

The Ethiopian Species of *Macropsis* Lewis
(*Pediopsis* auct.)

(Homopt. Bythoscopidae)

BY

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The genus *Macropsis* was founded by Lewis in 1835 to hold two species, *Cicada virescens* F. and *Cicada flavicollis* L. which were placed in separate divisions. In 1837 Burmeister engaged in splitting up Germar's genus *Bythoscopus*, erected the sub-genera *Oncopsis* and *Pediopsis* with *Macropsis* Lewis as the synonym of each. He placed *C. flavicollis* L. together with other species in the first subgenus whilst *C. virescens* F. and other species he placed in the second. No genotype was fixed for *Oncopsis* but *Bythoscopus tiliae* Germ. was cited as the typical species of *Pediopsis*. One of these two new sub-genera was of course a synonym of *Macropsis* Lewis. In 1840 Westwood cited *Cicada flavicollis* L. as the type of *Oncopsis* Burm. and *Cicada virescens* F. as the type of *Macropsis* Lewis. *Pediopsis* Burm. therefore became a synonym of *Macropsis* Lewis. These type fixations were ignored by older writers but when they came to be partially accepted by recent authors considerable confusion prevailed in the nomenclature of the Bythoscopid genera. Care must therefore be taken in accepting the generic names assigned to new species by their authors without reference to the descriptions.

In 1909 Distant described a new genus *Galboa* from Seychelles. The only distinctive characters between this genus and *Macropsis* are the rather heavier sculpturing of the head and pronotum and the shorter and less projecting clypeus.

The existence of a slightly raised unpunctured line down the middle of the face is a character present in varying degrees in some other

species of *Macropsis* such as *M. capensis* Cogan. I have no hesitation in sinking *Galboa* Dist. as a synonym of *Macropsis* Lewis.

Nearly seventy species of *Macropsis* have been described from all parts of the World ¹, and of these five have been described from the Ethiopian region. It is doubtful whether *M. typica* Dist. described under *Galboa* from Seychelles belongs to the Ethiopian element of the Seychellesian fauna or to the Indian element. In this revision it has been included in the former for the sake of convenience. Four new species of *Macropsis* are described below bringing the total Ethiopian list up to ten. The discovery of these new species is due to the untiring efforts of Mr. Rowland Turner who has collected many thousands of specimens in S. Africa during the last few years, and in whose collections (presented to the British Museum) are hundreds of new and interesting forms of Hemiptera.

Genus **Macropsis** Lewis.

1835. *Macropsis* Lewis, Trans. Ent. Soc. London, I, p. 49; Lectotype: *Cicada virescens* F. cited by Westwood in Introd. Class. Ins., II, p. 117, 1840.
 1837. *Pediopsis* Burmeister, Gen. Ins. (no pagination) 1837 (fide Sherborn)
 Orthotype: *Bythoscopus tiliae* Germar.
 1909. *Galboa* Distant, Trans. Linn. Soc. London (Zoology), XIII, p. 45, pl. 4, fig. 11; Orthotype: *Galboa typica* Distant.

Artificial Key to Ethiopian Species.

1. Tegmina green or greenish hyaline, sometimes minutely speckled with brown or with the veins spotted with brown..... 2
- Tegmina not green, whitish hyaline more or less densely variegated or transversely banded with dark brown..... 7
2. Veins of tegmen in part checkered brown and white, vertex acutely angular..... **simplex** Jac., E. Africa, Kilimandjaro.
- Veins of tegmen unicolorous, without brown spots..... 3
3. Vertex or frons or both spotted with black..... 4
- Vertex and frons unspotted or with only two small obscure spots placed one on each side below the anterior margin of the head..... 6

¹ I propose the new name **M. matsumurana** for *M. bifasciata* Matsumura (Journ. Coll. Agric. Tohoku Imp. Univ., IV, pl. VII, p. 309, 1912), preoccupied by *M. bifasciata* V. Duzee, Ent. Am., V, p. 173, 1889.

4. Front and middle tarsi and the dorsum black; eight black spots on the ventral surface of the head (vertex and frons); ♂.....
 **octopunctata** sp. nov., S. E. Africa, Pondoland.
 — Front and middle tarsi and the dorsum not black; only three black spots on the ventral surface of head..... 5
5. Scutellum with a blackish spot at each side in the basal angles; anterior margin of pronotum with three black spots (♀).....
 **sexpunctata** Mel., E. Africa, Mt. Karoli.
 — Scutellum without black spots in basal angles; anterior margin of pronotum with only one small median black spot (♀).....
 **nigrosignata** Stål, S. W. Africa, Svakop R.
6. Tegmina inutely speckled with brown or black, apex of clavus infuscate and apical margin of tegmen with 5-7 black spots; sternum marked with black (♂ and ♀). **capensis** Cogan, S. Africa, Cape Flats, Ceres and Rodriguez.
 — Tegmina not speckled with brown or black, apex of clavus not infuscate, apical margin of tegmen without black spots, sternum immaculate (♀).
 **pondoensis** sp. nov., S. E. Africa, Port St. John.
7. Head and pronotum yellowish green.....
 **turneri** sp. nov., S. Africa, Queenstown.
 — Head and pronotum not yellowish green..... 8
8. Silvery white; tegmina with three indistinct transverse brown bands; pronotum with a fine black line down the middle.....
 **aethiopica** Mel., S. Africa, Ouomber.
 — Entirely ochreous with dark brown punctures and infuscations..... 9
9. Tegmina densely variegated with dark brown, veins checkered white and black, a whitish hyaline area over the discal cells and another at the apices of the outer sub-apical cells; front and middle tibiae with brownish black annulations; clypeus long, produced well beyond posterior margin of face and extending to anterior trochanters.....
 **brunnea** sp. nov., S. Africa, Queenstown.
 — Tegmina suffused and speckled with brown only along the margins of the veins; veins brown spotted with small whitish, round tubercles; front and middle tibiae without brown or black annulations; clypeus short scarcely produced beyond the posterior margin of the face and not extending to the anterior trochanters..... **typica** Dist., Seychelles. Mahé.

1. *Macropsis simplex* Jacobi.

1910. Sjöstedt's Kilimandjaro, Meru Exped. 12, 7, p. 129, taf. 2, fig. 29, 29 a-b.

♀. Greenish yellow; the impressions on the pronotum and scutellum brownish. A big round mark on each side of the mesosternum

and several small bands and spots on the mesosternum and legs, black; bristles of the hind tibiae with a black basal spot. Abdomen with transverse rows of blackish brown spots. Tegmen yellowish hyaline, veins checkered with brown and white, the cells and particularly the clavus speckled with scattered groups of small brown spots. Wings milk white with dark veins. Face very long, deeply and densely punctate with longish impressions towards the base of the frons; clypeus in the same plane as the lower part of the frons. Last ventrite in the ♀ scale shaped because of the rounded sides. (Length not stated).

Described from 1 ♀. German E. Africa: Kilimandjaro.

I do not know this species and the above is a more or less literal translation of Jacobi's original description.

2. **Macropsis capensis** (Cogan) (fig. 1).

1916. *Pediopsis capensis* Cogan, Ohio Journ. Science, XVI, no. 5, p. 179. pl. IV, fig. 2 & 2, a-d.

This species was described from 2 ♂♂ taken by Mally at Cape

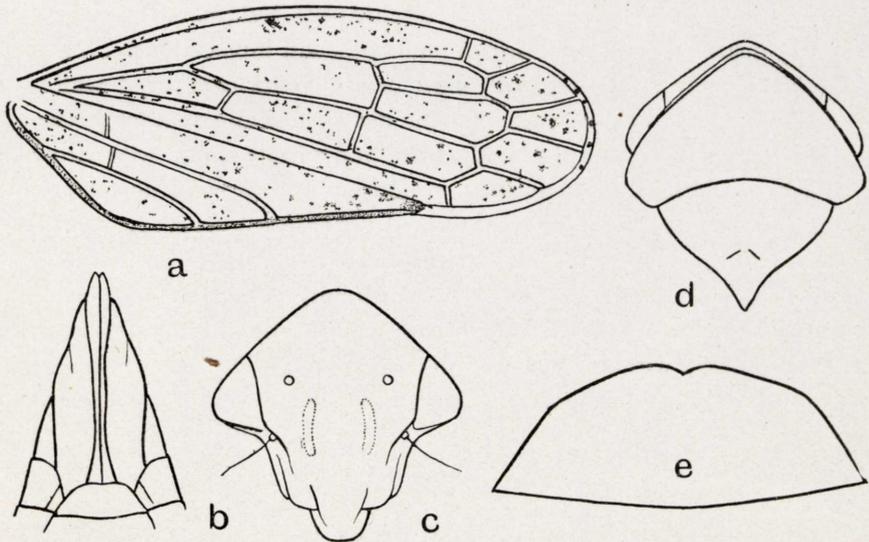


Fig. 1.—*Macropsis capensis* Cogan. a, tegmen; b, ventral view ♀ genital segments; c, face; d, dorsal view of head, pronotum and scutellum; e, last ventrite of ♀.

Flats, Cape Province. Mr. Turner's collection contains 2 ♂♂ and 3 ♀♀ from Ceres in the same Province.

The ♀ is similar to the ♂ but larger (5,2 mm.). The last ventrite is figured.

In his description Cogan omits to mention several distinctive characters: (a) the apical margin of the tegmen has five to seven distinct black spots; (b) the front and middle tibiae are whitish banded with brown; (c) the circlet of minute teeth at the base of each of the hind tibial spines is black; (d) he mentions that there are black spots on the pro and metapleura but the largest and most distinct blackish brown spot is on the mesosternum just above the middle coxa; (e) the eyes are normally red but in some specimens they have a filmy grey appearance. Cogan's figures are rather crude and cannot be relied upon for accuracy as a glance at the tibial armature as depicted in his drawings will indicate.

M. capensis resembles *M. simplex* Jac. in several respects but may be distinguished at once by the unchecked tegminal veins, the broader and less angulate head and pronotum, the unspotted abdomen and the brown banded front and middle tibiae.

3. *Macropsis nigrosignata* (Stål).

1858. *Bythoscopus nigrosignatus* Stål, Öfv. Vet. Ak. Förh., 15, no. 6, p. 320-38.

1866. *Pediopsis nigrosignatus* Stål, Hem. Afr., IV, p. 128.

♀. Pale yellowish green; a small sub-basal median spot and a lateral one on each side of the vertex placed above the ocellus, a very small one at the apex of the thorax and a lateral one on the prosternum at the base of the anterior coxae, black.

Length, 4,25 mm.; lat., 1,35 mm.

Sandy fields by the Svakop River, S. W. Africa.

Similar to *P. prasina* Boh. a Palaearctic species. Head and thorax rugulose, the former distinctly angulate as seen from above and very short in the middle.

I do not know this species and the above is a translation of Stål's revised description.

4. **Macropsis sexpunctata** (Mel.)

1911. *Pediopsis sexpunctata* Melichar, Bull. Mus. Hist. Nat. Paris, 17, p. 111.

♀. Green, of same shape and size as *P. virescens* F.¹ Vertex marked with three black spots, the middle one at the extremity. On the anterior margin of the pronotum, three black spots, one at the anterior angle, the others at each side behind the eye. Scutellum triangular with a deep transverse line in the middle and at each side in the basal angles a black spot which touches the posterior margin of the pronotum. Tegmina green the veins distinctly whitish green, the cells slightly brownish. Wings hyaline. Beneath green with a small black spot on each side of the anterior part of the sternum. Legs green, the anterior and intermediate tibiae yellowish.

Length, 4 mm.

E. Africa: Rendilé, Mont Karoli; Collected in May.

This species is not represented in the British Museum collection and the above is from Melichar's description.

5. **Macropsis octopunctata** sp. nov. (fig. 2).

♂. Yellowish green. Head and pronotum rather transverse much less angular than in *simplex* Jac. Eyes dark reddish brown with grey film in places, vertex from above about twice as long at the inner margins of the eyes as in the middle, tinted with brown at the sides. Face tinted with brown towards the sides and with eight black spots: one on each side of the base of the frons just within the frontal suture which is very distinct, a rather transverse one on each side of the vertex just above and touching the ocellus, a similar pair placed between and above the ocelli and tending to fuse with the supraocellar spots, and a small round spot on each side of the base of the vertex just below the anterior margin of the head and directly above the ocellus (see fig. 2). Apical joint of rostrum black along the outer surface. Pronotum green with the posterior margin distinctly angularly emar-

¹ A Palaearctic species.

ginate, anteriorly with two small black dots below the inner half of each eye and a rather broad irregular streak about as long as the breadth of an eye extending parallel with the anterior margin from the inner margin of each eye towards the anterior median angle of the pronotum. Scutellum greenish yellow with a large obscure reddish brown triangular spot in each basal angle. Tegmen greenish hyaline with the costal cell and the veins green, clavus and apical margin distinctly infuscate, the apices of the claval veins the apex of the clavus

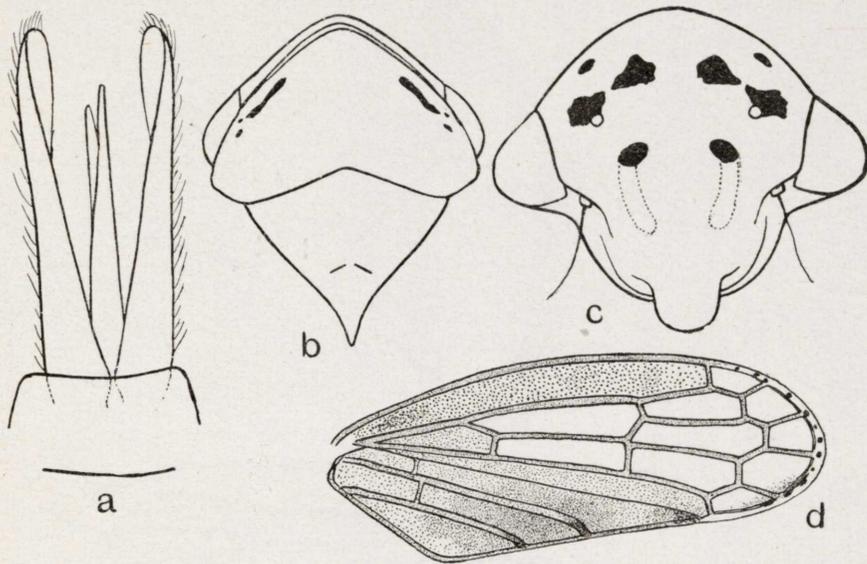


Fig. 2.—*Macropsis octopunctata* sp. nov. *a*, ventral view of ♂ genitalia; *b*, dorsal view of head, pronotum and scutellum; *c*, face; *d*, tegmen.

and about ten irregular spots and stripes placed along the apical margin, dark brown. Wings whitish hyaline with the veins brown apically. Metanotum and abdomen above black; sternum and venter green, immaculate, lower sides of abdomen green, anal style black. Legs yellowish green, the hind tibiae darker green; front and middle legs with the apex of tibia and the whole of the tarsus and claws, black; hind legs with only the apical half of the meta tarsal joint and the claws and the circlets of teeth at the base of the tibial spines, black.

Genitalia figured.

Length (incl. tegm.), 4,4 mm.; breadth across base of pron., 1,4 mm.

1 ♂ S. Africa: Pondoland, Port St. John, October, 1923 (R. E. Turner).

It is just possible that this is the male of *M. pondoensis* sp. nov. from the same locality.

6. **Macropsis pondoensis** sp. nov. (fig. 3).

♀. Green, fading to yellow in places. Head and pronotum rather more angular than in *octopunctata*. Eyes brownish, vertex rather more than twice as long at the inner margins of the eyes as in the middle; face greenish yellow usually with two very small black spots

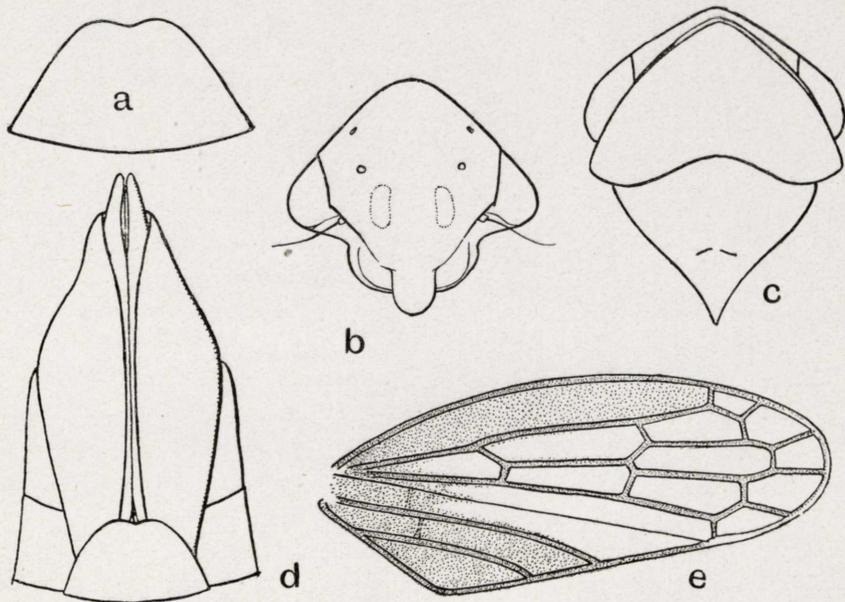


Fig. 3.—*Macropsis pondoensis* sp. nov. *a*, last ventrite of ♀; *b*, face; *c*, dorsal view of head, pronotum and scutellum; *d*, ventral view ♀ genital segments; *e*, tegmen.

one above each ocellus but close to the base of the vertex and just below the anterior margin of the head; apical joint of rostrum black at the apex. Pronotum green, immaculate, the posterior margin moderately deeply emarginate but not distinctly angularly so as in *M. octopunctata*. Scutellum greenish yellow, without or with only faint indications of a darker triangular spot in each basal angle. Tegmen pale greenish hyaline the veins unicolorous, costal cell rather more densely green, clavus slightly olivaceous, the apex of the clavus and the adjacent part of the appendix narrowly fuscous so that when

closed the tegmina bear an obscure dark spot at that point. Wings whitish hyaline, veins unicolorous. Metanotum and abdomen above green; sternum and venter green immaculate; legs green, claws and apices of metatarsi black, hind tibial spines pale brown with the circlets of minute teeth at their bases, black.

Last ventrite figured.

Length (incl. tegmina), 5,2 mm. Breadth across base of pronotum, 1,6 mm.

S. Africa: 8 ♀♀, Pondoland, Port St. John, October, 1923 (R. E. Turner).

5 ♀♀, Cape Province, Queenstown, 3,500 ft., 16 Jan. to 10 Feb. 1923 (R. E. Turner).

In spite of the very distinctive colour differences and the narrower and more angular head and pronotum, this may prove to be only the ♀ of *M. octopunctata* from the same locality.

7. *Macropsis turneri* sp. nov. (fig. 4).

♂. Head and pronotum pale yellowish green, the latter with its anterior margin rectangularly rounded. Eyes reddish brown, vertex distinctly more than twice as wide at the eyes as in the middle; clypeus lorae and genae strongly variegated with dark brown, almost entirely fuscous; rostrum extending to middle trochanters, basal joint blackish brown, apical joint ochreous with apex black. Posterior margin of pronotum broadly and very obtusely angularly emarginate. Scutellum ochreous spotted with fuscous punctures, the basal angles, the median anterior disc and the median posterior disc, dark brown, apex whitish; an obscure longitudinal ochreous line down the middle. Tegmen densely speckled with dark brown but with two distinct transverse whitish hyaline bands, one extending from the middle of the costal cell across the discal cells to the claval commissure, the other extending from the apical end of the costal margin across the sub-apical cells to the apex of the clavus, this one somewhat obscured by brown speckling in the region of the third sub-apical cell. Clavus pale brown speckled with dark brown, the basal half, the apex and the apices of the claval veins fuscous; veins whitish more or less regu-

larly spotted with large roundish black spots; costal margin (and claval margin less densely), with smaller and more numerous black spots, particularly well marked on the whitish hyaline portions; appendix well marked, whitish suffused in middle with brown and at the apex of the tegmen with several black dots. Wings whitish hyaline, the veins faintly tinted with brown especially at the apex of the wing. Abdomen and sternum brownish yellow, the dorsum with the segments tinted with brown except at the posterior margins; the sternum

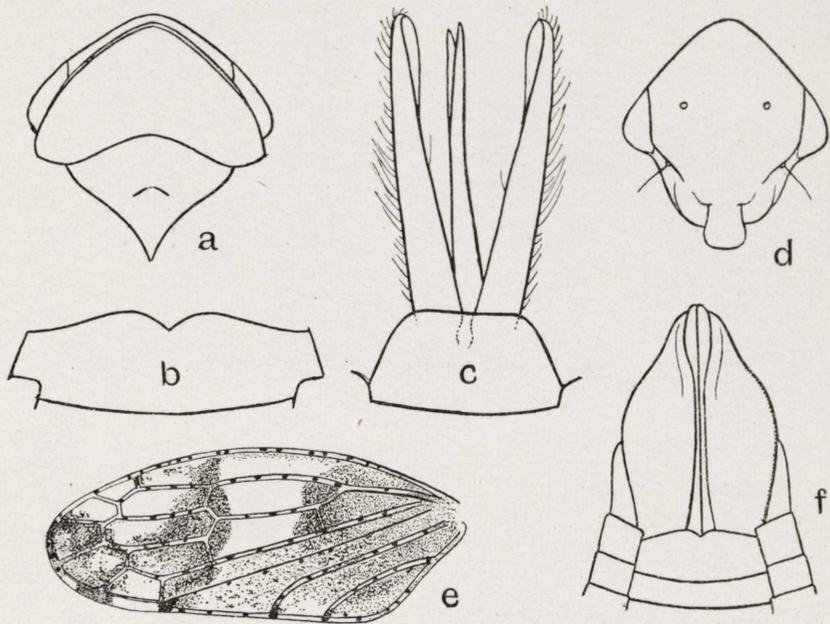


Fig. 4.—*Macropsis turneri* sp. nov. *a*, dorsal view of head, pronotum and scutellum; *b*, last ventrite of ♀; *c*, ventral view of ♂ genitalia; *d*, face; *e*, tegmen; *f*, ventral view of ♀ genital segments.

and the venter thickly variegated and marked with black and dark brown. Femora black with shagreened surface, the hind femora shading to yellow on the lower sides; front and middle tibiae pale yellow with three black annulations, tarsi pallid with the apical half of the metatarsi and the claws black; hind tibiae pale yellow with the bristles whitish, the origins of the stout spines and their extreme apices dark brown, the first tarsal joint above, the apical half of the metatarsus and the claws brownish black.

Genitalia figured.

Length (incl. tegm.) 3,3 mm., breadth across base of pron., 1,1 mm.

♀ similar to male but larger (length 4,3 mm., breadth 1,4 mm.), the intensity of the dark brown markings on the scutellum, tegmina clypeus, etc., somewhat variable and often much lighter than in the type. Abdomen often tending to orange red.

1 ♂ (type), 7 ♀ ♀, S. Africa: Cape Province, Queenstown, 3,500 ft., 16, Jan. to 10, Feb. 1923 (R. E. Turner).

8. *Macropsis aethiopica* (Mel.)

1911. *Pediopsis aethiopica* Melichar, Bull. Mus. Paris, XVII, p. 112.

Very small, brilliant silvery white. Vertex very narrow, angular; frons convex, densely covered like the vertex with little black spots. Pronotum triangularly produced, obliquely striate up to the anterior extremity, densely covered with points and with a fine black line down the middle. Eyes red. Scutellum triangular densely speckled and with a big triangular brown spot in each basal angle. Tegmina white; transparent, densely speckled with black and brown points forming three indistinct transverse bands, one at base, another before the middle and the third beyond the middle; nervures whitish with several large black spots, the costal margin similarly spotted with black. Wings hyaline. Abdomen above with dark speckling, below more or less spotted. Legs whitish yellow, femora densely punctate; tibiae with black annulations; claws black.

♀ Length 3 mm. South Africa: Ouomber.

This species is unknown to me, the above being a translation of Melichar's original description.

9. *Macropsis brunnea* sp. nov. (fig. 5).

♂. Pale ochreous more or less densely speckled with dark brown. Head and pronotum pale ochreous with the punctures and furrows, the apex of the clypeus, a levigate arcuate scar on each side of the frons, and a similar elongate scar on each side of the anterior margin of the pronotum, dark brown. Sculpturing of head and pronotum rather coarse, a levigate ridge running down the middle of the pronotum and the anterior half of the face. Scutellum coloured similarly to the pronotum with a large triangular brown spot in each basal angle the anterior disc with numerous dark brown punctures, the poste-

rior disc impunctate but tinted with brown, apex yellowish white. Tegmina whitish hyaline more or less densely speckled with brown, a round area over the middle of the discal cells and the apical halves of the outer sub-apical cells, unspeckled and hyaline; veins white checkered with blackish brown, the costal margin spotted with brown, the cross veins, the apices of the claval veins, the apex of the clavus and

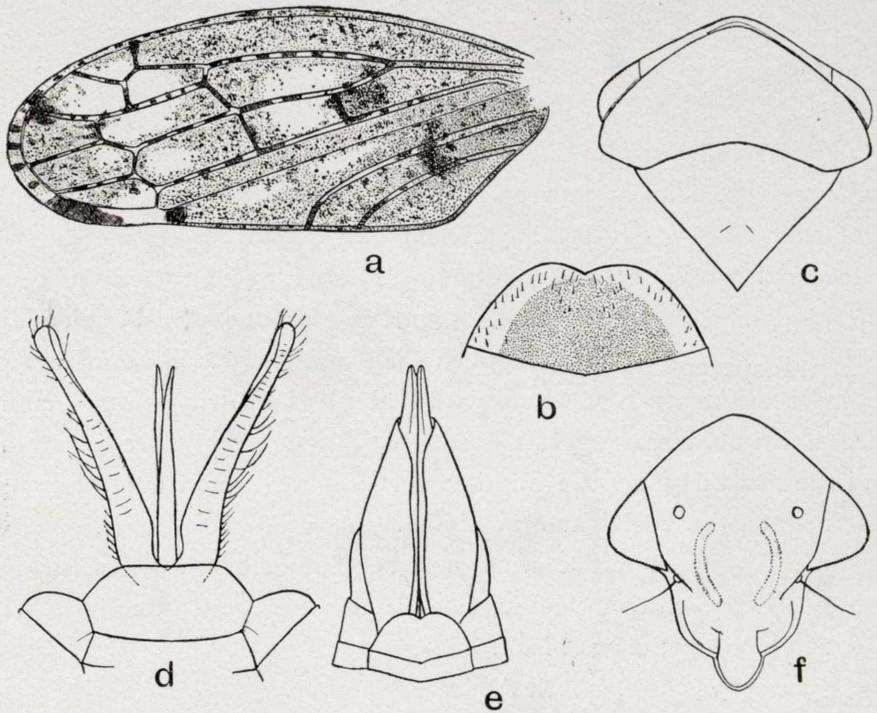


Fig. 5.—*Macropsis brunnea* sp. nov. *a*, tegmen; *b*, last ventrite of ♀; *c*, dorsal view of head, pronotum and scutellum; *d*, ventral view of ♂ genitalia; *e*, ventral view of ♀ genital segments; *f*, face.

the middle of the appendix, dark brown. Wings whitish hyaline with the veins brown. Abdomen yellowish brown the apical halves of the sclerites blackish brown; sternum largely dark brown with the mesosternum and pleura pale ochreous. Legs ochreous more or less banded and marked with black, the front and middle legs with the trochanters, the outer sides and the basal thirds of the inner sides of the femora, three annulations on the tibiae and the tarsi blackish brown; hind tibiae pale with a large streak on the outer sides and the bases of the tibial spines black; hind tarsi with the basal joint pale and the two apical ones fuscous.

Genitalia figured.

Length (incl. tegmina) 4,6 mm., breadth across base of pronotum 1,6 mm.

♀ Similar to ♂ but much larger (length 5,6 mm., breadth 1,9 mm.), the head and pronotum of a richer shade of ochreous, the punctures and rugulose furrows much less densely infuscate. The density of the brown speckling of the tegmina variable thus varying the distinctness of the hyaline patches.

Last ventral sclerite figured.

1 ♂ (type) and 4 ♀♀, S. Africa: Cape Province, Queenstown, 3,500 feet, 16, Jan. to 10, Feb. 1923 (R. E. Turner).

10. *Macropsis typica* (Distant) (fig. 6).

1909. *Galboa typica* Distant, Trans. Linn. Soc. London (Zoology), XIII, p. 45, pl. 4, fig. 11.

♀. Rich ochreous brown, the puncturations of the head, pronotum and scutellum dark brown.

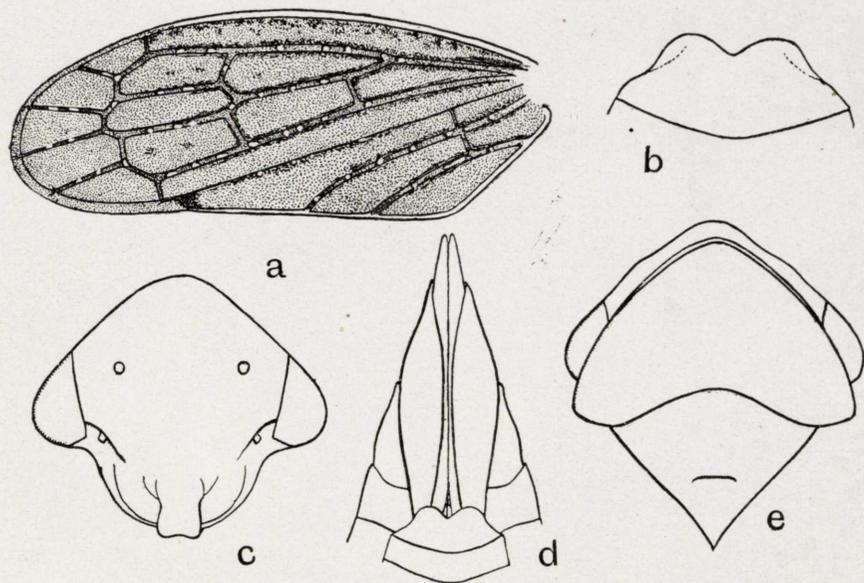


Fig. 6.—*Macropsis typica* Dist. *a*, tegmen; *b*, last ventrite of ♀; *c*, face; *d*, ventral view of ♀ genital segments; *e*, dorsal view of head, pronotum and scutellum.

tum and scutellum dark brown. Clypeus lorae and genae and a levigate ridge running down the middle of the anterior half of the pronotum

tum and the face, pale ochreous. Clypeus short projecting very little beyond the posterior margin of the genae. Eyes brown; scutellum with an obscure pale brown triangular spot in each basal angle. Tegmina pale brownish hyaline, margins of veins suffused with darker brown, an obscure row of brown speckles within the costal margin. veins with small round whitish tubercles; apex of clavus fuscous; Wings whitish hyaline with brown veins. Dorsal sclerites of abdomen with the basal halves dark brown and the apical halves pale ochreous. Sternum and venter pale ochreous, the pro and metapleura marked with blackish brown. Legs pale ochreous the upper sides of the femora streaked with dark brown, the bases of the hind-tibial spines and the front and middle tarsi, dark brown.

Last ventral sclerite figured.

Length (incl. tegmina) 5,5 mm., breadth at base of pronotum, 1,8 mm.

1 ♀ (type) Seychelles: Mahé, V, XII, 1905 (J. S. Gardiner).