

**Three new genera of Eurybrachyidae (Homoptera: Fulgoroidea)  
from West Africa and Australia**

By R. G. FENNAH

*Commonwealth Institute of Entomology*

SYNOPSIS

Three new species of Eurybrachyid Fulgoroidea, each representing a new genus, are here described on the basis of specimens from Central and Western Australia and from the Cameroun Republic. Keys are given to the tribes Loxocephalini and Platybrachyini, to which, as appropriate, they are referred.

FOR the privilege of studying the interesting members of the Eurybrachyidae described below, the writer is indebted to Dr. Fr. Heller, Curator of the entomological collection of the Staatliches Museum für Naturkunde, Stuttgart, and to Mr. J. P. Doncaster, Keeper of the Department of Entomology at the British Museum (Nat. Hist.), and tenders his warmest thanks to both.

Bibliographical references are cited in accordance with the usage in *A Bibliography of the Homoptera (Auchenorrhyncha)* (Metcalf, Z. P., 1942, Raleigh, N. C.)

The material from the Museum at Stuttgart comprised a single female with bizarre tegminal conformation, but in other respects of evident Loxocephaline affinity. It is ascribed to a new genus, which is compared with other genera of the tribe in the following key.

KEY TO GENERA OF LOXOCEPHALINI

- |      |      |  |                             |
|------|------|--|-----------------------------|
| (1)  | (2)  | Clavus of tegmina open . . . . .   | (3)                         |
| (2)  | (1)  | Clavus of tegmina closed . . . . .   | (5)                         |
| (3)  | (4)  | A distinct outwardly directed spinose process on lower margin of eye; common claval vein entering <i>Cu</i> <sub>2</sub> . . . . .       | <i>Loxocephala</i> Schaum   |
| (4)  | (3)  | Process below eye very small; common claval vein passing out of clavus into membrane . . . . .   | <i>Paropioxys</i> Karsch    |
| (5)  | (6)  | Tegmina strongly convex, relatively very long, tapering; wings narrow, distally truncate . . . . .                                       | <i>Harmosma</i> gen. n.     |
| (6)  | (5)  | Tegmina and wings not strongly convex; wings not narrow . . . . .  | (7)                         |
| (7)  | (8)  | Basal segment of metatarsus with 11 teeth . . . . .  | <i>Aspidioxys</i> Lallemand |
| (8)  | (7)  | Basal segment of metatarsus with 14–15 teeth . . . . .   | (9)                         |
| (9)  | (10) | Disc of vertex as long as pronotum; margin of hind wing in region of first and second anal veins evenly rounded to hind margin . . . . . | <i>Nesiana</i> Metcalf      |
| (10) | (9)  | Disc of vertex distinctly shorter than pronotum; wings with posterior angle rectangulate . . . . .                                       | <i>Amychodes</i> Karsch     |

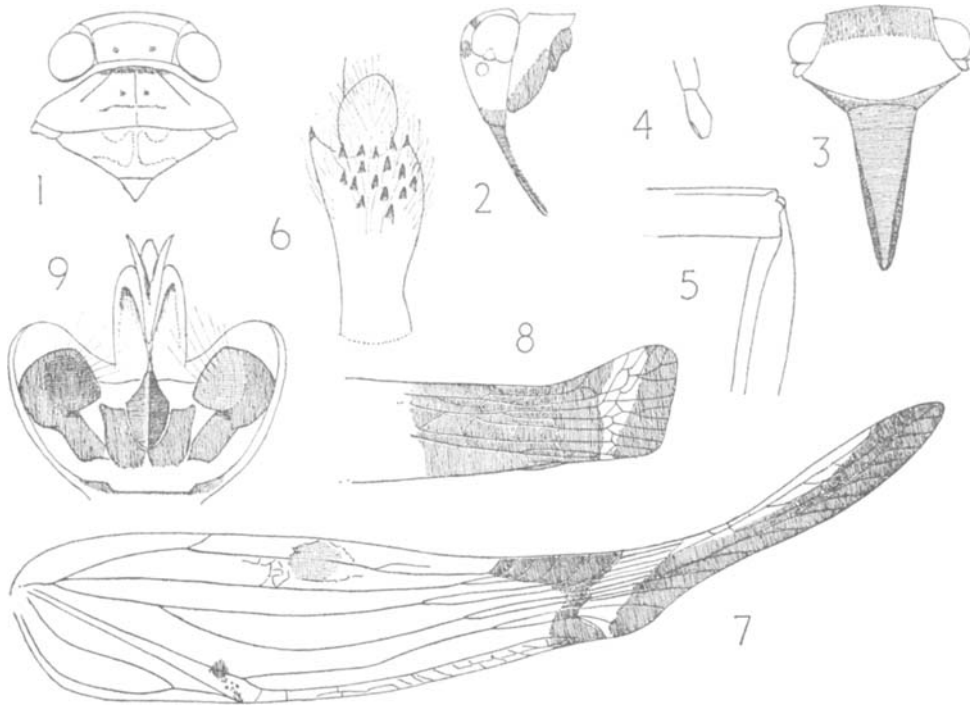
*Harmosma* gen. n.

Head with eyes rather narrower than pronotum. Vertex broader than long, anterior margin shallowly convex, lateral margins straight, posterior margin shallowly excavate, disc slightly depressed, base of frons visible from above; frons broader than long in middle, basal margin transverse, lateral margins each produced laterad in an acute angle, apical margin shallowly concave, disc ecarinate, flat in distal three quarters, curving back to vertex in basal quarter; clypeus long, ecarinate, reaching to mesotrochanters, rostrum with apical segment about twice as long as broad, not or little widened distally, subapical segment about twice as long as apical; ocelli absent; antennae subovate, little longer than broad; eyes round, only slightly longer than deep, each with a short stout spinose process below.

Pronotum about twice as long as vertex, anterior margin shallowly convex, posterior margin almost truncate; mesonotum short, broader than long, scutellum marked off from disc by a transverse sulcus. Legs relatively long, femora and tibiae of fore and middle legs strongly compressed but little foliately expanded; post-tibiae each with 5 spines laterally, 9 apically; basal metatarsal segment with about 18 teeth in 3 or 4 oblique rows; no pad of setae present.

Tegmina coriaceous, convex, relatively narrow, strongly produced and tapering to apex, clavus short, completely closed, claval suture continuing directly to commissural margin, margin not incised or interrupted at point of junction, claval veins uniting a little before apex, common claval vein entering  $Cu_2$  before its union with margin. Wings long, narrow.

Type species, *Harmosma bivulneratum* sp. n.



FIGS. 1-9.—*Harmosma bivulneratum* gen. et sp. n.: (1) head and thorax, dorsal view; (2) head in profile; (3) frons and clypeus; (4) apical segment of rostrum, lateral view; (5) apex of profemur and basal portion of protibia; (6) basal segment of post-tarsus, ventral view; (7) tegmen of female (showing principal veins only); (8) apical part of wing; (9) female genitalia, posterior view.

*Harmosma bivulneratum* sp. n. (figs. 1-9)

Vertex broader than long (2 : 1), a little wider apically than at base.

Pronotum with anterior margin of disc rather short, carinae strongly diverging caudad, a transverse callus across middle of disc. Tegulae with lower angle rather sharply defined; mesonotum broader than long (2.2 : 1), median carina distinct, lateral carinae less so.

Tegmina with veins  $Sc$  and  $R$  simple,  $M$  forked basad of level of union of claval veins,  $Cu_1$  forked slightly distad of level of claval apex, all veins united by a reticulum of veinlets, a series of about 6 larger and more regular cells at stigma, clavus about 3.3 times as long as broad at widest part. Wings long, narrow, more or less parallel-sided, with apical margin truncate; apical angle subacutely and anal angle obtusely rounded;  $Sc$  and  $R$  separate, simple to distal third,  $M$  forked at about two-fifths from base, cubital veins simple, a single line of transverse veinlets near apical margin, and irregular transverse veinlets in distal half, no distinct anal area developed.

Golden yellow; frons transversely at base and apex, 2 spots on sides of head before eyes, antennae, anterior margin of pronotum at middle, margin of lateral lobes, tegulae, an irregular band across mesonotum, spots on mesopleura and metapleura, tibiae and tarsi of fore and middle legs, and female genitalia in part, piceous, polished; profemora and mesofemora, crimson; post-coxae and post-femora in part, and abdomen dorsally, suffused castaneous. Tegmina black, with venation

yellow except at apex of clavus, and in a sigmoidal band from stigma to posterior margin, and in narrow apical portion; a round spot overlying costal and subcostal cells at middle of costal margin, red  
Wings fuscous-piceous, a narrow band overlying subapical row of transverse veinlets, yellowish-hyaline; veins concolorous.

Pregenital sternite of female moderately long, posterior margin shallowly and broadly excavate at middle. Ovipositor as figured.

Female: length, 7.0 mm; tegmen, 16.8 mm.

*Holotype* ♀, KAMERUN: Malende-Banga, 25 m., 5.xii.1957 (*H. Knorr*), in Staatliches Museum für Naturkunde, Stuttgart.

The remaining two species are based on series in the British Museum and each represents a new genus in the tribe *Platybrachyini*, which is here interpreted as including *Dardus* and *Metoponitys*. These two genera were regarded by Schmidt (1908e: 242) as forming a separate tribe, a view not supported by Jacobi (1928a : 2).

KEY TO GENERA OF PLATYBRACHYINI

- (1) (2) Tegmina with  $Cu_1$  forked at, or very near, nodal line of cross-veinlets . . . . . (3)
- (2) (1) Tegmina with  $Cu_1$  forked nearer to base . . . . . (17)
- (3) (4) Tegmina with *M* forked very close to base . . . . . (5)
- (4) (3) Tegmina with *M* not forked close to base . . . . . (11)
- (5) (6) A knob-like process on lower margin of eye . . . . . *Dardus* Stål
- (6) (5) No evident process below eye . . . . . (7)
- (7) (8) Frons with basal portion of the three discal carinae elevated, partially bounding two sunken areas near base of disc  
*Gelastopsis* Kirkaldy
- (8) (7) Frons more or less flat, without depressed areas near base . . . . . (9)
- (9) (10) Antennae not surpassing eyes; genital styles of male separate  
*Olonia* Stål
- (10) (9) Antennae surpassing eyes; genital styles of male fused together  
*Maon* gen. n.
- (11) (12) A knob-like process on lower margin of eye; antennae surpassing eyes, relatively slender . . . . . *Navorillana* gen. n.
- (12) (11) No evident process on lower margin of eye; antennae not surpassing eyes, or, if doing so, elongate and swollen . . . . . (13)
- (13) (14) Frons traversed from side to side medially by a furrow, tegmina relatively narrow, distally tapering or sinuate . . . . . (15)
- (14) (13) Frons not transversely impressed, tegmina not relatively narrow  
*Maeniana* Metcalf
- (15) (16) Second segment of antennae elongate, swollen, surpassing eyes  
*Gedrosia* Stål
- (16) (15) Second segment of antennae not as above, not surpassing eyes  
*Nirus* Jacobi
- (17) (18)  $Cu_1$  in tegmen forked extremely close to base *Euronotobrachys* Kirkaldy
- (18) (17)  $Cu_1$  in tegmen not forked close to base . . . . . (19)
- (19) (20) Pronotum and mesonotum combined longer than broad . . . . . (21)
- (20) (19) Pronotum and mesonotum combined not longer than broad . . . . . (23)
- (21) (22) Basal post-tarsal segment with a distinct pad of setae distally on lower surface . . . . . *Mesonitys* Schmidt
- (22) (21) Basal post-tarsal segment without such a pad . . . . . *Aspidonitys* Karsch
- (23) (24) Basal segment of post-tarsus with a definite pad of setae subapically below; tegmina not tapering distally, broadly rounded apically  
*Platybrachys* Stål
- (24) (23) Basal segment of post-tarsus without a pad of setae; tegmina tapering distally, narrowly rounded apically . . . . . *Metoponitys* Karsch

The following generic synonymy is proposed.

*Euronotobrachys* Kirkaldy

*Euronotobrachys* Kirkaldy, 1906c : 443, 446. Orthotype, *Euronotobrachys arcuata* Kirkaldy loc. cit. *Yarrana* Distant, 1906m : 206. Orthotype, *Yarrana sinuata* Distant, 1906 : 207, syn. n.

Kirkaldy's name appeared after 3rd February and at least before 3rd April, 1906, whereas Distant's name did not appear until after September of the same year. The writer has examined the type series of *Yarrana sinuata*, the typical species, in the British Museum (Nat. Hist.).

*Gelastopsis* Kirkaldy

*Gelastopsis* Kirkaldy, 1906c : 447. Haplotype, *Gelastopsis insignis* Kirkaldy op. cit. : 448. *Elthenus* Jacobi, 1928a : 3. Orthotype, *Yarrana glaucops* Schmidt, 1908 : 245, syn. n.

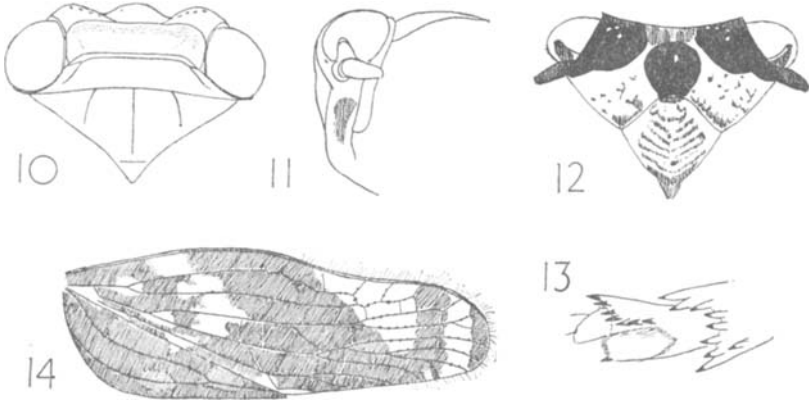
The writer has examined the type specimen of *Elthenus modestus* Jac. in the Naturhistoriska Riksmuseum in Stockholm.

*Platybrachys* Stål

*Platybrachys* Stål, 1859 : 280. Haplotype, *Aphana lanifera* Stål, 1854 : 244. *Lyncilia* Stål, 1863 : 248. Haplotype, *Lyncilia nobilis* Stål, 1863 : 248, syn. n.

*Navorillina* gen. n.

Vertex broader than long in middle (6 : 1), slightly longer at lateral margins than in middle, posterior margin shallowly excavate, lateral margins straight, anterior margin transverse, all margins carinate, disc concave in anterior view, only a little depressed; frons broader than long in middle



FIGS. 10-14.—*Navorillina bothrops* gen. et sp. n.: (10) head and thorax, dorsal view; (11) head in profile; (12) frons and clypeus; (13) basal segment of post-tarsus, ventral view; (14) tegmen.

line (about 3 : 1), basal margin concave, lateral margin bluntly rounded through 70° at middle, disc medially and laterobasally strongly bullate; clypeus subequal to greatest length of frons; rostrum shorter than distal portion of clypeus (anteclypeus), not attaining post-coxae, hollowed on anterior surface, apical segment shorter than subapical (about 2 : 3), antennae distinctly surpassing eyes, second segment cylindrical, broadest near base, tapering distally, ocelli absent; a small but distinct knob-like callus developed at lower margin of eye. Pronotum in middle line longer than vertex, anteriorly broadly convex, posteriorly shallowly concave, ecarinate or practically so; mesonotum slightly longer than pronotum and vertex combined, broader than long (about 2.3 : 1), tricarinate, median carina obsolete basally, lateral carinae percurrent; fore and middle femora and tibiae moderately dilated, post-tibiae trispinose laterally, with 9 spines on distal margin, basal segment of metatarsus with an oblique row of 7 spines, a spine at opposite apical angle, and a setose pad. Tegmina longer than broad (3.4 : 1), broadest about one-quarter from base, tapering distally, costal margin slightly sinuate, apical margin deeply and asymmetrically rounded, sutural margin straight, clavus terminating basad of middle, costal area completely absent, Sc and R forked at a quarter from base, M forked distad of fork of Sc and R and basad of union of claval veins, Cu<sub>1</sub> forked level with apex

of clavus, distal veins and distal margin of tegmina setose; common claval vein entering  $Cu_2$  near apex of clavus; clavus terminated by a thickened, obliquely transverse vein, just beyond which the margin is slightly notched. Wings reduced, half as long as tegmina, parallel-sided, symmetrically rounded apically.

Type species, *Navorillina bothrops* sp. n.

*Navorillina bothrops* sp. n. (figs. 10–14)

Posterior portion of seventh abdominal sternite one-third length of anterior portion.

Fuscous; pronotum behind lateral angles of vertex, anterior part of mesonotum and mesonotal carinae testaceous; laterodistal fields of frons interruptedly, clypeus except for a series of chevron-like stripes, 2 or 3 spots on pro- and meso- femora and tibiae, hind legs and abdomen testaceous-stramineous; raised laterobasal and median areas on frons, piceous, polished. Tegmina with corium fuscous with a broken dull yellow fascia from middle of costa to middle of claval suture and veins on a line from stigma to posterior margin, dull yellow; membrane hyaline, veins brown, with 2 transverse bands, fuscous.

Female: length, 3.0 mm; tegmen, 3.7 mm.

*Holotype* ♀, CENTRAL AUSTRALIA: *Navorillina* (*Capt. S. A. White*), in British Museum (Nat. Hist.). Two ♀, with same data.

*Maon* gen. n.

Vertex nearly 5 times as broad as long in middle, slightly longer at lateral margins than in middle, posterior margin shallowly excavate, lateral margins straight or slightly diverging distally, anterior margin transverse, all margins carinate, vertex flat, disc only slightly depressed; frons broader at widest part than long in middle line (2.5 : 1), basal margin transverse, lateral margins rounded through 100°, ventral portion slightly sinuate, disc flat in profile; clypeus subequal to greatest length of frons; rostrum shorter than clypeus, apical segment very short, more or less triangular, subapical segment about twice as long as apical; ocelli absent, antennae distinctly surpassing eyes, second segment cylindrical, broadest near base, sinuately tapering distally; an extremely weak eminence developed at lower margin of eye at upper limit of emargination. Pronotum in middle line slightly longer than vertex, anteriorly broadly convex, posteriorly shallowly concave, feebly carinate medially; mesonotum longer than pronotum and vertex combined, broader than long (about 1.8 : 1), tricarinate, median carina obsolete basally, lateral carinae percurrent; fore and middle femora and tibiae moderately dilated, post-tibiae trispinose laterally, with 9 spines on distal margin; basal segment of metatarsus with 9 spines in 2 oblique rows, a single spine at opposite apical angle, and a setose pad. Tegmina longer than broad (about 2.3 : 1), broadest at about one-quarter from base, slightly narrowed distally, costal margin sinuate, apical margin broadly and almost symmetrically rounded, sutural margin straight only to slightly beyond apex of clavus, clavus terminating distad of middle, costal area present,  $Sc + R$  forked at about one fifth from base,  $M$  forked distad of  $Sc + R$  fork and much basad of union of claval veins,  $Cu_1$  forked near level of union of claval veins; distal veins and apical margin setose, common claval vein terminating against thickened and transverse vein at apex; claval margin not interrupted. Wings about three-quarters as long as tegmina, anal area normally developed.

Type species, *Maon sinuatus* sp. n.

*Maon sinuatus* sp. n. (figs. 15–19)

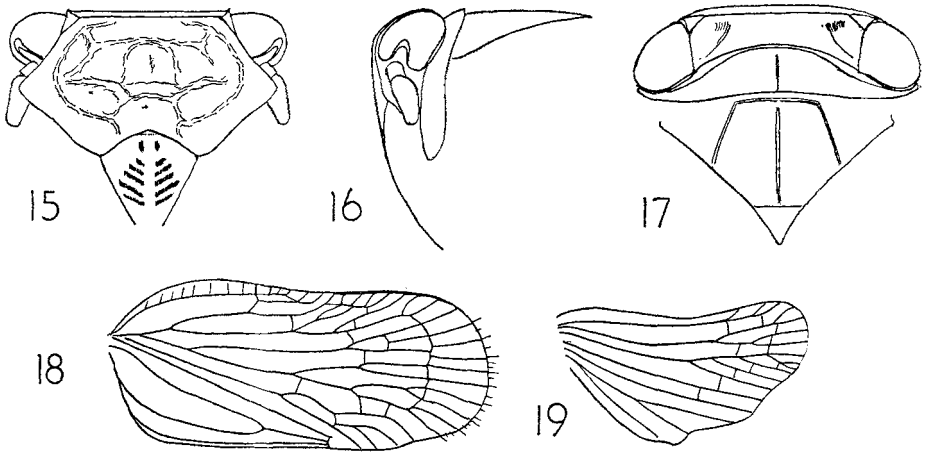
Frons feebly ridged as figured.

Fuscous, marbled piceous; metathorax and abdomen scarlet. Tegmina tawny, with fuscous spots. Anterior and apical margins very broadly fuscous, a spot on costal margin one-third from base, a spot at node and a subapical transverse band across tegmen, sordid white. Wings fuscous.

Anal segment of male long, broadly spatulate, flat. Aedeagus broad, produced dorsally near base in a finger-like process curved dorsad, ventral margin produced in 2 pairs of curved spines, 1 pair directed laterad and in repose more or less interlocking with process on genital styles, the other directed caudad with their distal part closely apposed, slightly diverging near apex. Genital styles fused in a curved bowl-shaped plate, with posterior margin sinuate.

Male: length, 4.8 mm; tegmen, 6.0 mm.

*Holotype* ♂, WESTERN AUSTRALIA: Yanchep, 32 miles north of Perth, 13–23.xi. 1935 (*R. E. Turner*), B.M. 1936–28, in British Museum (Nat. Hist.). Five males, same data.



Figs. 15-19.—*Maon sinuatus* gen. et sp. n.: (15) frons and clypeus; (16) head in profile; (17) head and thorax, dorsal view; (18) tegmen; (19) wing.

In general appearance *Maon* is broadly similar to the Platybrachyine genera *Olonia* Stål and *Euronotobrachys* Kirkaldy, but in addition to the characters given in the key it is readily separated from both by the shape and venation of the tegmina.

In *Maon* the actual thickening of the subocular callus is negligible, and would be easily overlooked but for the fact that a narrow band of pale colour is strongly dilated in this position.

#### BOOK NOTICE

*Insecta Helvetica. Fauna. 3. Hymenoptera: Sphecidae.* By Jacques de Beaumont. 8vo. Lausanne: Imprimerie la Concorde, 1964. Pp. 169, 551 text-figs.

This is the first complete list of Swiss Sphecidae to appear since that of Kohl (1883). It contains numerous illustrations, mostly original. The considerable changes in their nomenclature and in the basis of their classification has made this revision necessary.

A short introduction includes a brief account of the anatomical characters that will be taken into consideration for the identification of the genera and species. A key to the genera is followed by brief diagnoses of the subfamilies and each genus, with keys to the species. Details of geographical distribution and ecology are only mentioned briefly as these will be dealt with fully in a parallel series, *Insecta Helvetica. Catalogus*, yet to be published.

There is a list of works cited and separate indices of subfamilies, genera and subgenera, and species.