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New species and a new record of the genus *Chimarra* Stephens, 1836 (Insecta: Trichoptera) from India.

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Abstract. In this paper one new species *Chimarra serrata* sp. nov. is described and illustrated from Arunachal Pradesh. In addition, *C. flaviventris* KIMMINS, 1957 is also recorded for the first time from India (Arunachal Pradesh). The samples were collected during the Dihang-Dibang Biosphere Reserve Expedition in 2017.

Keywords: Expedition, Arunachal Pradesh, Caddisfly, taxonomy.

Introduction. The genus *Chimarra* is wide spread especially in the Oriental region. Almost half of the species (approx. 890 species from World, Morse, TWC, 2019) described so far, occur in this region alone. Presently almost 50 species have been described from India. In this paper, one new species *C. serrata* sp. nov. is described from Ramsing (Arunachal Pradesh). A new country record *C. flaviventris* KIMMINS, 1957 is also added to India from the same locality. The male genitalia of the new species is very peculiar in appearance and has not been observed earlier in my collections especially the structure of the mesal lobes of tergum X. The specimens were collected during the Dihang-Dibang Biosphere Reserve Expedition to Arunachal Pradesh in 2017. Many caddisflies were collected on this expedition leading to many new species and new records. But in the present paper, only a new species of *Chimarra* is described and illustrated.

Systematics

***Chimarra serrata* sp. nov.**

(Figs. 1-6)

Description : Adult ♂; colour in alcohol black brown, dorsum of head black, thorax black, wings light brown, legs darker, maxillary palp black. Length from tip of head to apex of folded forewing about 8mm; maxillary palp elongated, 1.75mm, segment III almost double the segment II, subequal to V; labial palp 1mm long. Length of forewing 7mm, venation: Rs curved, discoidal cell elongated, more than twice its width, cross vein *m* in close proximity to cross vein *s* and *r-m*; hind wing 5mm long.

Male genitalia (Figs. 1- 6):

Tergum IX very short dorsally, slightly produced anterodorsally; anteroventral margin produced; posterolateral margin produced medially. Post ventral process broad. Preanal appendages each reduced, very small, setose in lateral view, globular in dorsal view. Inferior appendages, each almost equal to tergum X in lateral view, posterodorsally directed, broad basally, narrowing toward rounded apex, setose, in ventral view wide basally, narrowing towards medially curved apex. Tergum X with sclerotized lateral lobes and separate mesal lobes; each lateral lobe wedge-shaped, leaf like in lateral view, broad basally, lobe bearing multiple sensilla; narrowed towards slightly pointed apex in lateral view; in dorsal view non-convergent, broad basally and tapering towards apex with

serrated outer margins; each mesal lobe broad basally, directed dorsally at the base then curved caudo-ventrad in lateral view; in dorsal view digitate, convergent, narrower in the middle and broader apically. Phallobase rounded & sclerotized. Endotheca tubular, non-discernable, with comb-like arrangement of endothecal spines in ventral view, bifurcated apically in dorsal and ventral view; a peculiar fork like structure is visible in dorsal view.

Holotype: ♂, India: Arunachal Pradesh, Ramsing bridge, 790m, 29-x-2017, (Pandher & Pathania), (NZC).

Diagnosis: This species is similar to *Chimarra devva* MALICKY & CHANTARAMONGKOL, 1993, *C. momma* MALICKY & CHANTARAMONGKOL, 1993, *C. podarge* MALICKY & THAMSENANUPAP, 2006 (reported from Thailand) and *C. opaca* MEY, 1998 reported from Vietnam, in the general appearance of the male genitalia in lateral view (similar shape of segment IX, lateral lobes of tergum X). But it is more similar to *C. devva* MALICKY and CHANTARAMONGKOL, 1993. However, the sclerotized lateral lobes of tergum X are longer than inferior appendages, broad basally, slightly concave ventromesally in the middle and narrowing towards pointed apex in lateral view, segment IX with wide well developed posteroventral process, sclerotized lateral lobes of tergum X with serrated indentations on the outer surface in dorsal view, inferior appendages in ventral view broad basally and tapering from mid-length of each appendage towards the mesally curved apex, in *C. serrata* sp. nov. whereas, sclerotized lateral lobes of tergum X are smaller than the inferior appendages, though broad basally but without ventromesal concavity in the middle in the lateral view, segment IX with posteroventral process not much wider, sclerotized lateral lobes without serrated indentations on the outer surface in dorsal view; inferior appendages in ventral view are broad at the base, width almost similar upto 2/3 length of the appendage and curved apicomeres sets this species aside from allied ones. Moreover, there are considerable differences in the shape and structure of the phallus.

Distribution: India: Arunachal Pradesh.

Etymology: The species name *serrata* is based on the serrated outer margins of the sclerotized lateral lobes of tergum X.

***Chimarra flaviventris* KIMMINS, 1957**

Chimarra flaviventris KIMMINS, 1957:11

Material examined: 2 males, India: Arunachal Pradesh, Ramsing bridge, 790m, 29-x-2017, (Pandher & Pathania), (NZC).

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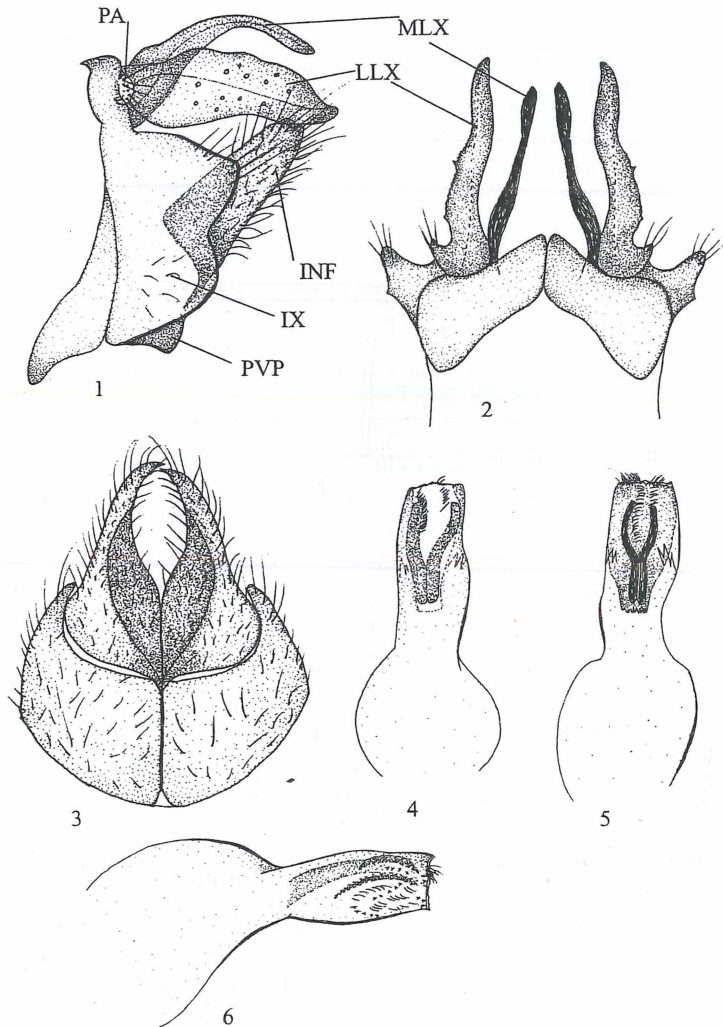
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Explanation to the figures:

Figures 1-6. Male genitalia of *Chimarra serrata* sp. nov. 1. Lateral view, 2. Dorsal view, 3. Ventral view, 4. Phallus, dorsal view, 5. Phallus, ventral view, 6. Phallus, lateral view. (Abbreviations: INF-Inferior appendage, LLX-Lateral lobes of tergum X, MLX-Mesal lobe of tergum X, PA-Prealanal appendage, PVP-Posteroventral process, IX-Segment IX.)



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