

**A NEW TRIBE OF THE SUBFAMILY PHYLLOCEPHALINAE AMYOT ET  
SERVILLE (HEMIPTERA: PENTATOMIDAE) FROM INDO-PAKISTAN SUB-  
CONTINENT AND THEIR RELATIONSHIPS<sup>1</sup>**

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A new tribe Cressonini is described within the subfamily Phyllocephalinae to accommodate *Cressona valida* Dallas with special reference to its metathoracic scent gland ostiole, male and female genitalia. The new tribe is compared with other tribes of its subfamily and the relationships of the included taxa within the subfamily are also briefly discussed.

**Introduction**

Recently Ahmad and Kamaluddin (1985 & 1985b) and Kamaluddin and Ahmad (1985) erected Megarrhamphini, Tetrodini and Phyllocephalini sensu stricto under the subfamily Phyllocephalinae Amyot et Serville. Presently to accommodate *Cressona valida* Dallas from east India and from Mekong in Burma a new tribe Cressonini is described. *Cressona valida* is also redescribed in detail with special reference to its metathoracic scent gland ostioles and male and female genitalia and in this light the relationships of the included taxa are also briefly discussed.

For descriptions, measurements, for diagrams and for inflation of aedeagus methods of Ahmad and Kamaluddin (1976) were generally followed.

Simple manipulation of the conjunctiva with fine watch maker forceps or the phallus removed from pygophore, kept over night in 10 % KOH solution produced complete inflation. All the measurements are in millimeters and the diagrams to the given scale.

**Cressonini trib nov.**

Body broadly elongate; head as long as broad atleast 1/2 length of pronotum; antecular region shorter than posterior of head including eyes; paraclypei anteriorly narrowed, longer, fused in front and enclosing clypeus; antennae always passing he-

1. Financially supported by an earlier USDA/PARC Research Project No. FG-PA-181 (A-17-ENT-37) and present FG-Pa-361 (PK-SEA-155).

2. Federal Government Urdu Science College, Karachi-47, Pakistan.

ad apex; with antenniferous tubercles visible from above; pronotum with humeral angles distinctly produced anterolaterad, latter passing head apex, anterior angles illdeveloped, tooth-like anterolateral margins always serrated; scutellum longer than broad.

Male genitalia: Pygophore elongated, longer than broad; balde of paramere with blunt process on outer margin; aedeagus with dorsal membranous conjunctival appendage well developed and always longer than vesica and penial lobes, separately.

Female genitalia: First gonocoxae much shorter, shorter than 9th paratergites and fused 8th paratergites separately; proctiger elongated.

Comparative note: The members of this new tribe can easily be separated from those of others for having remarkably developed humeral angles of pronotum produced anteriad, passing far beyond head apex with prominently dentate, anterolateral margins; basal antennal segments distinctly passing apex of a much shorter head than pronotum and by other characters noted in the description.

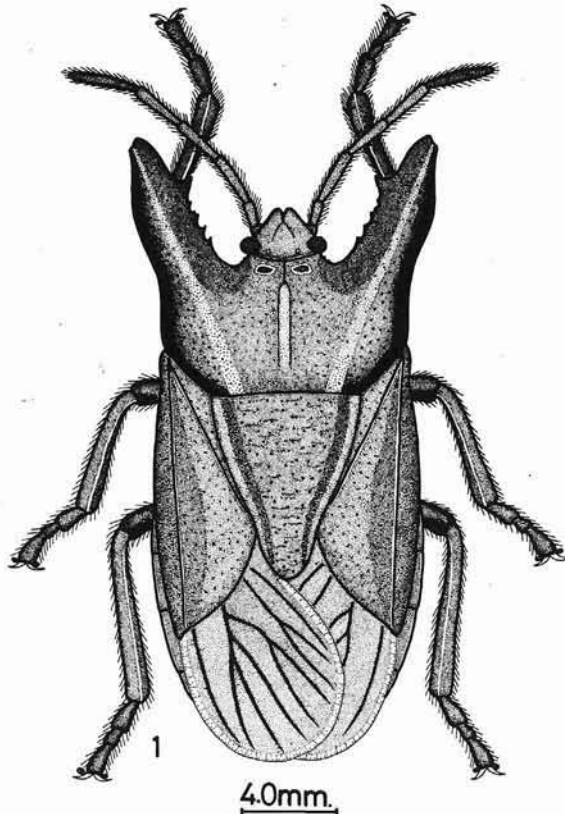


Figure 1: *Cressona valida* Dallas, dorsal view.

**Cressona Dallas, 1851**

*Cressona* Dallas, 1851; Brit. Mus. Publ. Lond.: 351a & 358; Stal, 1876; K. Svenska Vetensk. Akad. Handl. 14(4): 117; Atkinson, 1889; J. asiat. Sco. Beng. 58: 96 & 97; Kirkaldy 1909; Cat. Hem. 1: 243.

Head: Moderately narrowed anteriorly; width of head including eyes distinctly greater than width of pronotum, across anterior margin; antennae with basal segments distinctly passing beyond apex of head; labium very short, hardly reaching anterior margin of procoxae.

Thorax and abdomen: Pronotum anteriorly, laterally and posteriorly deflected, anterolateral margins dentate, posterolateral margins entire; metathoracic scent gland ostioles having elongated peritremes with anterior margin sinuated, posterior margin entire and evaporating area distinct. Connexiva exposed at repose, reflexed and recurved; ventrolateral angles rounded.

Male genitalia: Pygophore distinctly longer than broad; proctiger with sides convex and apical margin concave; paramere with curved blade and with a process at inner margin; inflated aedeagus with a pair of ventral, a pair of ventrolateral and dorsal membranous conjunctival appendages with a pair of lobes, penial lobes cup-shaped.

Female genitalia: First gonocoxae separated at posterior end posterior margin of arcus convex.

Comparative note: This genus appears completely isolated in the entire subfamily Phyllocephalinae in having the bizarre characters of a remarkably smaller head, having width including eyes much less than the width of anterior margins of pronotum and the humeral angles remarkably developed and produced anteriorly passing much beyond the head apex and by other characters as noted in the description.

Type species: *Cressona valida* Dallas.

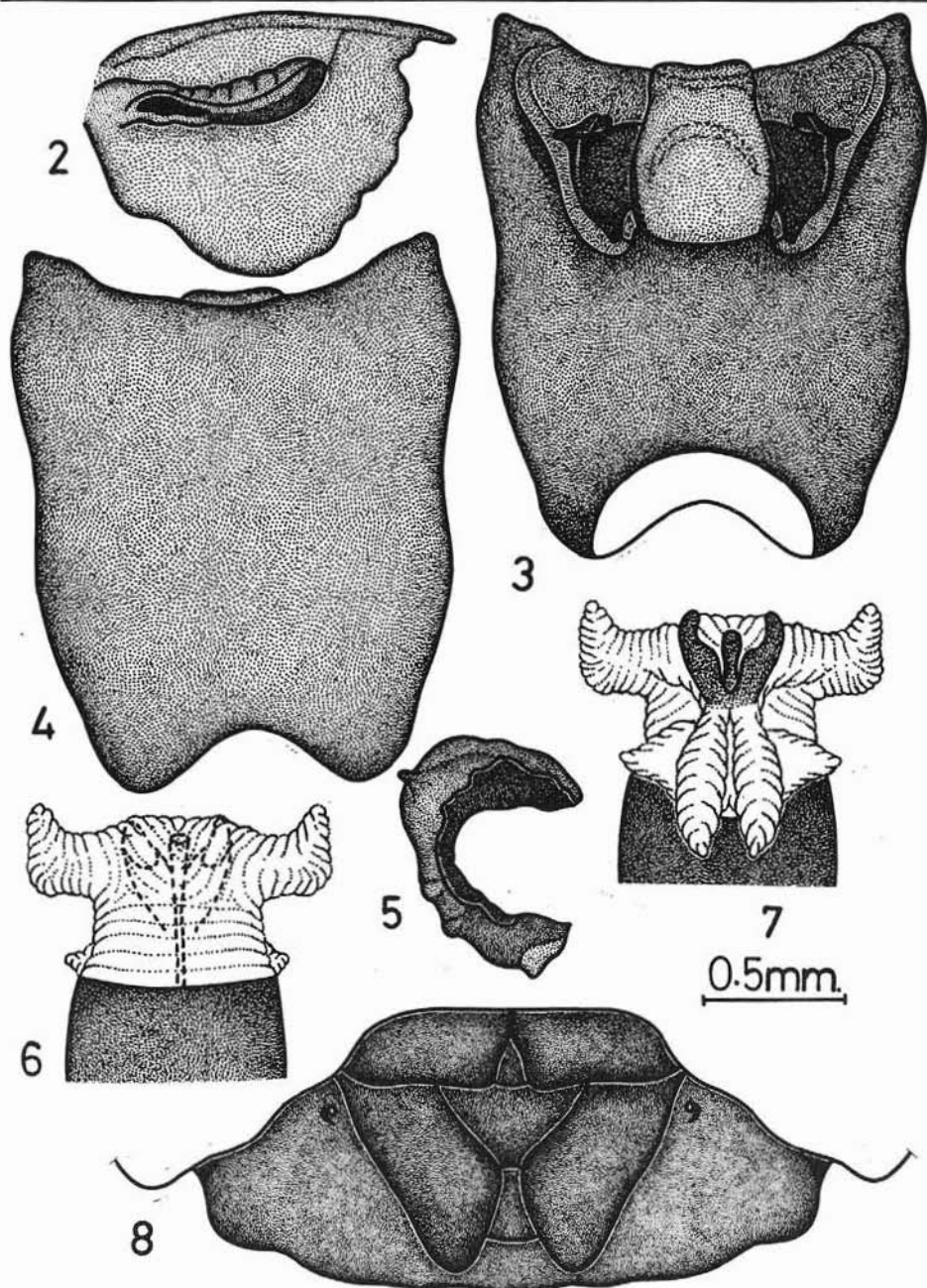
***Cressona valida* Dallas, 1851**

(Figs. 1-8)

*Cressona valida* Dallas, 1851; Brit. Mus. Publ. Lond.: 351a & 358; Atkinson, 1889; J. asiat. Sco. Beng. 58: 97; Distant, 1902; Brit. Ind. Rhy. Het. 1: 291; Kirkaldy, 1909; Cat. Hem. 1: 243.

Colouration: Body above pale yellow with reddish tinge, except a pair of adjacent longitudinal lines of black punctures or spots on apical lobe of scutellum, corium and membrane; ventrally pale ochraceous with dense castaneous punctures on meso- and meta-pleuron.

Head: Anteoocular distance about  $\frac{3}{4}$ th of posterior of head including eyes; length of head slightly more than  $\frac{1}{2}$  length of pronotum; antennae with only  $\frac{1}{3}$ rd of basal segments passing beyond head apex; 2nd segments slightly longer than 3rd and equal to 4th, length of segments I 1.30, II 2.35, III 2.10, IV 2.35, V 2.50, antennal formula 1, 3, 2 = 4 5; labium mutilated in type; length anteoocular region 1.40; length po-



Figures 1-8: *Cressona valida* Dallas, metathoracic scent gland ostiole; 2: ventral view, pygophore; 3: dorsal view; 4: ventral view; paramere; 5: inner view; aedeagus; 6: dorsal view; 7: ventral view; 8: female terminalia; ventral view.

sterior of head including eyes 1.75; width 3.15; interocular distance 2.60; interocellar distance 2.10.

Thorax and abdomen: Pronotum distinctly less than 2x as broad as long, about 1/3rd of humeral angles, produced beyond head apex, apex lobe-like, posterolateral margin sinuated, length pronotum more than 13/4x the head length, length of pronotum 5.90; width 11.50; scutellum more than 21/4x the head length, apex of apical lobe rounded, length of scutellum 11.0; width 8.10; metathoracic scent gland ostioles (Fig. 2) large, slit-like opening with peritremes blade-like, apex directing anteriorly and rounded, anterior margin rugulose, posteriorly entire; membrane of hemelytra passing abdomen; distance base scutellum-apex clavus 7.80; apex clavus-apex corium 4.50; apex scutellum-apex abdomen including membrane 5.90; posterior margin of 7th abdominal sternum medially concave, lateroinner margin sinuated. Total length ? 25.95.

Male genitalia: Pygophore (Figs. 3 & 4) with dorsolateral lobes prominent, dorso-median surface concave and broadly projecting posteriorly, dorsolateral inner margins sinuated, ventroposterior margin medially shallowly concave; paramere (Fig. 5) with blade posteriorly narrowed, inner and outer margin sinuated; inflated aedeagus (Figs. 6 & 7) with bilobed, large dorsal membranous conjunctival appendage, a pair of lung-like ventral membranous conjunctival appendages and a pair of lobe-like ventrolateral and membranous conjunctival appendages, penial lobes fused medially, vesica shorter than penial lobes.

Female genitalia: (Fig. 8) First gonocoxae much broader than long, proximally fused, with posterior margin sinuated; 8th paratergites large, flap-like, distally narrowed with outer margin sinuated, inner margin concave and posterior margin sinuated; 2nd gonocoxae large distally narrowed; proctiger with posterior margin convex; spermatheca mutilated.

Material examined: Holotype ♀, East India, „type“, *Cressona valida* Dallas, 43-43, in British Museum Natural History, London. 1 ♂ Mount Mekong; Vien Penkha 3-5-1918, R.V. de Salva, in the above museum.

### Relationships of the included taxa

The members of the subfamily Phyllocephalinae Amyot et Serville have been treated differently by various workers in the past. The present authors have already erected three tribes under the subfamily Phyllocephalinae viz. Phyllocephalini sensu stricto, (Kamaluddin and Ahmad 1985). Megarrhamphini Ahmad and Kamaluddin 1985b, Tetrodini Ahmad and Kamaluddin 1985c.

The members of the present tribe appear to be new tribe eressonini distributed in East India and in Burma. There appear to be remarkably advanced in having head very smaller, basal antennal segments passing apex of head humeral angles of pronotum produced anteriorly and distinctly passing beyond head apex with denticles on the antero inner margins and in males pygophore much longer than broad.

The elongated oval body and paraclypei longer than clypeus and enclosing it in

front appear however its primitive trait showing its origin at an early date, advanced later to suit some special habitat.

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