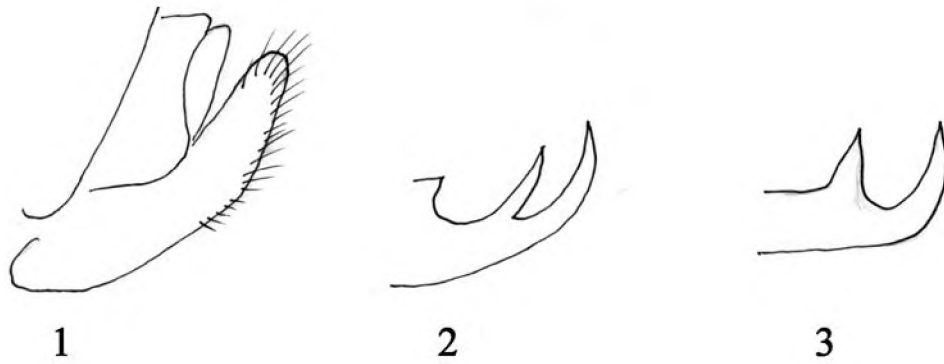


Fig. 1: Sawsheath of *Beleses stigmatalis* (Cameron, 1876). in lateral view **Fig. 2:** Claw of *Beleses stigmatalis* (Cameron, 1876) **Fig. 3:** Claw of *Anapeptamena khasiensis* spec. nov.



Fig. 4: *Beleses stigmatalis* (Cameron, 1876) (photo: Haris)

of hind tibia. Wings yellowish, apical part from apex of stigma dark infusate. Stigma white, costa and subcosta yellow, venation brownish-yellow in yellow part of wing but dark blackish-brown in infusate part of wing. Apical quarter of hind wing infusate either. Ratios of antennal segments: 13 : 13 : 53 . 59 : 39 : 24 : 17 : 17 : 20. OOL : POL : OCL: 20 : 11 : 20. Head shiny, rather densely and moderately deeply punctured. Punctures not uniform generally smaller on frontal and supraclypeal area but larger on vertex, temples and upper frontal area. Clypeus truncate. Malar space and postoccipital carina missing. Head very slightly dilated behind eyes. Inner margins of eyes hardly convergent. Lateral supraantennal pits missing, middle supraantennal pits about 4x as large as diameter of front ocellus. Mesonotal lobes densely and uniformly punctured with small and moderately deep punctures, shiny. Mesoscutellum and mesoscutellar appendage roughly punctured with moderately large and moderately deep punctures, hardly shiny. Metascutellum shiny with moderately dense small punctures in its posterior part. Mesopleuron moderately densely and moderately deeply punctured with middle sized punctures, shiny. Mesoscutellum and mesopleuron flat. First and second abdominal tergites smooth and shiny. Other tergites with fine, granulated surface sculpture, shiny. Head and thorax sparsely covered with short and white hairs. Hairs on antennal flagellum dense, short and black. Abdominal tergites covered with short, sparse and black hairs. Length of inner hind tibial spur : length of hind basitarsus : apical width of hind tibia: 23 : 92 : 20. Claws with well developed basal lobe. Inner tooth of claw much shorter than apical (Fig. 2). Sawsheath curved upwards in lateral view and densely covered with long, straight setae (Fig. 1). Length: 14.5 mm.

Material: female: NE. India, Meghalaya, West Garo Hills, Nokrek peak, 10. 05. 1996, 1300 ± 100 m., N 25° 27.6', E 90° 19.3'

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