

Leston, 1955

Proc. Ent. Soc. Lond.

62

(B) 24 (3-4): 62-68

A KEY TO THE GENERA OF ONCOMERINI STÅL (HETEROPTERA :
PENTATOMIDAE, TESSARATOMINAE), WITH THE DESCRIPTION
OF A NEW GENUS AND SPECIES FROM AUSTRALIA AND NEW
SYNONYMY.

By DENNIS LESTON, F.R.E.S.

STÅL (1870) divided Tessaratominæ Schilling, into five sections, which have subsequently been regarded as tribes. Later, further tribes were added—principally by Horvath (1900)—so that Kirkaldy (1909) listed no fewer than eleven. However, Eumenotini is clearly a tribe of Dinidorinæ, whilst Delocephalini has been transferred to Phyllocephalinæ with loss of tribal status (Schouteden, 1909). Recently, Natalicolini (= Aplosternini) has also been removed from Tessaratominæ and given subfamily status within Pentatomidae (Leston, 1955).

TRIBES OF TESSARATOMINÆ.

In his original keys to the tribes of Tessaratominæ Stål used venational characters of fore and hind wing, shape of the margins of the abdomen, structure of the metasternum and scutellum as well as the structure of the pronotum. Examination discloses that, apart from wing venation, the diagnostic criteria are of little more than generic weight; the wing venation, however, clearly splits the subfamily into two tribes. The aedeagus of *Oncomeris* Laporte has been examined and shown to be of the same general type as that of *Tessaratoma* Berthold, *Eusthenes* Laporte and *Sepina* Signoret (described in Leston, 1954a; Pruthi, 1925), i.e. there are no essential differences in the structure of the aedeagus between Tessaratomini and Oncomerini.

KEY TO TRIBES OF TESSARATOMINÆ.

- 1 Membrane with a series of three to five basal cells from which longitudinal transmembranal veins radiate; hind wing with R + M and Cu widely separate at their proximal two thirds **Tessaratomini** Schilling
- 2 Membrane without basal cells or with a single elongate and narrow, but feebly defined cell; hind wing with R + M and Cu parallel and contiguous at their proximal two thirds **Oncomerini** Stål

The following groups, hitherto ranked as tribes, are reduced to subtribal status within Tessaratomini:

- Prionogastraria* Stål **stat. nov.**
- Sepinaria* Horvath **stat. nov.**
- Eusthenaria* Stål **stat. nov.**
- Tessaratomaria* Schilling **stat. nov.**
- Platyataria* Horvath **stat. nov.**

Notopomini, a monotypic group from S.E. Asia, is unknown to the writer. Pantochlorini, a monotypic group from central America is possibly related to

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Edessini, Pentatominae, although it has characters in common with *Piezosternum* A. & S.; further work is in progress on the morphology of Edessini which should elucidate this problem.

SYSTEMATICS OF ONCOMERINI.

This tribe remains circumscribed as by its originator, Stål. It poses a zoogeographical problem for, whilst all the included genera but one are from the Oriental-Australasian regions, *Piezosternum* A. & S. occurs in Africa (very widespread), Madagascar and the Neotropical region. The aedeagus of *P. calidum* (F.) has been examined (Leston, 1954b) and shown to be quite unlike that of *Tessaratomya* Berthold in that it has a long, tubular and coiled vesica, very suggestive of Coreoid affinities, whilst in *Tessaratomya* the vesica is somewhat rigid and non-tubular (Leston, 1954a). Until the limits of the various Pentatomoid families have been re-defined, *Piezosternum* is retained within Oncomerini by virtue of its similar fore and hind wing venation, but is given group status.

Piezosternaria subtrib. n.

Tessaratomyinae, Oncomerini. Differs from Oncomeraria in having a long, flexible, coiled vesica. Metasternum produced forwards in a long, wide-based spine. Ethiopian and Neotropical.

Oncomeraria subtrib. n.

Tessaratomyinae, Oncomerini. Aedeagus similar in general structure to that of *Tessaratomya*; vesica rigid or semi-rigid, not elongate and coiled. Metasternum flat or swollen but never produced forwards. Oriental and Australasian.

All the genera included in the following key have been seen except *Cumare* Blöte, for which the author's description has been used (1945); *Tamolia* Horvath is unknown to the writer.

KEY TO GENERA OF ONCOMERINI.

- 1 Ethiopian and Neotropical; metasternum produced forwards as an elongate spine-like process *Piezosternum* Amyot & Serville 2
- Australasian and Oriental; metasternum not produced forwards 2
- 2 Scutellum not or only slightly longer than broad (save in *Cumare*); third abdominal sternum without a median forwards-pointing spine-like process, but a median tubercle or swelling sometimes present 3
- Scutellum always much longer than broad; third abdominal sternum produced forwards in a spine-like process 7
- 3 Scutellum squarely truncate posteriorly; male genitalia surrounded apically by the seventh abdominal segment; paraclypeus greatly produced; flattened insects with a superficial resemblance to Natalicolinae *Chinatessa* gen. n 4
- Appearance otherwise 4
- 4 Postero-lateral pronotal angles spinously produced; third abdominal sternum without a median tubercle *Neosalica* Distant
- Postero-lateral pronotal angles not spinously produced; third abdominal sternum with a median tubercle 5
- 5 Antennae 4-segmented *Stilida* Stål 5
- Antennae 5-segmented 6

- 6 First antennal segment surpassing the apex of the head ; mesosternum without carinae **Rhoecocoris** Bergroth
- First antennal segment not surpassing the head ; mesosternum with anterior and posterior carinae **Cumare** Blöte
- 7 Scutellum excavated at apex **Agapophyta** Laporte
- Scutellum not excavated at apex 8
- 8 Antennae 4-segmented 9
- Antennae 5-segmented 10
- 9 Eye-ocelli distance equal to inter-ocelli distance ; ocelli clearly situated behind an imaginary line joining the eyes posteriorly ; lateral pronotal margins curved **Oncomeris** Laporte
- Eye-ocelli distance less than the inter-ocelli distance ; ocelli scarcely situated behind an imaginary line joining the eyes posteriorly ; lateral pronotal margins straight **Plisthenes** Dallas
- 10 Apex of scutellum sharply pointed **Lyramorpha** Westwood
- Apex of scutellum rounded **Erga** Walker

Head very flattened into long tube anteriorly; tubercles visible 12:55:50; second fourth segments inter-ocelli distance. Rostrum reaching second segment. Pronotum: foliaceously distended at internal angles. Scutellum as long as broad, convergent posteriorly.

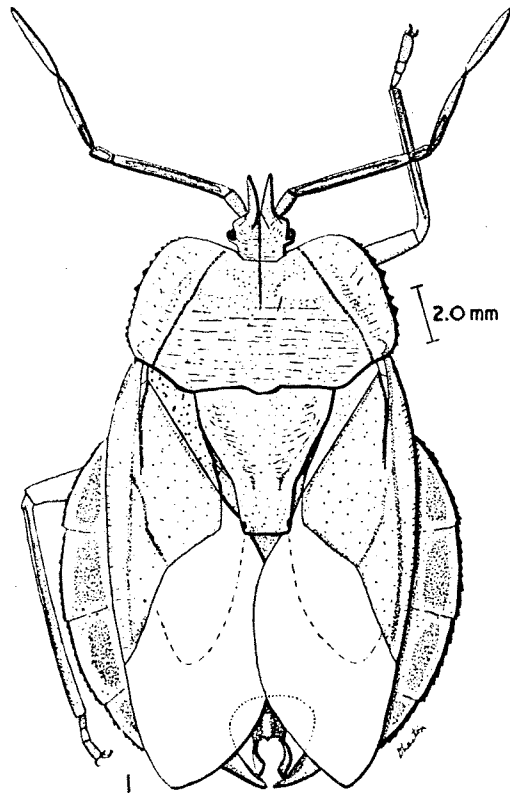
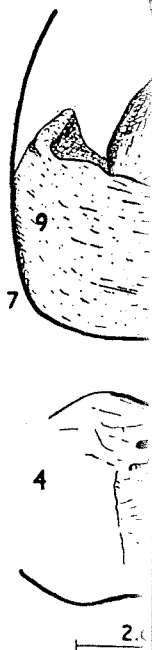


FIG. 1.—*Chinatessa natalicoloides* gen. et sp.n. Male type from Queensland, Australia (Venation of membrane omitted.)

Chinatessa gen. n. (Fig. 1-5.)

Very flat bugs; abdomen circular; head shorter than pronotum, pronotum slightly shorter on mid-line than scutellum.

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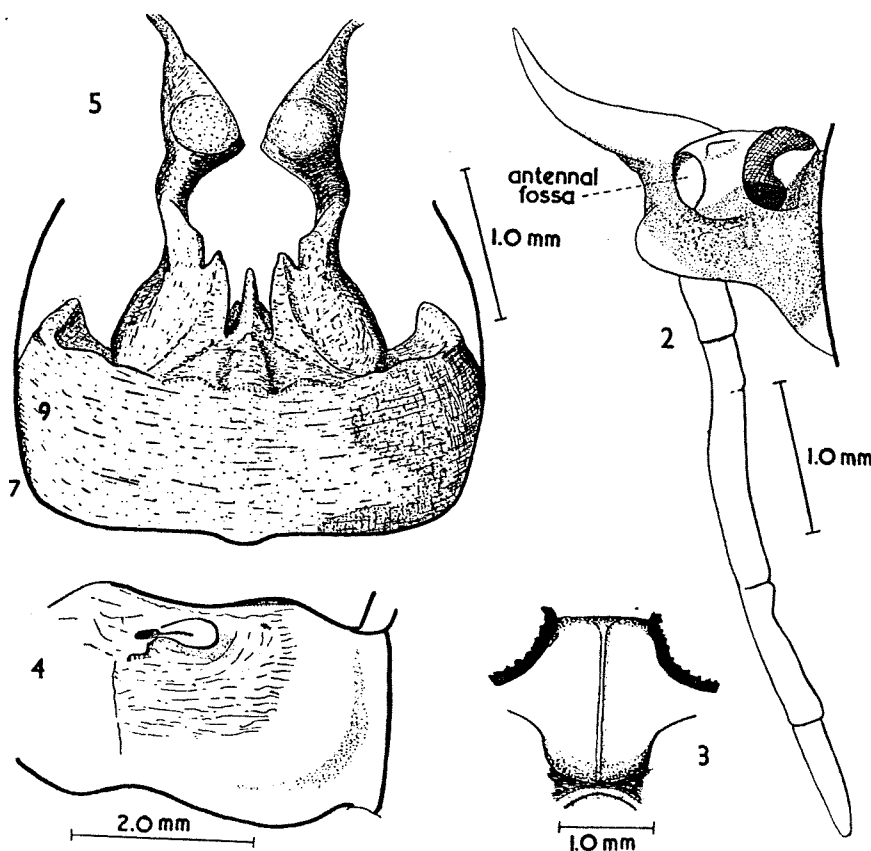


FIGS. 2-5.—*Chinatessa natalicoloides* (4) Left sternal segment (p)

Hemelytra with cross-veins indistinct. Abdomen about as long as broad. Prosternum with a small tubercle.

Head very flat above, broader than long (excluding projections). Paraclypeus produced into long horn-like processes with upturned tips and reflexed lateral margins. Clypeus anteriorly almost completely hidden by the paraclypeal processes. Antenniferous tubercles visible from above, broad and oblique. Antennae 5-segmented, ratios 15 : 80 : 12 : 55 : 50; second and third segments fused; second segment clearly and third and fourth segments obscurely canaliculate above. Eyes small. Inter-ocular : ocular-ocelli : inter-ocelli distances 3 : 1 : 1.5. Bucculae short, foliaceous anteriorly and there divergent. Rostrum reaching half-way across the mesosternum. Rostral ratios 20 : 35 : 15 : 13, second segment curved anteriorly.

Pronotum : maximum width to length on mid-line 17 : 8. Lateral margins flat and foliaceously expanded. Antero-lateral and postero-lateral angles rounded; postero-internal angles rounded and obtuse. Lateral margins rounded, edges sharp and serrate. Scutellum as long as its basal width; lateral margins rounded anteriorly, straight and convergent posteriorly; apex truncate. Tarsi 3-segmented.



Figs. 2-5.—*Chinatessa natalicoloides*. (2) Head and rostrum, lateral. (3) Metasternum. (4) Left stink-gland external orifice and evaporatorium. (5) Male ninth abdominal segment (pygophore) from below.

Hemelytra as figured; membrane with numerous longitudinal veinlets, cells and cross-veins indistinct and largely wanting. Hind wing short, but venation complete. Abdomen above circular, connexival segments rigidly fused, margins finely serrate. Prosternum slightly carinate, mesosternum flat medially, metasternum swollen medially

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 ocelli scarcely
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 Plisthenes Dallas
gramorpha Westwood
 . . . **Erga** Walker

Queensland, Australia
 pronotum slightly

and with a median carina. Stink-gland opening large, leading to a short, apically raised, auriculate process. Evaporatorium well defined, with numerous low rugosities. Venter very flat; second abdominal segment visible medially only as a narrow, curved, raised strip. Second abdominal spiracles visible. Paired trichobothria present on segments 3-7.

Male genital segment short and cylindrical, deeply embedded in the abdomen and surrounded ventrally by a ventral hood-like deflection of the seventh segment posteriorly. Genital segment ventrally produced into a median process with two long lateral projections. Claspers not seen (either reduced or absent).

Type species: *Chinatessa natalicoloides* sp. n.

Distribution: QUEENSLAND.

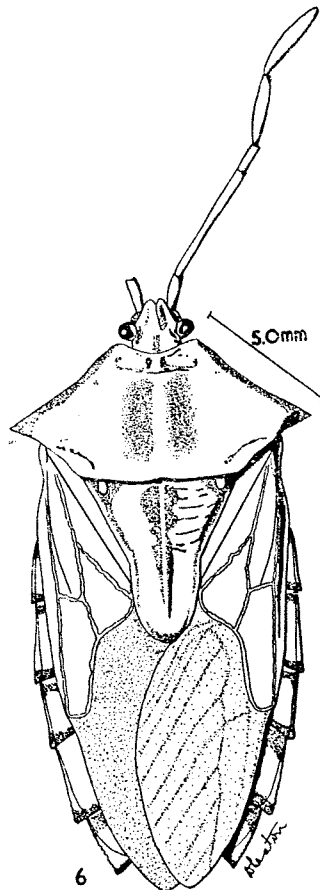


FIG. 6.—*Neosalica pedestris* (Breddin). Male, Sadon, N.E. Burma, 1200 metres (Malaise).

***Chinatessa natalicoloides* sp. n.**

Male.—Largely yellow with pink and green tints admixed (faded museum specimen of great age). Head with median line brown and inner margins of paraclypeal processes pale brown. Pronotum with a median brown line anteriorly and an oblique brown line from behind the eyes to behind and within the postero-lateral angles. Lateral pronotal line

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continued for a short distance on the corium. Corium pinkish; connexival segments centrally pink. Lateral serrate margins of pronotum and abdomen black. Venter yellow with ventral connexivum pink and tibiae and tarsi red.

Head rugose, finely punctate on the clypeus. Antennae finely pubescent. Pronotum rugose except for two low and indistinct anterior calli; lateral areas densely but minutely punctate, elsewhere less so. Scutellum transversely rugose, punctate, apex greenish with two dark ante-apical marginal spots.

Abdomen produced in two inwardly curving processes which surround the genital segment, the processes triangular in cross-section.

Length 22.0 mm.; maximum pronotal width 10.0 mm.; maximum abdominal width 15 mm.

Female unknown.

Type male, "N.E. AUSTRAL.", in British Museum (Nat. Hist.). Presented by Perth Museum, Scotland; B.M. No. 1953-629. Ex Coll. Buchanan-White.

Chinatessa is named in honour of Dr. W. E. China who, upon receiving it amongst unnamed material from the Perth Museum, recognised it as an undescribed genus.

Neosalica Distant, 1882.

Ent. mon. Mag. 19: 168. Type: *N. forbesi*.

Mesolea Breddin, 1902 **syn. nov.**

Wien. ent. Ztg. 21: 99. Type: *M. pedestris*.

1. *forbesi* Distant, 1882 (*Neosalica*).

Ent. mon. Mag. 19: 157. Sumatra.

2. *pedestris* Breddin, 1902 (*Mesolea*).

Wien. ent. Ztg. 21: 100.

nigrovittata Distant, 1921 (*Neosalica*) **syn. nov.**

Entomologist 54: 164. Tonkin, Sikkim, N. Burma.

Neosalica (fig. 6) is the sole genus of *Oncomerini* reaching to the Asiatic mainland; it has not previously been figured.

ACKNOWLEDGMENTS.

Dr. W. E. China and The Trustees, British Museum (Nat. Hist.) are thanked for the facilities provided and for permission to describe the unique *Chinatessa*. Dr. R. Malaise and the Naturhistoriska Riksmuseum are thanked for supplying examples of *Neosalica*.

SUMMARY.

1. Tessaratominae is restricted to include two tribes, *Oncomerini* and *Tessaratomini*.
2. *Tessaratomini* includes subtribes *Tessaratomaria*, *Prionogastraria*, *Sepinaria*, *Eusthenaria* and *Platytataria*.
3. *Oncomerini* includes two subtribes, *Oncomeraria* and *Piezosternaria*.
4. *Piezosternaria* is retained *pro. tem.* within *Oncomerini* although its aedeagus is different in general structure.
5. A key to all known genera (except *Tamolia*) of *Oncomerini* is provided.
6. *Chinatessa natalicoloides* gen. et sp. n. is described from Queensland.
7. *Neosalica* and *Mesolea* are synonymised and illustrated.

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