

## THE TARTESSINAE OF AUSTRALIA, NEW GUINEA AND SOME ADJACENT ISLANDS (HOMOPTERA: CICADELLIDAE)<sup>1</sup>

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*Abstract.* The Australia-centered Tartessinae are widespread in arid and semiarid environments, and also in tropical rain forests. The extension of their range outside Australia to New Guinea and beyond is presumed to be associated with their ability to colonize rain forest environments. Treated are 37 genera, of which 32 are proposed as new; 18 genera are confined to Australia, 13 to New Guinea and adjacent islands, 4 to both Australia and New Guinea, 1 to New Guinea and the Oriental Region, and 1 to New Caledonia. Of the 130 species treated, 84 are described as new; all are illustrated.

J. W. Evans, in his paper “The Leafhoppers and Froghoppers of Australia and New Zealand” (1966), predicted that a revisional study of cicadellids grouped under the genus *Tartessus* Stål might disclose a need for division of the genus into further genera, based on considerable differences observed among ♂ genitalia. After my retirement in 1966 from the University of Sydney, I undertook a revision of this group. This study was made possible through the advice and encouragement of my husband, J. W. Evans.

Leafhoppers in the subfamily Tartessinae are usually wedge-shaped insects ranging 2–12 mm in body length. In color, they may be partly or wholly gray, brown, or green, but a few species have a bold color pattern in which yellow may predominate. Some species are sexually dimorphic. Features typical of the subfamily are shown in FIG. 1.

### Subfamily TARTESSINAE Distant

*Characters.* The *epistomal suture* is retained to varying degrees and a complete differentiated *frons* may be present. The *maxillary plates* are broad and the *supra-antennal ledges*, which lie close to the anterior margins of the eyes, are well defined and usually transverse. The *ocelli* are situated either adjacent to the hind margin of the face or on the narrow *crown*, which may be of even length throughout, longest against the eyes or, in species with produced heads, longest in the center. The *hind femur* bears 2 pairs of apical spines and the *hind tibia* bears 3 rows of spines, the middle row

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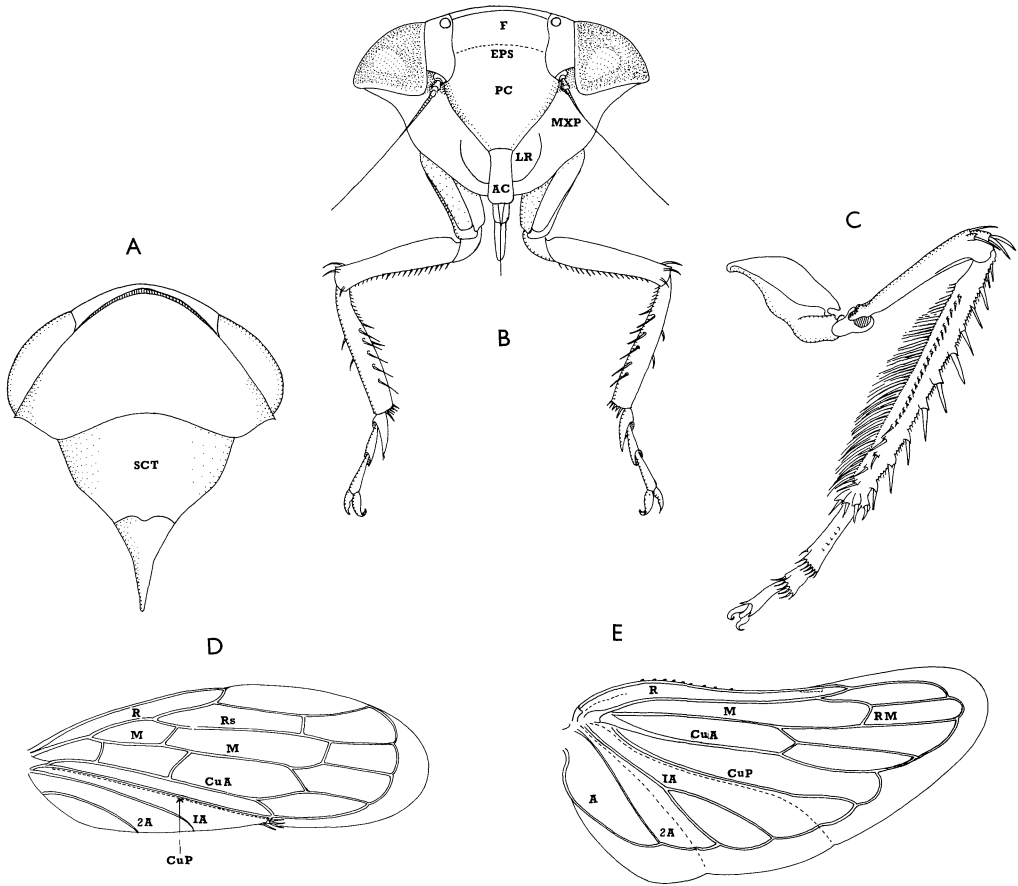


FIG. 1. *Austrotartessus ianassa*: A, head and thorax; B, face and fore legs; C, hind leg; D, tegmen; E, hind wing. PC = postclypeus; AC = anteclypeus; EPS = epistomal suture; F = frons; LR = lorum; MXP = maxillary plate; SCT = scutellum.

having small spines between the larger spines. The *tegmen* usually has complete cicadellid venation and the *appendix* continues broadly around the apex. The *hind wing* has the marginal vein extending onto the anal area. The ♂ *genitalia*, which are of great importance in species recognition, frequently have a pair of variously shaped accessory processes which arise from, or from near, the base of the Xth abdominal segment and sometimes, seemingly, from the base of the pygophore. The VIIth *abdominal sternum* in the ♀ is also a useful relationship indicator.

#### DISTRIBUTION

The Tartessinae are tree- and shrub-inhabiting leafhoppers which, in Australia, are particularly associated with xerophytic flora. However, in northeastern Australia,

a number of species live in tropical rain forests. This adaptive flexibility has enabled the subfamily to extend its range of distribution beyond the continent to the north.

Representatives of the subfamily occur abundantly in New Guinea and sparsely in Indonesia, Micronesia, the Philippines, Malaysia, China, Japan and India. Species found outside the geographical range are listed in Metcalf (1964).

While a few essentially Australian cicadelloids belonging to another family, the Eurymelidae, have become established in New Guinea, most of these seem to be largely restricted to those parts of the island with a recently established eucalypt flora, that is to say, along the Papuan coast south of the Owen Stanley Range.

Among insects in general, the occurrence of closely related species in both dry open forests and in rain forests is extremely unusual. Monteith (1975) has drawn attention to this fact and has pointed out that this, in part, is because the species of plants which occur in the 2 environments are very different and that most plant-feeding insects are host specific. Many Australian Tartessinae are known to be associated with eucalypts; little is known of their other food plants.

Rain forests in Australia occur as a chain of unconnected islands between which there is little faunal interchange (Monteith 1973). This circumstance in northern Australia has led to the evolution of an abundance of closely related species. In New Guinea, also, this may be a reason for species abundance.

#### SYSTEMATICS

Prior to this study, 6 genera were recognized within the Tartessinae. Three of these, *Tartessoides* Evans, *Tartessella* Evans and *Newmaniana* Evans, are confined to Australia. *Borduria* Distant is from India and is not dealt with here.

The 3 preceding Australian genera, redescribed below, differ from others in the subfamily in 2 particulars; thus their ♂ genitalia, unlike those of species in other genera, are remarkably stable and all conform to a single pattern. This may be the basic pattern for the subfamily and, possibly, for the family Cicadellidae as a whole.

Of the remaining genera, *Sarpestus* Spångberg is separated from *Tartessus* Stål by a venational anomaly in which, in the tegmen, M diverges from R close to the point of derivation of Rs. Two new genera with venation similar to *Sarpestus* and 30 new genera with normal basic cicadellid venation are described herein. Many of these are distinguished largely on ♂ genitalia characteristics. I have given thought to the possibility of associating groups of genera into separate tribes, but insufficient common characteristics have been found.

Of the 123 species recognized within the *Tartessus-Sarpestus* complex and occurring within the area studied, 58 are from Australia, 62 are from New Guinea and adjacent islands, 1 is from New Caledonia, and 2 are represented in both Australia and New Guinea.

Acronyms and abbreviations for institutions cited in the text are as follows.

AM	Australian Museum, Sydney
ANIC	Australian National Insect Collection, CSIRO, Canberra City

BISHOP	Bishop Museum, Honolulu
BMNH	British Museum (Natural History), London
LEIDEN	Rijksmuseum van Natuurlijke Historie, Leiden
QM	Queensland Museum, Brisbane
SAM	South Australian Museum, Adelaide
STOCKHOLM	Naturhistoriska Riksmuseet, Stockholm
VICTORIA	National Museum of Victoria, Melbourne

KEY TO GENERA OF TARTESSINAE REPRESENTED IN  
AUSTRALIA, NEW GUINEA AND NEW CALEDONIA

1. Labium terminating between hind coxae; scutellum elevated posteriorly  
... (Australia) ..... **Tartessoides**
- Labium not extending as far as hind coxae; scutellum flat ..... 2
- 2 ( 1). Green; apex of head narrowly or broadly produced ... (Australia)  
..... **Newmaniana**
- If green, with carinate head not produced ..... 3
- 3 ( 2). Xth abdominal segment of ♂ without well-developed accessory pro-  
cesses (FIG. 4G) ..... 4
- Xth abdominal segment of ♂ with accessory processes (FIG. 10A) .... 8
- 4 ( 3). Venation of tegmen sometimes reticulate; ♂ genitalia, pygophore nar-  
rowly triangular (FIG. 4) ... (Australia) ..... **Tartessella**
- Venation of tegmen never reticulate; pygophore variously shaped but  
not narrowly triangular ..... 5
- 5 ( 4). Small, brown or blackish; ♂ genitalia, pygophore not roundly emargin-  
ate (FIG. 5) ..... 6
- Small, brown; ♂ genitalia, pygophore roundly emarginate (FIG. 6) ... 7
- 6 ( 5). Crown of head and thorax bright orange dorsally ... (Australia)  
..... **Dorotartessus, n. gen.**
- Crown of head brown or black; thorax dorsally wholly or partly black  
... (Australia) ..... **Microtartessus, n. gen.**
- 7 ( 5). Face mottled brown or black ... (Australia) .... **Unguitartessus, n. gen.**
- Face black with yellow markings ... (Australia) .... **Alotartessus, n. gen.**
- 8 ( 3). Small, yellowish brown; ♂ genitalia, aedeagus hammer-shaped, pygo-  
phore narrow (FIG. 7, 8) ..... 9
- Not as above ..... 10
- 9 ( 8). Male genitalia, pygophore apically rounded (FIG. 7) ... (Australia)  
..... **Neotartessus, n. gen.**
- Male genitalia, pygophore apically hook-shaped (FIG. 8A) ... (Australia)  
..... **Spanotartessus, n. gen.**
- 10 ( 8). Paired processes of Xth abdominal segment of ♂ hook-shaped (FIG. 9-  
12) ..... 11
- Paired processes of Xth segment not hook-shaped ..... 13

- 11 (10). Sturdy, brown or yellow and brown; ♂ genitalia, aedeagus with 1 or a pair of slender apical extensions (FIG. 9) ... (Australia, New Guinea) ..... **Brunotartessus, n. gen.**  
Not as above ..... 12
- 12 (11). Narrow, pale brown or staminaceous; ♂ genitalia, pygophore broadly rounded (FIG. 11) ... (Australia) ..... **Tenuitartessus, n. gen.**  
Yellow and brown with crown of head and thorax bright yellow dorsally ... (Australia) ..... **Bulotartessus, n. gen.**
- 13 (10). Male genitalia, apex of pygophore broadly pick-axe-shaped (FIG. 13A, D, G) ..... 14  
Not as above ..... 15
- 14 (13). Pale and dark brown, with an unusually striking pattern ... (Australia) ..... **Kaltitartessus, n. gen.**  
Small, appearing completely black ... (Australia) .....  
..... **Nigritartessus, n. gen.**
- 15 (13). Small, orange-brown or black; ♂ genitalia as in FIG. 13K-H ... (Australia, New Guinea) ..... **Distantessus, n. gen.**  
Not as above ..... 16
- 16 (15). Small, bronze; ♂ genitalia, aedeagus W-shaped (FIG. 13P) ... (Australia) ..... **Furcatartessus, n. gen.**  
Not as above ..... 17
- 17 (16). Pallid, sometimes mottled; ♂ Xth abdominal segment unusually large (FIG. 14) ... (Australia) ..... **Protartessus, n. gen.**  
Not as above ..... 18
- 18 (17). Narrow, small, brown or yellowish; ♂ genitalia, pygophore frequently bilobed, aedeagus U-shaped (FIG. 15, 16) ... (Australia, New Guinea) ..... **Austrotartessus, n. gen.**  
Not as above ..... 19
- 19 (18). Small, golden yellow or yellowish brown; ♂ genitalia, aedeagus as in FIG. 17C, F ... (Australia) ..... **Borditartessus, n. gen.**  
Not as above ..... 20
- 20 (19). Slender, golden brown; ♂ genitalia, pygophore usually boat-shaped, aedeagus complex (FIG. 18B, F, I) ... (Australia) .. **Eutartessus, n. gen.**  
Not as above ..... 21
- 21 (20). Small, pale green or orange, with bulbous head, crown anteriorly carinate ... (Australia) ..... **Alotartessella, n. gen.**  
Not as above ..... 22
- 22 (21). Pale, with head and thorax largely yellow; tegmen pale hyaline brown or vitreous; ♂ genitalia, pygophore simple or highly complex (FIG. 21, 22) ... (Australia, New Guinea) ..... **Plexitartessus, n. gen.**  
Not as above ..... 23

- 23 (22). Boldly colored yellow and black ... (New Guinea) ..... **Flavitartessus, n. gen.**  
 Not as above ..... 24
- 24 (23). Brown and black, sometimes with orange markings; ♂ genitalia variously shaped (FIG. 24–27) ... (New Guinea) ..... **Tartessops, n. gen.**  
 Not as above ..... 25
- 25 (24). Brown, with a black transverse stripe margined with yellow on apex of head; ♂ genitalia as in FIG. 28 ... (New Guinea) ..... **Phytotartessus, n. gen.**  
 Not as above ..... 26
- 26 (25). Sturdy body brown; head pale orange with a dark transverse stripe posteriorly on face; ♂ genitalia as in FIG. 29, 30 ... (New Guinea) ..... **Duatartessus, n. gen.**  
 Not as above ..... 27
- 27 (26). Shining brown, with a dark mottled band on vertex of head; ♂ genitalia as in FIG. 31, 32 ... (New Guinea) ..... **Infulatartessus, n. gen.**  
 Not as above ..... 28
- 28 (27). Large, orange or brown; ♂ genitalia as in FIG. 33 ... (New Guinea, Oriental Region) ..... **Tartessus**  
 Not as above ..... 29
- 29 (28). Brown with an incomplete black or brown stripe at apex of head, ♂ genitalia as in FIG. 34A–C ... (New Guinea) ... **Fedotartessus, n. gen.**  
 Not as above ..... 30
- 30 (29). Large, yellowish and dark brown, with head angularly produced; ♂ genitalia as in FIG. 34D–F ... (New Guinea) ... **Macrotartessus, n. gen.**  
 Not as above ..... 31
- 31 (30). Brown, usually with a transverse black stripe posteriorly on face; ♂ genitalia as in FIG. 35 ... (New Guinea) ..... **Triviotartessus, n. gen.**  
 Not as above ..... 32
- 32 (31). Brown to black; face brown and black anteriorly, yellow with transverse black stripe posteriorly; ♂ genitalia as in FIG. 36 ... (New Guinea) ..... **Milotartessus, n. gen.**  
 Not as above ..... 33
- 33 (32). Yellow, brown and black; in tegmen M diverges from R close to the point of deviation of Rs ..... 34  
 Venation of tegmen conforming to basic cicadellid pattern ..... 35
- 34 (33). Male genitalia as in FIG. 37A–B, F–H ... (New Guinea) ..... **Sarpestus**  
 Male genitalia as in FIG. 37I–O ... (New Guinea) ..... **Alosarpestus, n. gen.**
- 35 (33). Slender, brown and yellowish; tegmen largely vitreous; ♂ genitalia as in FIG. 38 ... (New Guinea) ..... **Iriartartessus, n. gen.**

- Not as above ..... 36
- 36 (35). Both sexes brown or yellowish brown; face with a brown or black scribble pattern; ♂ genitalia as in FIG. 39-41 ... (New Guinea) ..... **Philotartessus, n. gen.**
- Sexually dimorphic; ♂ largely black, ♀ predominantly brown; ♂ genitalia as in FIG. 42 ... (New Caledonia) ..... **Calotartessus, n. gen.**

### Genus **Tartessoides** Evans

*Tartessoides* Evans, 1937: 55 (type-species: *T. griseus* Evans).

Pale grayish or brown insects, ranging in length from 8.4-14 mm. Face longer than wide; labium terminating between hind coxae; anteclypeus long and tapering; postclypeus convex. Crown slightly longer against eyes than in center or narrowly produced. Pronotum depressed anteriorly and laterally. Scutellum elevated posteriorly. Tegmen with venation reticulate in claval area. ♂ genitalia: pygophore apically acute; aedeagus curved, apically barbed; parameres unusually short; Xth segment lacking processes. ♀: VIIth abdominal sternum deeply divided into 2 long, narrow, parallel-sided parts.

*Distribution.* Australia.

*Remarks.* The 2 species contained in this distinctive genus differ in size, coloration and minor ♂ genitalia characteristics.

### **Tartessoides griseus** Evans

FIG. 2A-E

*Tartessoides griseus* Evans, 1937: 56 (between Everard Ranges, South Australia and Warburton Ranges, Western Australia—type in SAM).

Length: ♂, 10 mm; ♀, 14 mm. Coloration: pale grayish brown mottled with dark brown. Crown of head of ♀ narrowly produced. ♂ genitalia as in FIG. 2B-D.

*Distribution.* Australia: South Australia, Western Australia, Northern Territory.

### **Tartessoides brunneus** Evans

FIG. 2F-H

*Tartessoides brunneus* Evans, 1966: 200 (209 km SE of Broome, Western Australia—type in VICTORIA)

Length: ♂, 8.4 mm. General coloration brown. ♂ genitalia as in FIG. 2F-H.

*Distribution.* Australia: Western Australia.

### Genus **Newmaniana** Evans

*Euprora* Evans, 1938: 9 (nec Busck, 1906) (type-species: *E. mullensis* Evans).

*Newmaniana* Evans, 1942: 152 (type-species: *N. viridis* Evans); 1947: 207.

*Stenotartessus* Evans, 1947: 207 (n. n. for *Euprora* Evans, 1938). **New synonymy.**

Insects ranging in length from 7-12 mm, uniformly green in color when alive. Anterior margin of head and legs sometimes pink and brown. Sometimes sexually dimorphic with head narrowly or broadly anteriorly produced. Face with anteclypeus slightly convex, widest anteriorly or medially; postclypeus flattened; antennal ledges close to hind margins of eyes. Crown longer in center than against eyes; ocelli marginal. Pronotum anteriorly produced. Tegmen hyaline, apically narrow. ♂ genitalia: pygophore narrowing posteriorly; aedeagus curved with 1 or a pair of apical spines; Xth lacking processes. ♀: VIIth abdominal sternum rectangular, hind margin sinuate.

*Distribution.* Australia.

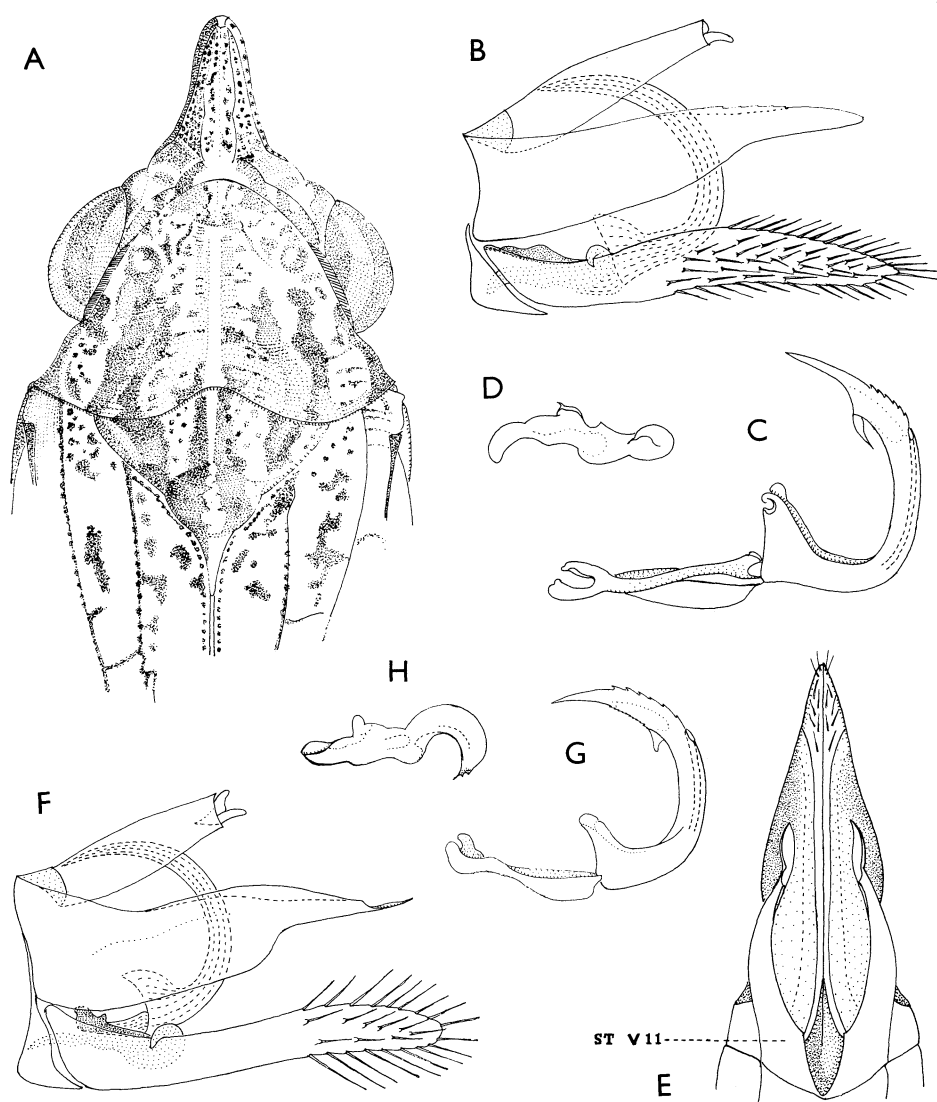


FIG. 2. A-E, *Tartessoides griseus*: A, ♀ head and thorax; B, ♂ genitalia; C, aedeagus and basal plate; D, paramere; E, apex of abdomen. F-H, *T. brunneus*: F, ♂ genitalia; G, aedeagus and basal plate; H, paramere. ST = sternum.

### **Newmaniana mullensis (Evans), new combination**

FIG. 3A-D

*Euprora mullensis* Evans, 1938: 10 (Western Australia: Mullewa—type in SAM).

*Newmaniana viridis* Evans, 1942: 152.

*Stenotartessus mullensis*: Evans, 1947: 207.

Length: ♂, 7 mm; ♀, 9.8–13 mm. ♂ genitalia as in FIG. 3A-C.



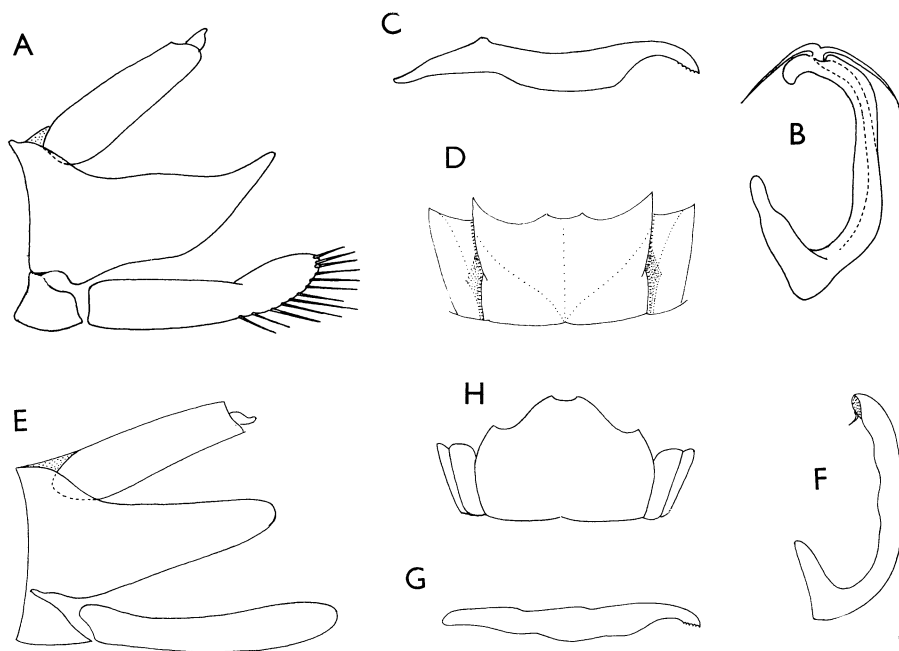


FIG. 3. A-D, *Stenotartessus mullensis*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-H, *S. queenslandensis*: E, ♂ genitalia; F, aedeagus; G, paramere; H, ♀ sternum VII.

**Distribution.** Australia: widely distributed in southern Western Australia; also Kiat, Victoria.

**Remarks.** Taken on *Acacia* spp.

***Newmaniana queenslandensis* (Evans), new combination**

FIG. 3E-H

*Stenotartessus queenslandensis* Evans, 1966: 201 (Queensland: Biloela—type in QM).

Length: ♂, 10 mm; ♀, 12 mm. ♂ genitalia as in FIG. 3E-G.

**Distribution.** Australia: Queensland.

**Genus *Tartessella* Evans**

*Tartessella* Evans, 1937: 56 (type-species: *T. attenuata* Evans).

Pale or dark brown insects ranging in length from 7–12 mm. Face wider than long; labium terminating between fore coxae; anteclypeus widest medially; postclypeus convex; epistomal suture arched; antennal ledges in alignment with center of eyes. Crown flat, widest against eyes. Tegmen long and narrow, sometimes with reticulate venation. ♂ genitalia: pygophore narrowing posteriorly; aedeagus hook-shaped; Xth segment lacking processes. ♀: VIIth abdominal sternum, hind margin sinuate or laterally produced.

**Distribution.** Australia.

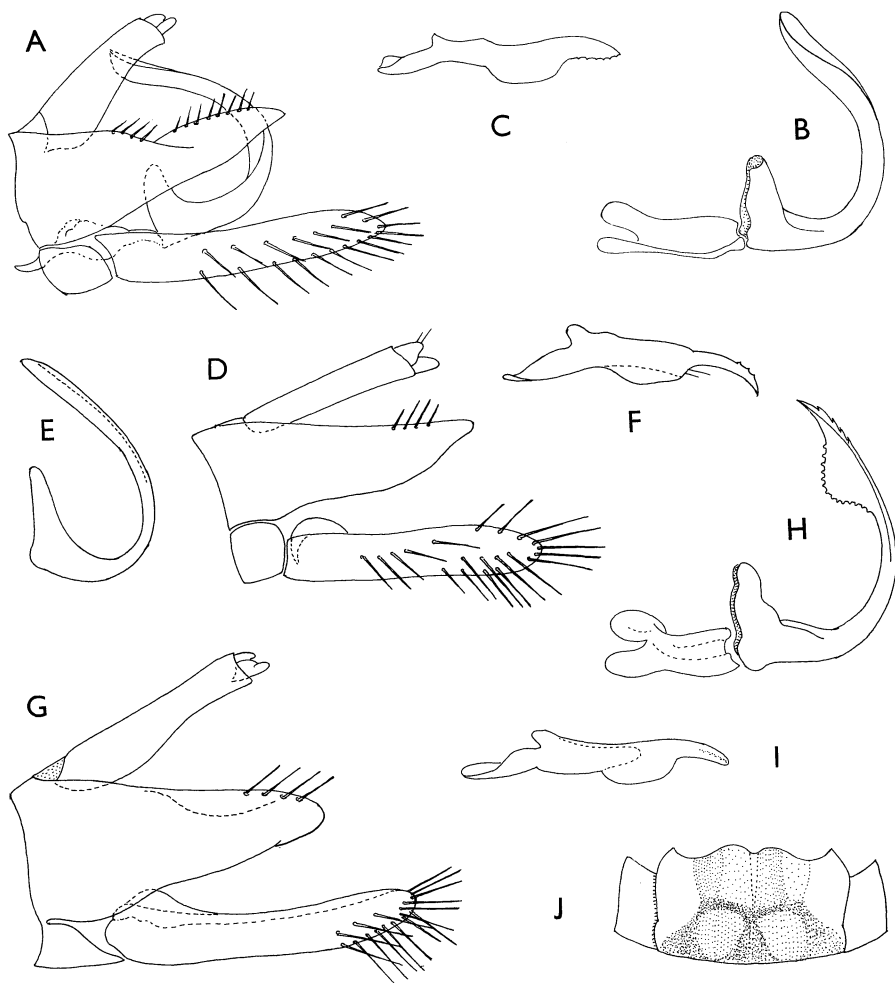


FIG. 4. A–C, *Tartessella attenuata*: A, ♂ genitalia; B, aedeagus and basal plate; C, paramere. D–F, *T. rugosa*: D, ♂ genitalia; E, aedeagus; F, paramere. G–J, *T. incompleta*: G, ♂ genitalia; H, aedeagus and basal plate; I, paramere; J, ♀ sternum VII.

### ***Tartessella attenuata* Evans**

FIG. 4A–C

*Tartessella attenuata* Evans, 1937: 56 (Western Australia: Mullewa—type in SAM).

Length: ♂, 9–11 mm. Coloration: brown with a variable mottled pattern. ♂ genitalia as in FIG. 4A–C.

*Distribution.* Australia: Western Australia.

### ***Tartessella incompleta* Evans**

FIG. 4G–J

*Tartessella incompleta* Evans, 1937: 57 (Queensland: Cunnamulla—type in SAM).

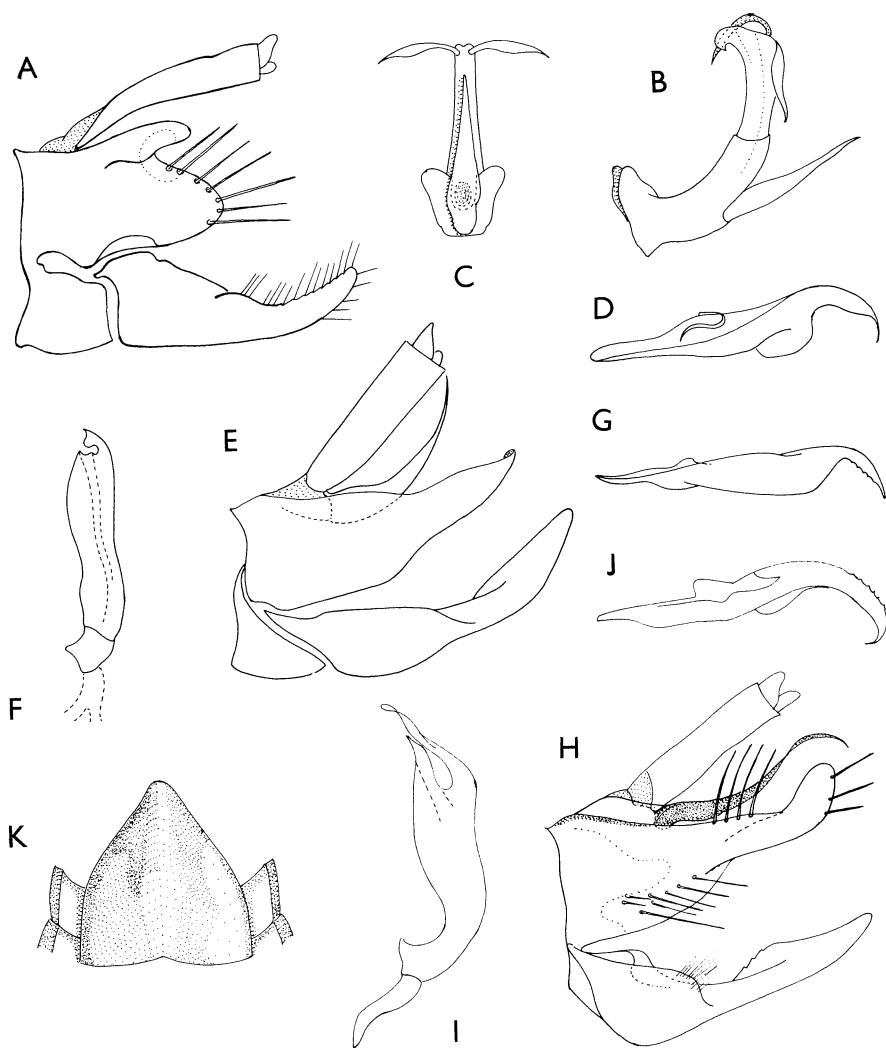


FIG. 5. A-D, *Dorrotartessus dorrigenensis*: A, ♂ genitalia; B, aedeagus in profile; C, posterior view; D, paramere. E-G, *Microtartessus idyia*: E, ♂ genitalia; F, aedeagus; G, paramere. H-K, *M. kurandae*: H, ♂ genitalia; I, aedeagus; J, paramere; K, ♀ sternum VII.

Length: ♂, 8-9 mm; ♀, 11.5-13 mm. Coloration: pale or dark brown. ♂ genitalia as in FIG. 4G-I.

*Distribution.* Australia: Queensland.

### ***Tartessella rugosa* (Evans), new combination**

FIG. 4D-F

*Tartessus rugosus* Evans, 1942: 156 (Western Australia: Yanchep—type in BMNH).

Length: ♂, 7.5 mm. Coloration: brown. ♂ genitalia as in FIG. 4D-E.

*Distribution.* Australia: Western Australia.

**Dorrotartessus F. Evans, new genus**

Small, yellowish-brown, dark brown to black insects. Crown slightly shorter in center than against eyes. ♂ genitalia: pygophore narrowing posteriorly, apically rounded and heavily spined, dorsally produced as a fingerlike process; aedeagus columnar with a pair of acute apical processes and a strong spinelike projection arising from near the base; Xth segment lacking processes. ♀: VIIth abdominal sternum helmet-shaped.

*Type-species.* *Dorrotartessus dorrigenis*, n. sp.

*Distribution.* Australia.

*Remarks.* *Dorrotartessus*, n. gen. and succeeding genera resemble *Tartessus* Stål in general morphological features. These are illustrated in FIG. 1. They differ from *Tartessus* and from each other in their coloration, head shape, and ♂ genitalia.

**Dorrotartessus dorrigenis F. Evans, new species**

FIG. 5A–D

Length: ♂, 5 mm. Face black, external margins of maxillary plates narrowly yellow and a slender band on head posteriorly, yellow. Crown, pronotum and scutellum bright orange. Tegmen dark hyaline brown; veins brown. Body beneath black; legs black, except fore and middle tibiae yellow. ♂ genitalia as in FIG. 5A–D.

Holotype ♂, AUSTRALIA: New South Wales: Dorrigo (SAM).

**Microtartessus F. Evans, new genus**

Small brown or blackish insects. Face: postclypeus flat, overhung posteriorly by transversely striated frons and vertex. Crown declivous, longest against eyes. ♂ genitalia: pygophore narrowing posteriorly with a pair of long, proximally broad, and distally acute processes arising from base; aedeagus columnar, subapically emarginate; Xth segment usually lacking processes. ♀: VIIth abdominal sternum helmet-shaped.

*Type-species.* *Tartessus idyia* Kirkaldy.

*Distribution.* Australia.

*Remarks.* This genus may be distinguished by its characteristic ♂ genitalia, in particular by the shape of the pygophore and aedeagus.

**Microtartessus idyia (Kirkaldy), new combination**

FIG. 5E–G

*Tartessus idyia* Kirkaldy, 1907: 44 (Queensland: Nelson—type in BISHOP).

Length: ♂, 5.6 mm. Face black, sides of postclypeus narrowly pale brown. Crown black or pale brown. Pronotum and scutellum black. Tegmen hyaline testaceous, sometimes in part very dark brown; veins black. ♂ genitalia as in FIG. 5E–G.

*Distribution.* Australia: Queensland (Nelson, Kuranda, and Palmerston National Park).

**Microtartessus kurandae F. Evans, new species**

FIG. 5H–K

Length: ♂, 6 mm; ♀, 8 mm. Face, pronotum anteriorly and scutellum apically pale yellow. Crown, hind margin of pronotum and scutellum anteriorly black. Tegmen pale or dark hyaline brown; veins and costal margin broadly black. ♂ genitalia as in FIG. 5H–J.

Holotype ♂ and allotype ♀, AUSTRALIA: Queensland: Cairns, XII.1969, J.G. Brooks (AM). Paratypes: Queensland: 1♂, Coopers Creek, 16 km N of Daintree Riv, T. Weir (Evans coll.); 1♂, Kuranda, W.M. Giffard (BISHOP).

*Remarks.* Differs from *M. idyia* (Kirkaldy) in the shape of the aedeagus.

### **Unguitartessus F. Evans, new genus**

Small brown insects having the face dark mottled brown or black and the crown pale yellow or pale brown. Crown and thorax either concolorous with the tegmen or considerably paler. Tegmen ochreous or pale hyaline brown; veins dark brown. ♂ genitalia: pygophore deeply roundly emarginate; aedeagus with 3 curved vertical extensions, Xth segment either lacking processes or with a pair of small slender ones. ♀: VIIIth abdominal sternum with the sides sloping towards a central depression.

*Type-species.* *Unguitartessus cairnsensis*, n. sp.

*Distribution.* Australia.

*Remarks.* *Unguitartessus* resembles *Duatartessus*, n. gen. in having a deeply emarginate pygophore and also in certain aedeagal characters. It differs in size, head coloration, and characters of the Xth segment.

#### **Unguitartessus cairnsensis F. Evans, new species**

FIG. 6A-D

Length: ♂, 6.5 mm; ♀, 7.5 mm. Coloration: dorsal surface pale olive brown; face black; crown, pronotum, scutellum and tegmen pale olive brown. ♂ genitalia: pygophore deeply roundly emarginate; aedeagus W-shaped, 2 distal extensions considerably larger than proximal one. ♀: VIIIth abdominal sternum as in FIG. 6D.

Holotype ♂ and allotype ♀, AUSTRALIA: Queensland: Cairns, 4.XI.1971, J.G. Brooks (AM). Paratypes: 2♂, same data as holotype (Evans coll.).

*Remarks.* Distinguished by the deeply emarginate pygophore.

#### **Unguitartessus trispinus F. Evans, new species**

FIG. 6E-G

Length: ♂, 7 mm. Coloration: dorsal surface brown; face black, subantennal depressions yellow; crown, pronotum and scutellum pale brown or pale brownish yellow; tegmen pale hyaline brown. ♂ genitalia: pygophore emarginate, though less so than in type-species; aedeagus broad, curved, with a pair of long slender posterior extensions.

Holotype ♂, AUSTRALIA: Queensland: Cairns, 4.VI.1971, J.G. Brooks (AM).

*Remarks.* Differs from the type-species in the pygophore being considerably less emarginate and in aedeagal characters.

### **Alotartessus F. Evans, new genus**

Small yellowish-brown insects. Crown slightly longer against eyes than in center or of even length. ♂ genitalia: pygophore approximately rectangular, hind margin dorsally emarginate; aedeagus narrowly U-shaped with a pair of long narrow apical processes; Xth segment lacking processes. ♀: VIIIth abdominal sternum posteriorly sinuate, medially notched.

*Type-species.* *Tartessus iambe* Kirkaldy.

*Distribution.* Australia.

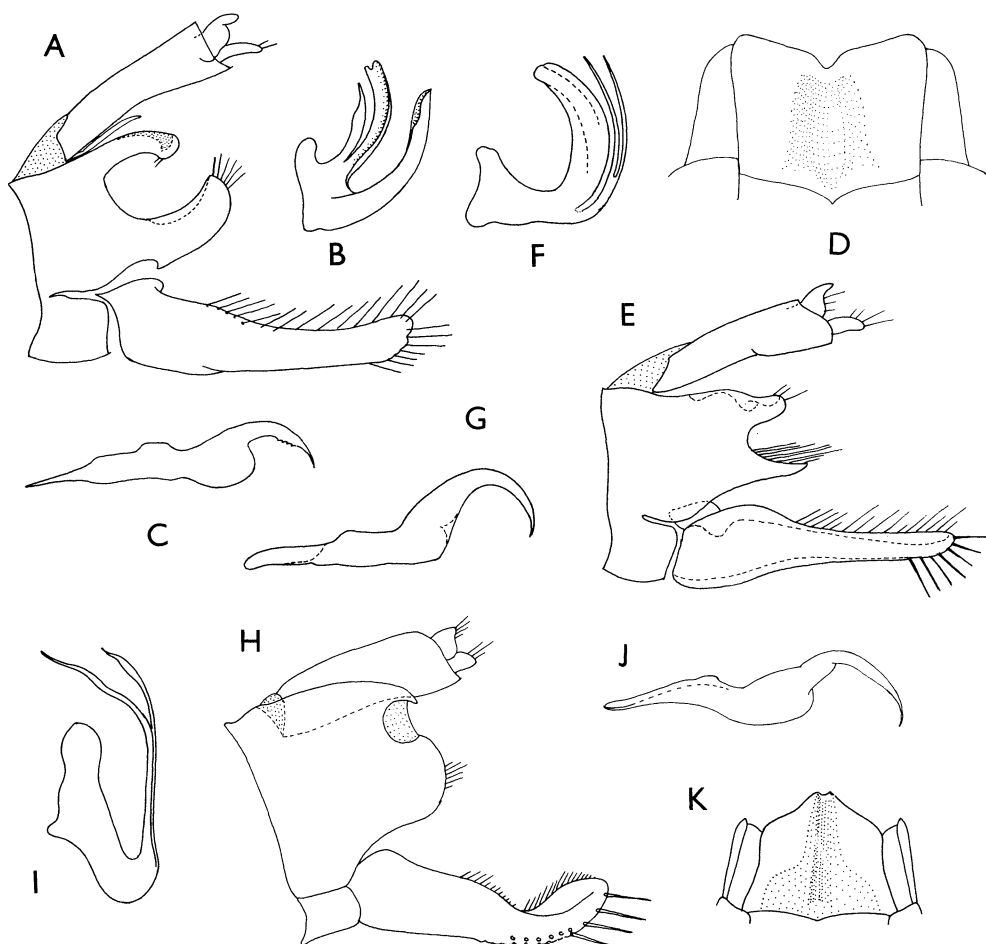


FIG. 6. A-D, *Unguitartessus cairnsensis*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-G, *U. trispinus*: E, ♂ genitalia; F, aedeagus; G, paramere. H-K, *Alotartessus iambe*: H, ♂ genitalia; I, aedeagus; J, paramere; K, ♀ sternum VII.

**Remarks.** Resembling *Unguitartessus*, n. gen. in having a partly emarginate pygophore. Differing in aedeagal characters.

***Alotartessus iambe* (Kirkaldy), new combination**

FIG. 6H-K

*Tartessus iambe* Kirkaldy, 1907: 46 (New South Wales: Sydney—type in BISHOP).

*Tartessus mackerrasi* Evans, 1937: 54.

Length: ♂, 6–7 mm. Face: ♂, black with yellow markings and a yellow transverse band posteriorly; ♀, yellow with variable black markings. Tegmen hyaline brown; veins pale or dark brown.

**Distribution.** Australia: New South Wales (Casula, Leura, Mittagong, Mt Kosciuszko); Queensland (Brisbane, Tweed Heads).

**Neotartessus F. Evans, new genus**

Small, yellowish-brown or black insects ranging in length from 3–6 mm. Crown of equal length with eyes. Tegmen brown or yellowish hyaline sometimes partly suffused with brown; veins pale or dark brown or black. ♂ genitalia: pygophore narrowing posteriorly, apically rounded, sometimes apically curved; aedeagus either broadly S-shaped and apically hammerlike or curved and apically hooked. Xth segment with a pair of curved parallel-sided processes which arise from near the base of the segment or which may seemingly be associated with an inner fold of the pygophore. ♀: VIIth abdominal sternum narrowing posteriorly inwardly or outwardly curved medially notched.

*Type-species.* *Tartessus flavipes* Spångberg.

*Distribution.* Australia.

*Remarks.* Distinguished by the characteristic shape of the aedeagus.

**Neotartessus flavipes (Spångberg), new combination**

FIG. 7A–F

*Tartessus flavipes* Spångberg, 1878: 4 (Northern Australia—type in STOCKHOLM).

*Tartessus sahlbergii* Signoret, 1880: 351. **New synonymy.**

*Tartessus io* Kirkaldy, 1907: 46.

Length: ♂, 6–6.8 mm; ♀, 6.2–7.2 mm. Coloration: variable, ranging from yellow to dark brown or black. ♂ usually considerably darker than ♀. Face golden yellow, buff, dark brown or black; muscle impressions on postclypeus prominent. Pronotum ochreous to black with pale areas behind the eyes. Scutellum concolorous with pronotum, sometimes apically pale. Tegmen hyaline brown, apically smoky with pale areas at apex of clavus and between veins  $R_{1a}$  and  $R_{1b}$ ; veins dark brown, marginal vein apically whitish. ♂ genitalia as in FIG. 7D–F.

*Distribution.* Australia: generally eastern.

**Neotartessus parvus (Evans), new combination**

FIG. 7J, K

*Tartessus parvus* Evans, 1966: 198 (Western Australia: S of Bunbury—type in AM).

Length: ♂, 3–4 mm. Coloration: pale yellowish brown. Face broadly triangular, yellowish; ante- and postclypeus brown. Pronotum and scutellum pale yellow. Tegmen pale yellowish hyaline; veins yellow. ♂ genitalia as in FIG. 7J, K.

*Distribution.* Australia: Western Australia.

**Neotartessus fumus (Evans), new combination**

FIG. 7G–I

*Tartessus fumus* Evans, 1942: 155 (Western Australia: Mundaring—type in BMNH).

Length: ♂, 3–4 mm. Coloration: brown to golden brown. Head and thorax golden brown. Tegmen pale hyaline brown, apex smoky; veins dark brown. ♂ genitalia as in FIG. 7G–I.

*Distribution.* Australia: Western Australia.

**Neotartessus mundarensis (Evans), new combination**

FIG. 7L

*Tartessus mundarensis* Evans, 1942: 155 (Western Australia: Mundaring—type in BMNH).

Length: ♂, 5–6 mm. Coloration: testaceous. Head and thorax pale brown. Tegmen pale hyaline brown; veins brown. ♂ genitalia: aedeagus as in FIG. 7L.

*Distribution.* Australia: Western Australia.

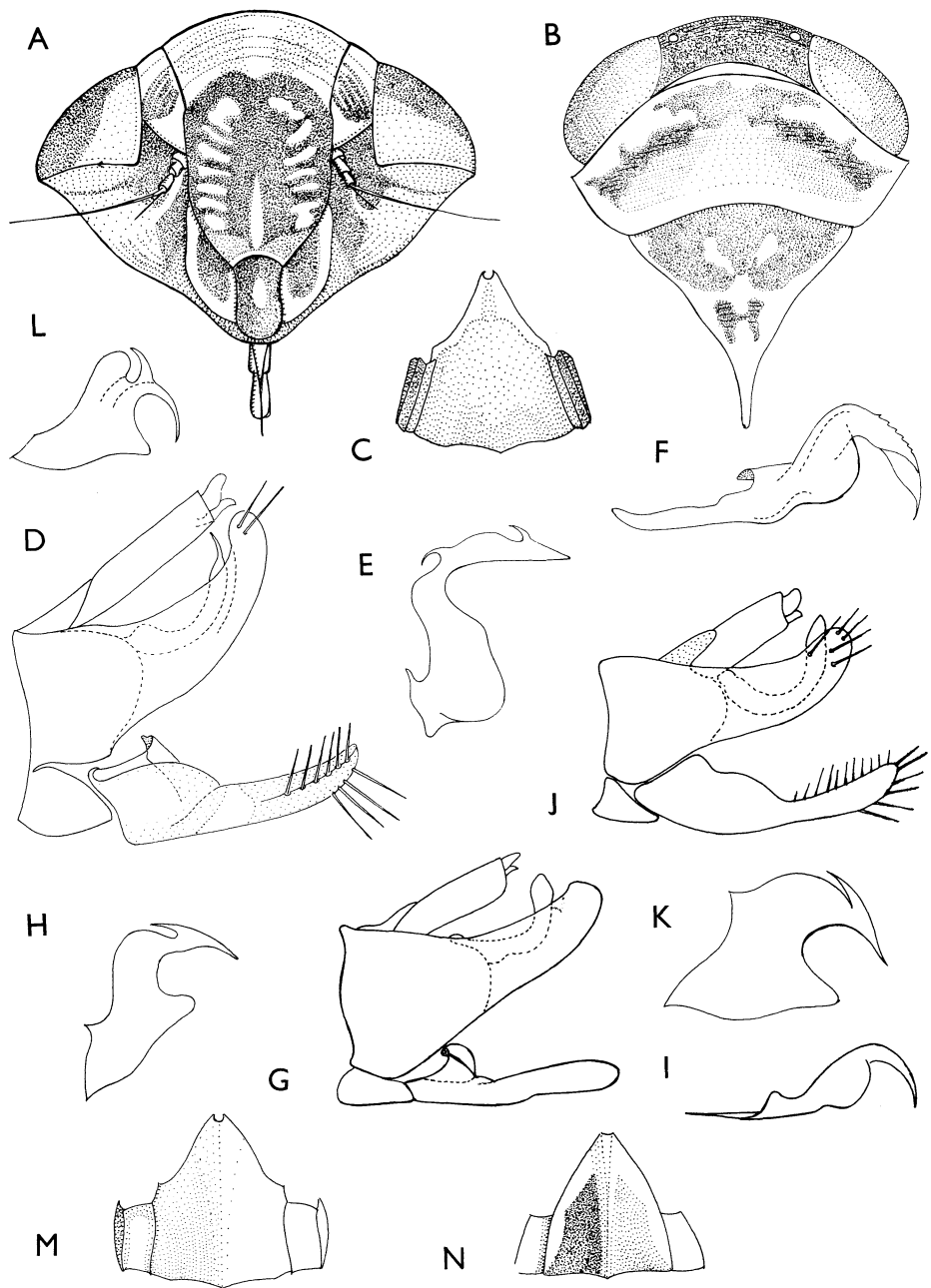


FIG. 7. A-F, *Neotartessus flavipes*: A, face; B, crown and thorax; C, ♀ sternum VII; D, ♂ genitalia; E, aedeagus; F, paramere. G-I, *N. fumus*: G, ♂ genitalia; H, aedeagus; I, paramere. J-K, *N. parvus*: J, ♂ genitalia; K, aedeagus; L, *N. mundarensis*, aedeagus. M, *N. pallidus*, ♀ sternum VII. N, *N. ianeira*, ♀ sternum VII.



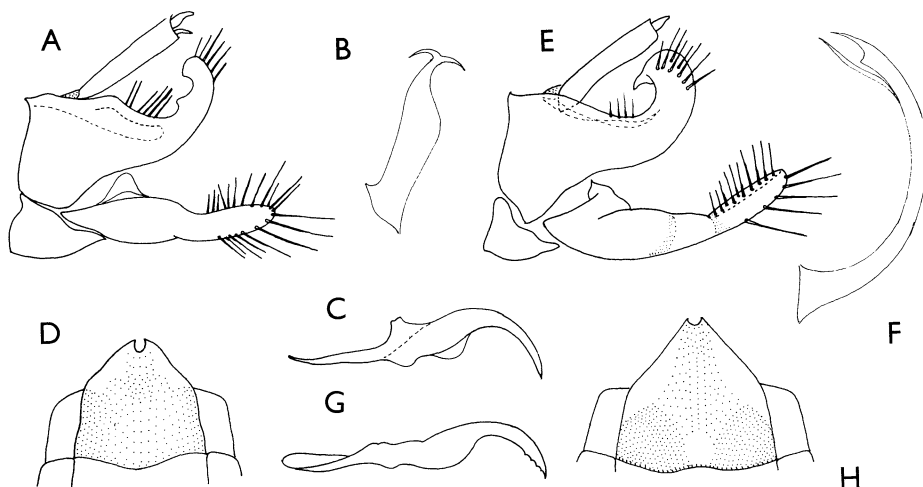


FIG. 8. A-D, *Spanotartessus evansi*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-H, *S. montanus*: E, ♂ genitalia; F, aedeagus; G, paramere; H, ♀ sternum VII.

### ***Neotartessus ianeira* (Kirkaldy), new combination**

FIG. 7N

*Tartessus ianeira* Kirkaldy, 1907: 48 (New South Wales: Sydney—type in BISHOP).

Length: ♀, 5.8 mm. Coloration: brown. Face pale brown with dark brown muscle impressions on post-clypeus; lateral sutures of well-defined crown posteriorly divergent. Pronotum and scutellum ochreous. Tegmen, including veins, brown. ♀: VIIth abdominal sternum as in FIG. 7N.

*Distribution.* Australia: New South Wales.

### ***Neotartessus pallidus* (Evans), new combination; resurrected from synonymy**

FIG. 7M

*Tartessus pallidus* Evans, 1937: 54 (New South Wales: Sydney—type in AM).

Length: ♀, 7 mm. Coloration: golden yellowish brown. Face pale yellowish brown; lateral margins of well-defined frons posteriorly divergent. Crown declivous, slightly longest against eyes. Pronotum and scutellum ochreous. Tegmen similarly colored; veins brown. ♀: VIIth abdominal sternum as in FIG. 7M.

*Distribution.* Australia: New South Wales.

*Remarks.* This species, which previously has been regarded as a junior synonym of *Austrotartessus iokaste* (Evans 1966), is reinstated as a separate species because of its differently shaped ♀ VIIth abdominal sternum. In the absence of ♂ specimens, its placement in the genus *Neotartessus* is provisional.

### ***Spanotartessus* F. Evans, new genus**

Small brown insects. Crown of variable length. Tegmen hyaline brown. ♂ genitalia: pygophore spanner- or hook-shaped; aedeagus columnar, apically bifurcate. Xth abdominal segment with a pair of long narrow processes arising from the base. ♀: VIIth abdominal sternum helmet-shaped, medially notched.

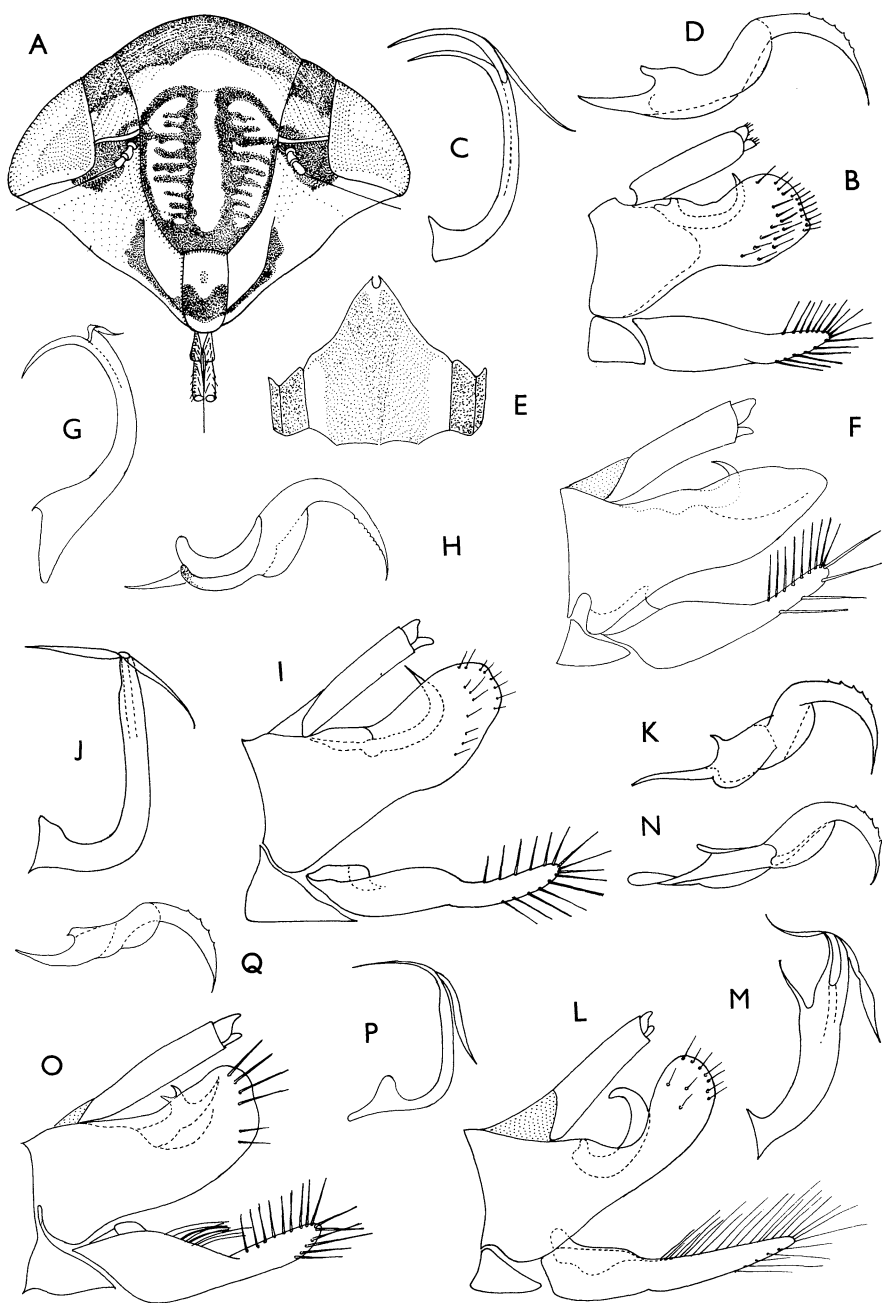


FIG. 9. A-E, *Brunotartessus fulvus*: A, head; B, ♂ genitalia; C, aedeagus; D, paramere; E, ♀ sternum VII. F-H, *B. ianthe*: F, ♂ genitalia; G, aedeagus; H, paramere. I-K, *B. darwinensis*: I, ♂ genitalia; J, aedeagus; K, paramere. L-N, *B. eldoensis*: L, ♂ genitalia; M, aedeagus; N, paramere. O-Q, *B. aroaensis*: O, ♂ genitalia; P, aedeagus; Q, paramere.

*Type-species.* *Tartessus obscurus* Evans.

*Distribution.* Australia.

*Remarks.* Distinguished by the hook-shaped pygophore.

**Spanotartessus evansi** (Metcalf), **new combination**

FIG. 8A-D

*Tartessus obscurus* Evans, 1937: 54 (nec Schmidt, 1920) (New South Wales: Leura—type in AM).

*Tartessus evansi* Metcalf, 1955: 266 (new name).

Length: ♂, 4.5 mm; ♀, 5–6 mm. Coloration: golden brown. Crown of head longer in center than against eyes. Face pale brownish yellow with dark brown muscle impressions on postclypeus. Tegmen hyaline brown; veins brown. ♂ genitalia as in FIG. 8A–C.

*Distribution.* Australia: New South Wales (Leura), Queensland (Torbul Pt.).

**Spanotartessus montanus** F. Evans, **new species**

FIG. 8E-H

Length: ♂, 4–5 mm; ♀, 5–6 mm. Coloration: brown. Face dark brown. Crown of even length. Pronotum and scutellum dark yellowish brown. ♂ genitalia as in FIG. 8E–G.

Holotype ♂ and allotype ♀, AUSTRALIA: New South Wales: Katoomba, III.1967, J.W. & F. Evans (AM). Paratypes: 1♂, 1♀, same data as holotype (Evans coll.).

*Remarks.* *S. montanus* resembles the type-species in coloration, general appearance, and pygophore shape. It differs in aedeagus shape. Its assignment to this genus is provisional.

**Brunotartessus** F. Evans, **new genus**

Sturdy, brown or brown and yellow insects, sometimes ventrally black, 8–10 mm in length. Crown longest against eyes, together with pronotum and scutellum, brown or yellow. Tegmen pale hyaline brown sometimes with whitish or vitreous areas. ♂ genitalia: pygophore rounded apically with a pair of short, broad curved processes arising from the inner margin and seemingly not associated with the Xth segment; aedeagus columnar with subapical or apical acute processes. ♀: VIIth abdominal sternum with sides of hind margin sloping towards the medially notched apex.

*Type-species.* *Bythoscopus fulvus* Walker.

*Distribution.* Australia and New Guinea.

**Brunotartessus fulvus** (Walker), **new combination**

FIG. 9A-E

*Bythoscopus fulvus* Walker, 1851: 866 (Van Diemen's Land—type in BMNH).

*Bythoscopus transversus* Walker, 1851: 869.

*Bythoscopus latifrons* Walker, 1851: 869.

*Bythoscopus semicitrinus* Walker, 1858: 105.

*Tartessus australicus* Spångberg, 1878: 3.

*Tartessus subniger* Signoret, 1880: 350.

*Tartessus syrtidis* Kirkaldy, 1906: 341.

Length: ♂, 6–8 mm; ♀, 8–10 mm. Face black and yellow, predominantly black in ♂; postclypeus with a bold herringbone pattern. Crown and thorax yellow. Tegmen pale hyaline brown with 1 or a pair of indistinct whitish fasciae. Ventral surface of thorax and abdomen black; legs pale brown. ♂ genitalia as in FIG. 9B–D.

*Distribution.* Widespread in Australia generally.

**Brunotartessus ianthe** (Kirkaldy), **new combination**

FIG. 9F–H

*Tartessus ianthe* Kirkaldy, 1907: 47 (Queensland: Cairns—type in BISHOP).

Length: ♂, 7–8 mm; ♀, 9–11 mm. Coloration: pale brown. Face pale brown; frontoclypeus and vertex sparsely mottled. Crown declivous. Pronotum and scutellum pale brown with faint pale blotches. Tegmen evenly hyaline brown; veins pale brown. Ventral surface of thorax and abdomen pale brown. ♂ genitalia as in FIG. 9F–H.

**Distribution.** Australia: Cape York Peninsula to southern tablelands of New South Wales, west to Murwillumbah. Southern specimens are somewhat smaller and darker than northern ones.

**Remarks.** *B. ianthe* resembles the type-species in the shape of the VIIth abdominal sternum of the ♀ and in the shape and position of the Xth segment processes of the ♂. It differs in color and in the shape of the apical extensions of the aedeagus.

**Brunotartessus darwinensis** F. Evans, **new species**

FIG. 9I–K

Length: ♂, 8 mm. Closely resembling *B. ianthe* in appearance and coloration. Differing in having paired, apical aedeagus extensions of equal length.

Holotype ♂, AUSTRALIA: Northern Territory: Darwin, I.1939, M. Kamper (AM). Paratypes: Northern Territory: 1♂, 19 km WSW of Mt Cahill, Weir & Angeles (Evans coll.). 1♂, Maningrida, Arnhem Land, Gressitt (BISHOP).

**Brunotartessus eldoensis** F. Evans, **new species**

FIG. 9L–N

Length: ♂, 7–8 mm; ♀, 9–10 mm. Face pale yellowish with black markings, developed more extensively in ♂. Crown pale grayish or yellow. Pronotum grayish with 6 or 8 small brown anterior markings. Scutellum concolorous with pronotum. Tegmen pale vitreous brown. Ventral surface of thorax and abdomen yellow. ♂ genitalia as in FIG. 9L–N.

Holotype ♂ and allotype ♀, AUSTRALIA: Northern Territory: Eldo, 12.I.1971, T. Weir & A. Allwood (ANIC).

**Remarks.** This species can be distinguished from others in the genus by the shape of the aedeagus.

**Brunotartessus aroaensis** F. Evans, **new species**

FIG. 9O–Q

Length ♂, 7 mm. Face pale yellowish brown; postclypeus irregularly mottled with brown. Crown declivous, yellow. Pronotum and scutellum concolorous with crown. Tegmen pale hyaline whitish brown; veins pale and dark brown. ♂ genitalia as in FIG. 9O–Q.

Holotype ♂, PNG: NEW GUINEA (SE): Aroa Estate, W of Redscar Bay, 29.IX.1958, J.L. Gressitt (BISHOP 11,703).

**Remarks.** Resembles *B. darwinensis*, n. sp. in the shape but not the proportions of the aedeagus, but differs in the shape of the Xth segment process.

**Brunotartessus cunnamullensis** F. Evans, **new species**

FIG. 10A–D

Length: ♂, 6–7 mm; ♀, 8–8.5 mm. Coloration: pale yellow or pale brown. Head and thorax yellow. Crown slightly longest against eyes. Tegmen pale hyaline brown or vitreous, apically smoky. ♂ genitalia as in FIG. 10A–C.

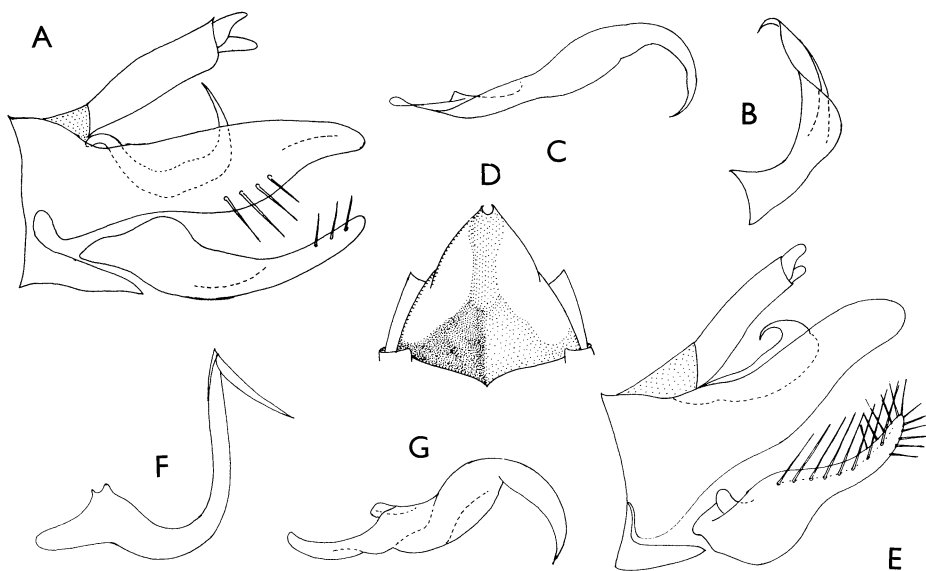


FIG. 10. A-D, *Brunotartessus cunnamullensis*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-G, *B. weiri*: E, ♂ genitalia; F, aedeagus; G, paramere.

Holotype ♂ and allotype ♀, AUSTRALIA: Queensland: Cunnamulla, V.1942, M. Geary (AM). Paratype: 1♂, Northern Territory: Darwin, Moore (Evans coll.).

*Remarks.* Distinguished from other species in the genus by the shape of the aedeagus.

#### ***Brunotartessus weiri* F. Evans, new species**

FIG. 10E-G

Length: ♂, 6.2 mm. Coloration: pale olive brown. Face pale brown. Crown and thorax pale olive brown. Tegmen vitreous, apically smoky; veins dark brown. ♂ genitalia as in FIG. 10E-G.

Holotype ♂, AUSTRALIA: Northern Territory: Cooper Creek, 19 km E by S of Mt Boradaile, 2.XI.1972, T. Weir & G.T. Angeles (ANIC).

*Remarks.* Distinguished from other species in the genus by the shape of the aedeagus.

#### ***Tenuitartessus* F. Evans, new genus**

Narrow pale brown insects. Crown of even length or slightly shorter in center. Pronotum not extending in front of eyes. Tegmen pale hyaline brown; veins brown. ♂ genitalia: pygophore rounded posteriorly; aedeagus columnar, curved, enlarged apically. Xth segment with a pair of long, curved processes arising from the base. ♀: VIIth abdominal sternum narrowly helmet-shaped, sometimes medially emarginate.

*Type-species.* *Tartessus blundellensis* Evans.

*Distribution.* Australia.

*Remarks.* Distinguished by having apically swollen columnar aedeagi and pygophores which are apically truncate.

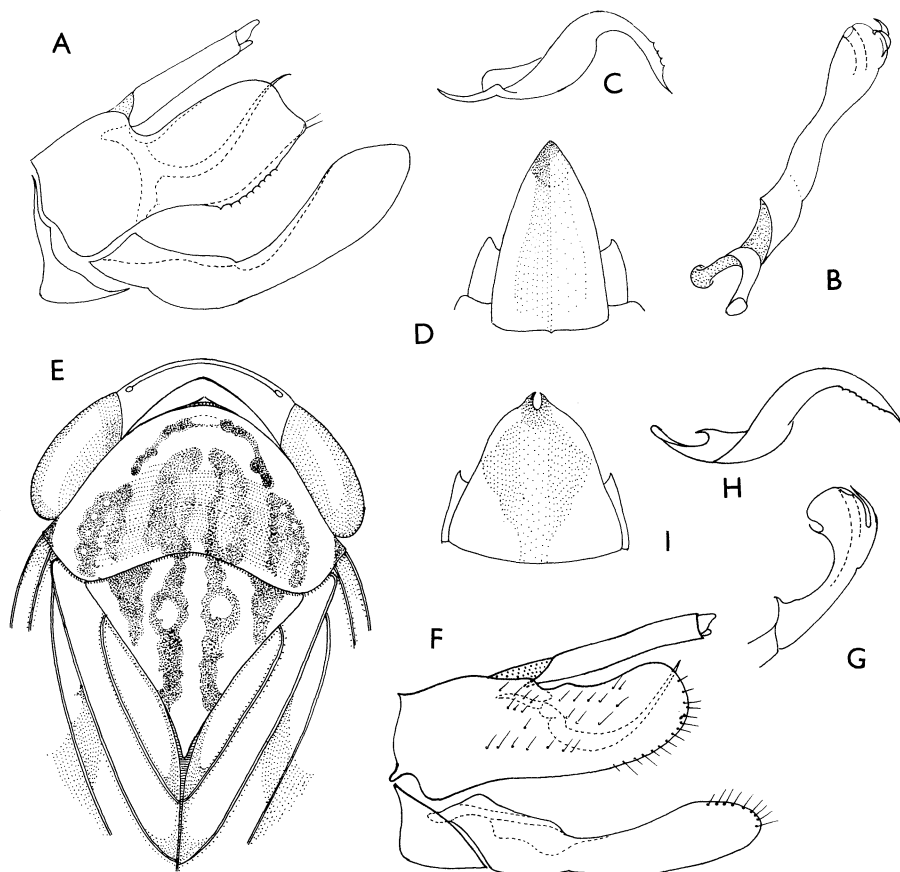


FIG. 11. A–D, *Tenuitartessus blundellensis*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E–I, *T. angelesi*: E, head and thorax; F, ♂ genitalia; G, aedeagus; H, paramere; I, ♀ sternum VII.

### ***Tenuitartessus blundellensis* (Evans), new combination**

FIG. 11A–D

*Tartessus blundellensis* Evans, 1937: 55 (A.C.T.: Blundells—type in ANIC).

Length: ♂, 8.5 mm; ♀, 9.5 mm. Coloration: pale coffee brown. Face pale brown. Pronotum pale brown with pale yellowish markings. Scutellum pale brown with 3 pale yellowish longitudinal stripes and a pair of circular yellowish spots. ♂ genitalia as in FIG. 11A–C.

**Distribution.** Australia: A.C.T., Victoria (Upper Nariel), New South Wales (Ny-magee), and Queensland (Brisbane).

### ***Tenuitartessus angelesi* F. Evans, new species**

FIG. 11E–I

Length: ♂, 6.8 mm, ♀, 7.8 mm. Coloration: stramineous. Face stramineous, partly dark brown in ♀. Pronotum and scutellum pale stramineous, sometimes in ♀ with a distinctive pattern of longitudinal coffee-colored markings. Tegmen pale hyaline brown; veins pale or dark brown. ♂ genitalia: pygophore

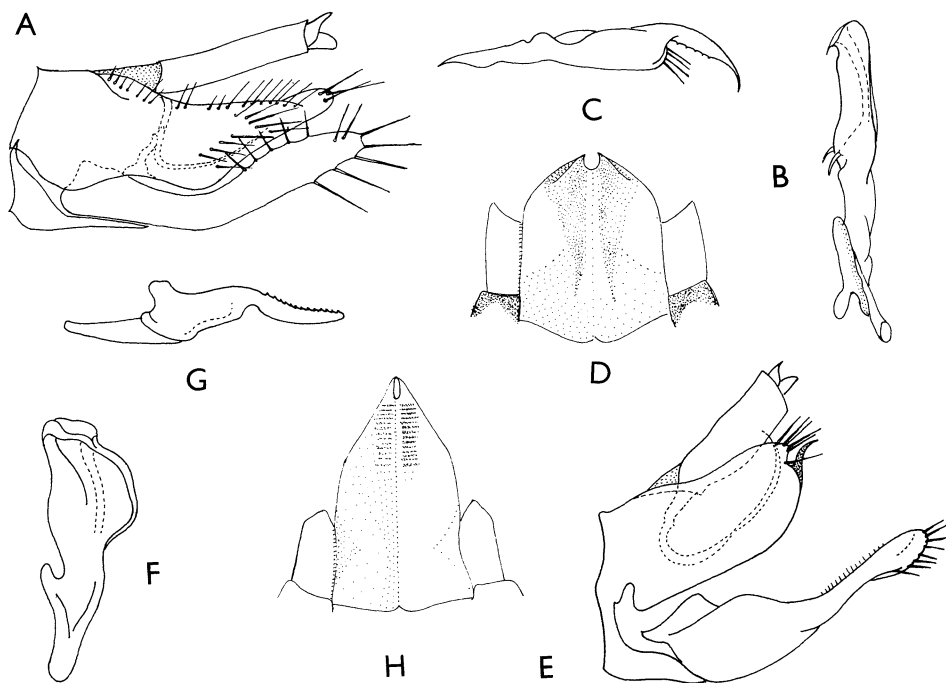


FIG. 12. A-D, *Bulotartessus cooloolensis*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-H, *B. ambiguus*: E, ♂ genitalia; F, aedeagus; G, paramere; H, ♀ sternum VII.

parallel-sided, apically rounded; aedeagus club-shaped with an anterior and a posterior spine. Xth segment with a pair of hook-shaped processes arising from the base.

Holotype ♂, AUSTRALIA: Northern Territory: Nourlangie Creek, 6 km E of Mt Cahill, 12.X.1972, T. Weir (ANIC). Allotype ♀, Northern Territory: Cooper Creek, 11 km S by W of Nimburah Rock, 1.XI.1972, T. Weir & G.T. Angeles (ANIC). Paratypes: 1♂, 2♀, same data as allotype (Evans coll.).

*Remarks.* *T. angelesi*, n. sp. resembles the type-species in ♂ genitalia characters but differs considerably in size and coloration.

### ***Bulotartessus* F. Evans, new genus**

Yellow and brown insects ranging in length from 6.3–12 mm. Crown either of equal length with eyes, longest against eyes, or roundly produced and longest in center. Crown and thorax bright yellow. Tegmen pale or dark hyaline brown, apically smoky, sometimes with 1 or 2 whitish transverse fasciae; veins pale or dark brown. ♂ genitalia: pygophore proximally parallel-sided, narrowing posteriorly; aedeagus columnar, parallel-sided, or broadest at apex; Xth segment with a pair of U-shaped processes arising from the base. ♀: VIIth abdominal sternum, sides of hind margin curved, medially notched.

*Type-species.* *Bulotartessus cooloolensis*, n. sp.

*Distribution.* Australia.

**Bulotartessus cooloolensis** F. Evans, **new species**

FIG. 12A–D

Length: ♂, 6.3 mm. Coloration: yellow, brown and white. Head and thorax yellow. Crown, bearing ocelli, of even length. Tegmen, in part, pale hyaline brown, partly white, apex broadly smoky brown and with brown markings at apex of claval suture and against costal border; veins dark brown. ♂ genitalia as in FIG. 12A–C.

Holotype ♂, AUSTRALIA: Queensland: Cooloola, 13.III.1970, E. Dahms (QM).  
Paratype: 1♂, Queensland: Black Mt Rd, E of Mt Malloy, Brooks (Evans coll.).

*Remarks.* Distinguished by color characteristics and by the shape of the aedeagus.

**Bulotartessus ambiguus** F. Evans, **new species**

FIG. 12E–H

Length: ♂, 10 mm; ♀, 12 mm. Coloration: pale yellowish brown, pale brown and white. Head and thorax pale brown (possibly yellow in life). Crown anteriorly produced, of even length. Tegmen pale brown, apically darker and with a pair of incomplete transverse white fasciae. ♂ genitalia as in FIG. 12E–G.

Holotype ♂, AUSTRALIA: Queensland: Kuranda, 200 m, 14.III.1956, J.L. Gressitt (BISHOP 11,704). Allotype ♀, Queensland: Cairns, 4.XI.1971, J.G. Brooks (AM).

*Remarks.* It is with some hesitation that the above species has been placed in the same genus as *B. cooloolensis*, for not only is it considerably larger but it more closely resembles *Plexitartessus pulchellus*, n. comb. in general appearance. However, the last-named species lacks Xth segment processes in the ♂ and *B. ambiguus* resembles the type-species of *Bulotartessus* in color pattern characteristics.

**Kaltitartessus** F. Evans, **new genus**

Striking-looking insects light and dark brown in color. Crown only slightly wider than length of each eye. ♂ genitalia: pygophore short, rounded posteriorly with 3 apical spinelike processes; aedeagus with a pair of long, parallel-sided parts. Xth segment with a pair of broad, pick-axe-shaped processes arising from the base, or with paired spinelike processes.

*Type-species.* *Kaltitartessus mouldsi*, n. sp.

*Distribution.* Australia.

*Remarks.* Distinguished by distinctive coloration and by characters provided by the ♂ genitalia.

**Kaltitartessus mouldsi** F. Evans, **new species**

FIG. 13D–F

Length: ♂, 9 mm. Face, maxillary plates, lora and sides of postclypeus yellow, remainder black. Pronotum anteriorly yellowish, posteriorly brown. Scutellum brown, the sides anteriorly and apex subapically yellow. Tegmen pale hyaline brown, clavus proximally and distally and veins black. ♂ genitalia as in FIG. 13D–F.

Holotype ♂, AUSTRALIA: Queensland: Mt Lewis, SW of Mossman, 7.XII.1966, M.S. Moulds (AM).

*Remarks.* Distinguished by ♂ genitalia characteristics.



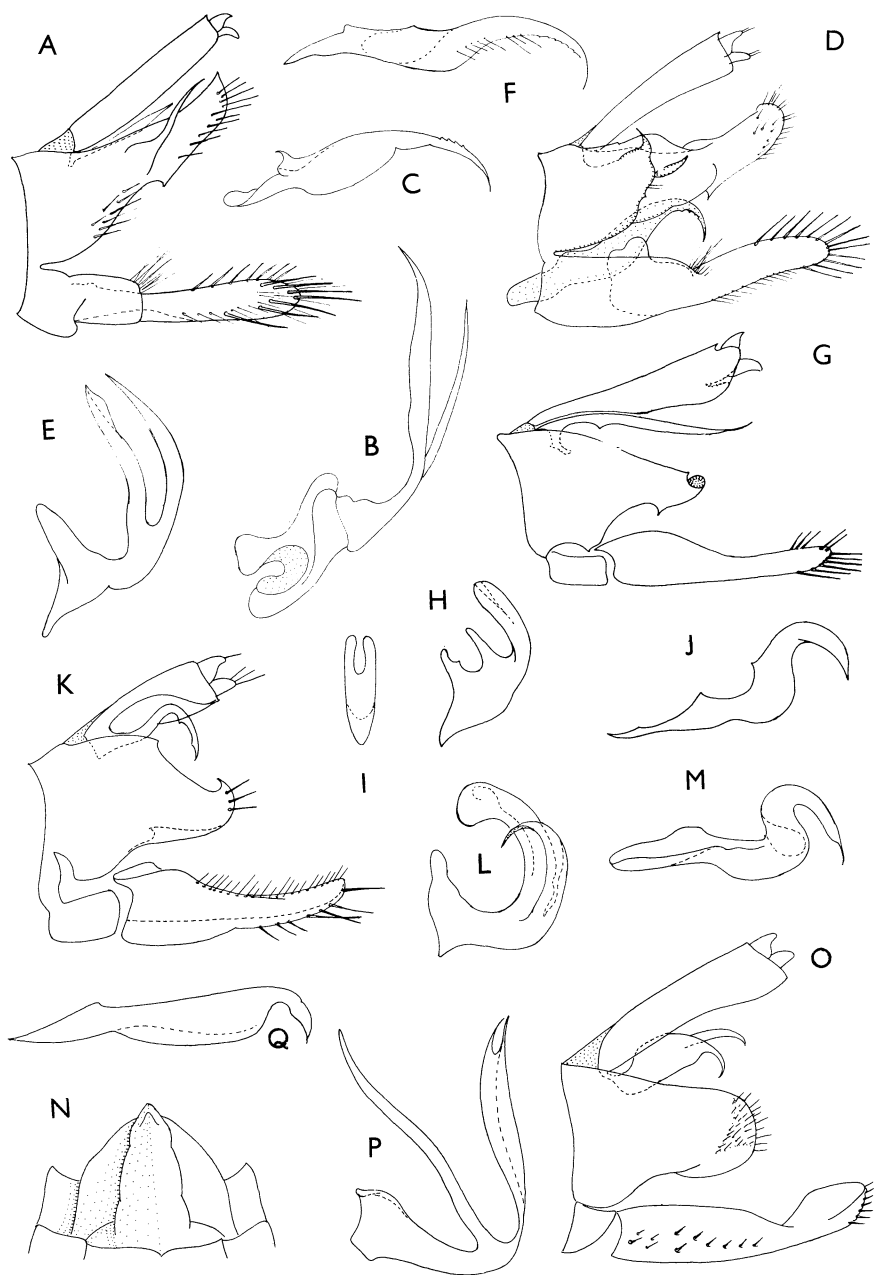


FIG. 13. A-C, *Kaltitartessus anomalus*: A, ♂ genitalia; B, aedeagus; C, paramere. D-F, *K. mouldsi*: D, ♂ genitalia; E, aedeagus; F, paramere. G-J, *Nigritartessus henriettensis*: G, ♂ genitalia; H, aedeagus; I, in apical aspect; J, paramere. K-N, *Distantessus iphis*: K, ♂ genitalia; L, aedeagus; M, paramere; N, ♀ sternum VII. O-Q, *Furcatartessus waiwerensis*: O, ♂ genitalia; P, aedeagus; Q, paramere.

**Kaltitartessus anomalus** F. Evans, **new species**

FIG. 13A–C

Length: ♂, 8.5 mm. Coloration: brownish yellow with black markings. Face anteriorly, as far as antennal ledges, yellowish, posteriorly black. Crown black, pronotum and scutellum pale brownish yellow, apex of latter pale yellow. Tegmen vitreous pale brown, costal margin broadly, base and apex of external margin, and veins black. ♂ genitalia: pygophore apically acute with a long narrow external process; aedeagus with a pair of long slender extensions. Xth segment with a pair of small, straight, spinelike processes arising from the base.

Holotype ♂, AUSTRALIA: Queensland: Mossman, 7.XII.1966, B. Cantrell (QM).

*Remarks.* This species resembles the type-species in having a pair of long narrow aedeagus processes. It differs in having shorter processes and in pygophore shape.

**Nigritartessus** F. Evans, **new genus**

Small insects appearing completely black in color. Tegmen dark hyaline brown; veins black. ♂ genitalia: pygophore narrowing and irregularly shaped posteriorly; aedeagus consisting of 2 vertical columns, a short proximal one and a longer distal one, apically divided into 2 fingerlike lobes. Xth segment with a pair of unusually long, narrow, curved processes arising from the base.

*Type-species.* *Nigritartessus henriettensis*, n. sp.

*Distribution.* Australia.

*Remarks.* Differing from other genera in coloration and ♂ genitalia characteristics.

**Nigritartessus henriettensis** F. Evans, **new species**

FIG. 13G–J

Length: ♂, 6 mm. Coloration: black and dark brown. Face flat. Pronotum declivous, together with scutellum, black. Ventral surface of thorax and abdomen, and legs black. ♂ genitalia as in FIG. 13G–J.

Holotype ♂, AUSTRALIA: Queensland: Palmerston National Park, Henrietta Creek, 12.XII.1966, B. Cantrell (QM). Paratypes: Queensland: 2♂, 1, same data as holotype; 1, Cairns, Brooks (Evans coll.).

**Distantessus** F. Evans, **new genus**

Small orange-brown or black insects. ♂ genitalia: pygophore apically hooked; aedeagus curved with a long, narrow, posterior process; parameres S-shaped. Xth segment with a pair of curved processes arising from, or from near, the base.

*Type-species.* *Tartessus iphis* Kirkaldy.

*Distribution.* Australia.

*Remarks.* While the shape of the aedeagus of the type-species suggests some relationship with species comprised in the new genus *Austrotartessus*, it is nevertheless sufficiently distinctive to merit placement in a separate genus.

**Distantessus iphis** Kirkaldy, **new combination**

FIG. 13K–N

*Tartessus iphis* Kirkaldy, 1907: 45 (Queensland: Nelson—type in BISHOP).

Length: ♂, 6–7 mm; ♀, 6.5–7 mm. Face black, narrowly brown posteriorly. Crown, pronotum and scutellum orange or black. Tegmen hyaline orange, dark brown, or black. ♂ genitalia as in FIG. 13K–M.

*Distribution.* Australia: Queensland (Cairns, Townsville, Iron Range); New Guinea (Port Moresby, on mangroves).

**Furcartartessus F. Evans, new genus**

Small bronze insects with a convex face. Crown bearing ocelli ill-defined or of even length. ♂ genitalia: pygophore broad, evenly rounded, spinous; aedeagus V-shaped, distal extension wider than proximal one. Xth segment with a pair of short, broad processes with 2 differently shaped apical spines arising from the base.

*Type-species.* *Furcartartessus waiwerensis*, n. sp.

*Distribution.* Australia.

*Remarks.* While the type-species of this genus has an aedeagus similar in shape to those of species in *Kaltitartessus*, n. gen., it differs in having a broadly rounded pygophore.

**Furcartartessus waiwerensis F. Evans, new species**

FIG. 130-Q

Length: ♂, 7 mm. Head pale brown. Pronotum brown medially suffused with dark brown. Scutellum brown, apex pale yellowish. Tegmen hyaline yellowish; veins dark brown. ♂ genitalia as in FIG. 130-Q.

Holotype ♂, AUSTRALIA: New South Wales: Waiwere, Narrabri, 20.I.1975, P.M. Room (ANIC). Paratype: 1♂, same data as holotype (Evans coll.).

**Protartessus F. Evans, new genus**

Pallid, sometimes mottled insects. Crown usually well defined and of even length. Pronotum and scutellum pale yellowish brown sometimes mottled with darker brown. Tegmen vitreous or pale hyaline brown; veins brown, sometimes with white bars and sometimes with small spines. ♂ genitalia: pygophore narrowing posteriorly, usually apically rounded; aedeagus bilobed, the distal lobe sometimes paired, or W-shaped, in profile. Xth segment unusually large, ventral margin broadly curved and with a pair of variously shaped processes arising from base. ♀: VIIth abdominal sternum truncate, sinuous posteriorly.

*Type-species.* *Tartessus spinosus* Evans.

*Distribution.* Australia.

*Remarks.* This genus is closely related to *Austrotartessus*, n. gen. It differs from it in the shape of the Xth abdominal segment in the ♂ and also in pygophore shape.

**Protartessus spinosus (Evans), new combination**

FIG. 14A-D

*Tartessus spinosus* Evans, 1937: 55 (Western Australia: Carnac I—type in AM).

Length: ♂, 6.5 mm; ♀, 7.2 mm. General coloration, mottled brown. ♂ genitalia as in FIG. 14A-C.

*Distribution.* Australia: Western Australia.

*Remarks.* It is possible the above species may be identical with *Tartessus occidentalis* Jacobi (1909: 342), the type of which has not been seen.

**Protartessus woodwardi F. Evans, new species**

FIG. 14E-G

Length: ♂, 7.6 mm. Coloration: pale brown. Head pale yellow. Pronotum and scutellum pale mottled yellowish brown. Tegmen whitish hyaline; veins pale brown. ♂ genitalia as in FIG. 14E-G.

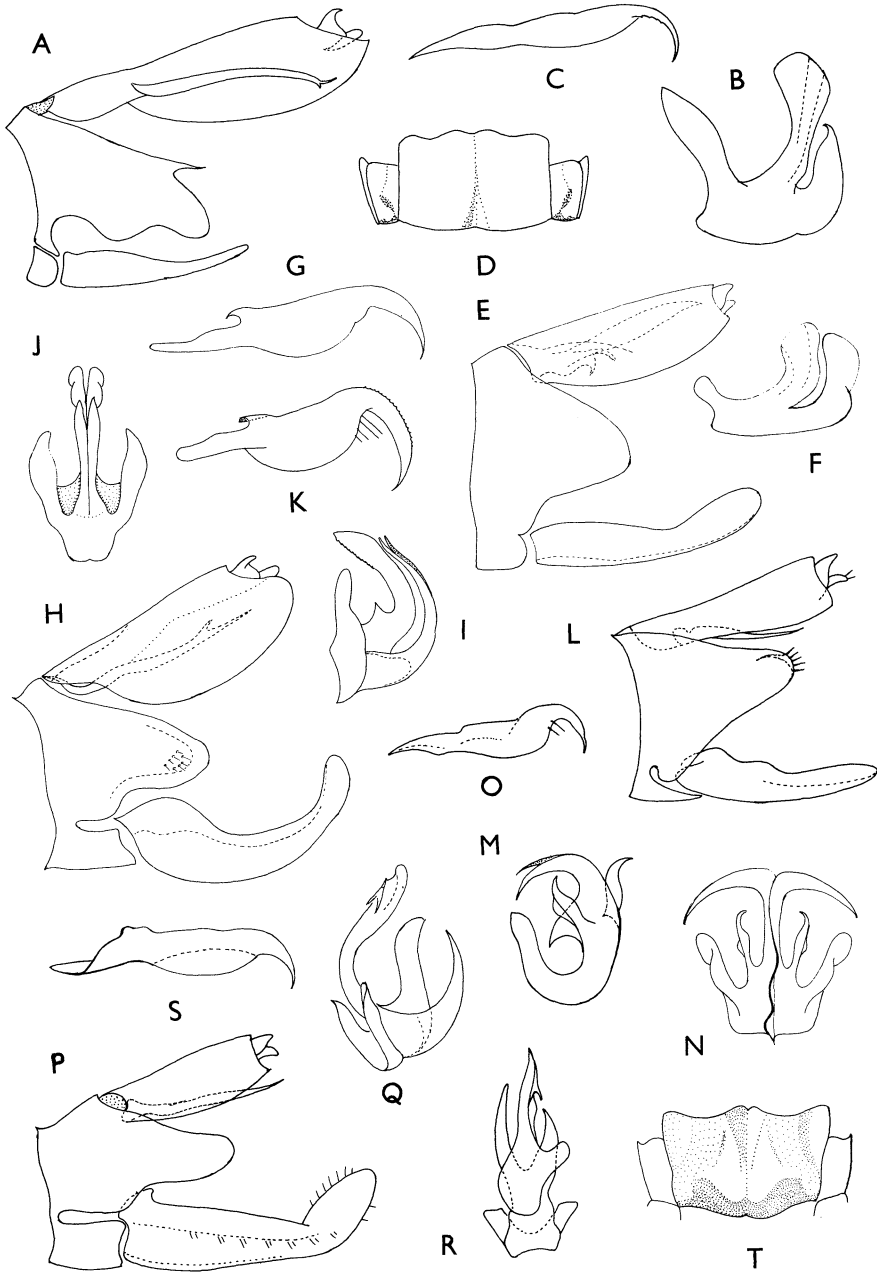


FIG. 14. A-D, *Protartessus spinosus*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-G, *P. woodwardi*: E, ♂ genitalia; F, aedeagus; G, paramere. H-K, *P. drummondi*: H, ♂ genitalia; I-J, aedeagus; K, paramere. L-O, *P. nynganensis*: L, ♂ genitalia; M-N, aedeagus; O, paramere. P-S, *P. wallacei*: P, ♂ genitalia; Q-R, aedeagus; S, paramere. T, *P. australis*, ♀ sternum VII.

Holotype ♂, AUSTRALIA: Northern Territory: Dunmara-Renner Spring, 23.VIII.1964, T.E. Woodward (QM).

*Remarks.* While the aedeagus of this species resembles that of the type-species in general features, it differs in having similarly sized dorsal processes and in pygophore shape.

**Protartessus drummondi** F. Evans, **new species**

FIG. 14H-K

Length: ♂, 7 mm. Coloration: pale yellowish brown. Face, maxillary plates, lora, ante- and postclypeus pale yellowish brown, frons lightly mottled with brown and vertex with black. Pronotum and scutellum pale brown. Tegmen vitreous; veins brown with white bars. ♂ genitalia as in FIG. 14H-K.

Holotype ♂, AUSTRALIA: Queensland: 50 km S of Longreach, VI.1960, R. Drummond (QM).

*Remarks.* This species differs from others in the genus in having slender paired processes on the aedeagus.

**Protartessus nynganensis** F. Evans, **new species**

FIG. 14L-O

Length: ♂, 6 mm. Coloration: pale brown. Face pale brown, postclypeus somewhat darker. Pronotum pale brown, mottled anteriorly. Scutellum pale brown, lateral muscle impressions dark brown. Tegmen pale hyaline brown. ♂ genitalia as in FIG. 14L-O.

Holotype ♂, AUSTRALIA: New South Wales: Nyngan, 1.II.1960, T.E. Woodward (QM).

*Remarks.* This species is only tentatively assigned to *Protartessus*, n. gen., since its aedeagus does not conform to the usual pattern.

**Protartessus wallacei** F. Evans, **new species**

FIG. 14P-S

Length: ♂, 7 mm. Coloration: pale yellowish. Tegmen vitreous, pale yellowish brown; veins pale brown. ♂ genitalia as in FIG. 14P-S.

Holotype ♂, AUSTRALIA: Western Australia: Coastal Highway, S Cape Crossing, IV.1971, M. Wallace (AM).

*Remarks.* This species is distinguished by its characteristic complex aedeagus.

**Protartessus australis** (Walker), **new combination**

FIG. 14T

*Bythoscopus australis* Walker, 1851: 872 (New Holland—type in BMNH).

Length: ♂, 6.8 mm. Coloration: brown. Face pale brown, cibarial muscle impressions and a median oval area on frontoclypeus darker in color; frons and vertex adjacent to eyes with small scattered brown markings. Pronotum yellowish brown anteriorly, darker posteriorly. Scutellum pale yellowish brown, mottled in center, and with a pair of longitudinal brown markings. Tegmen hyaline brown; veins dark brown.

*Distribution.* Australia.

**Austrotartessus** F. Evans, **new genus**

Small, narrow, apically tapering, golden brown, yellowish, or dark brown insects, sometimes mottled with brown or yellow. Tegmen hyaline brown or golden yellow; veins dark brown. ♂ genitalia: pygophore

broadly lobelike, sometimes narrowly, or widely, dorsally emarginate; aedeagus U-shaped, sometimes with a basally attached narrow, or broad, vertical posterior process. Xth segment with a pair of long, narrow, sometimes downwardly curved processes arising from the base. ♀: VIIth abdominal sternum transverse, medially emarginate.

*Type-species.* *Tartessus ianassa* Kirkaldy.

*Distribution.* Australia and New Guinea.

*Remarks.* Species in this genus are distinguished by usually having a U-shaped aedeagus with an acute posterior process.

***Austrotartessus ianassa* (Kirkaldy), new combination**

FIG. 15A–C, P

*Tartessus ianassa* Kirkaldy, 1907: 42 (Queensland: Cairns—type in BISHOP).

Length: ♂, 8 mm; ♀, 8–9.5 mm. Coloration: golden brown mottled with yellow and brown, ♀ somewhat darker than ♂. Face mottled yellow and brown, cibarial muscle impression brown. Pronotum and scutellum concolorous with face. Tegmen hyaline yellowish brown, sometimes with irregular pale areas; veins dark brown with pale oval markings. ♂ genitalia as in FIG. 15A–C.

*Distribution.* Australia (New South Wales to Cape York Peninsula) and New Guinea.

***Austrotartessus flavus* (Evans), new combination**

FIG. 15D–F

*Tartessus flavus* Evans, 1942: 156 (Western Australia: Yanchep—type in BMNH).

Length: ♂, 6 mm. Coloration: apricot. ♂ genitalia as in FIG. 15D–F.

*Distribution.* Australia: Western Australia.

***Austrotartessus monteithi* F. Evans, new species**

FIG. 15G–I

Length: ♂, 8 mm. Coloration: mottled yellowish brown. Face pale brownish yellow. Crown, pronotum and scutellum pale brown mottled with yellow. Tegmen hyaline brown; veins brown with pale bars. ♂ genitalia: hind margin of pygophore narrowly rounded ventrally with a dorsal spearlike extension; aedeagus W-shaped. Xth segment with a pair of narrow, spearlike processes arising from the base.

Holotype ♂, AUSTRALIA: Queensland: Lamington National Park, 28.I.1966, G. Monteith (QM).

*Remarks.* This species is distinguished by ♂ genitalia characteristics.

***Austrotartessus sedlaceki* F. Evans, new species**

FIG. 15J–L

Length: ♂, 6 mm. Coloration: mottled brown. Face pale brown. Crown, pronotum and scutellum pale mottled brown. Tegmen pale brown spotted with darker brown. ♂ genitalia: hind margin of pygophore narrowly emarginate, dorsally and apically spanner-shaped; aedeagus U-shaped with a small posterior vertical spine. Xth segment with a pair of broad, swordlike processes arising from the base.

Holotype ♂, AUSTRALIA: Queensland: 96 km S of Cooktown, 500 m, 28.I.1964, J. Sedlacek (AM).

*Remarks.* This species is distinguished by ♂ genitalia characteristics.

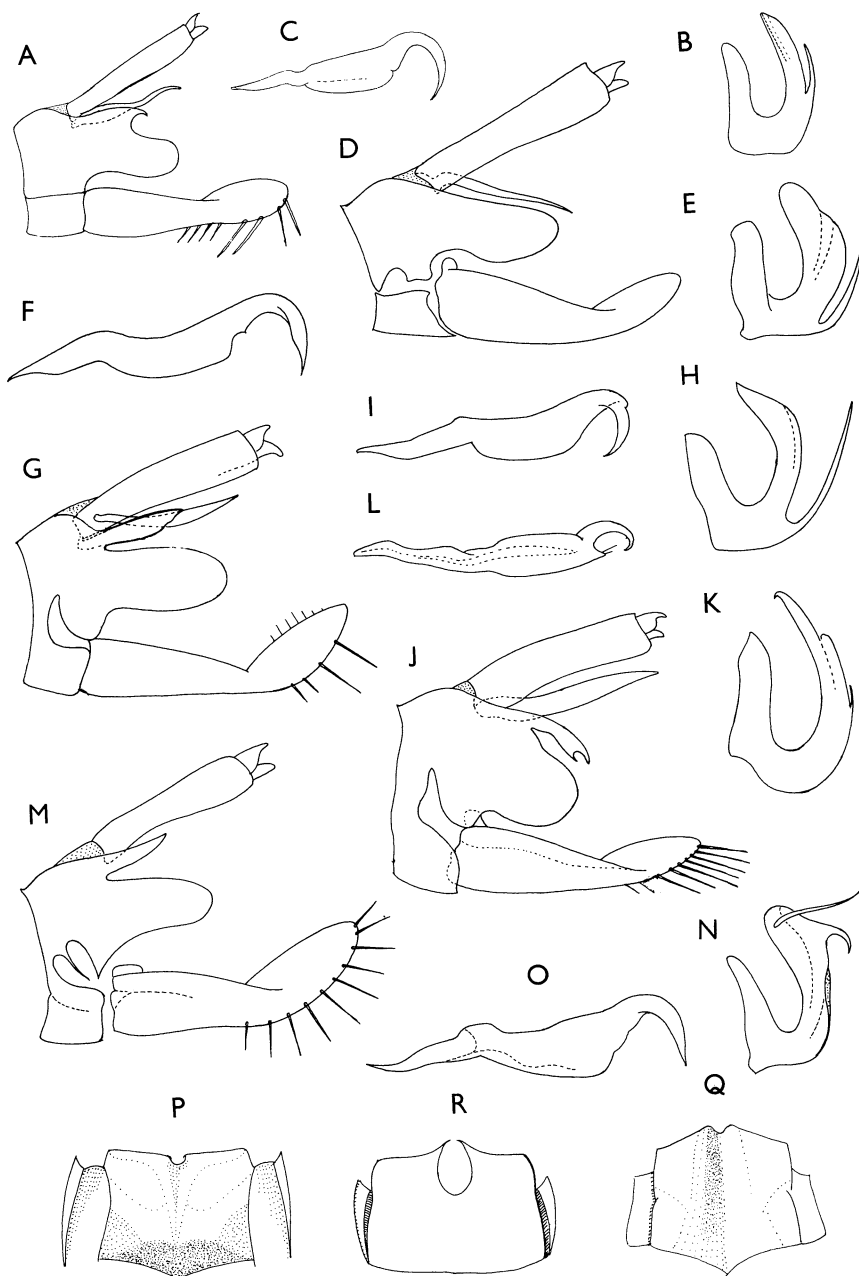


FIG. 15. A-C, *Austrotartessus ianassa*: A, ♂ genitalia; B, aedeagus; C, paramere. D-F, *A. flavus*: D, ♂ genitalia; E, aedeagus; F, paramere. G-I, *A. monteithi*: G, ♂ genitalia; H, aedeagus; I, paramere. J-L, *A. sedlaceki*: J, ♂ genitalia; K, aedeagus; L, paramere. M-O, *A. muiri*: M, ♂ genitalia; N, aedeagus; O, paramere. P, *A. ianassa*, ♀ sternum VII. Q, *A. issa*, ♀ sternum VII. R, *A. iokaste*, ♀ sternum VII.

**Austrotartessus muiri** F. Evans, **new species**

FIG. 15M-O

Length: ♂, 7 mm. Coloration: pale mottled brown. Face pale yellowish brown. Crown pronotum and scutellum pale mottled yellowish brown. Tegmen pale hyaline brown; veins brown with pale bars. ♂ genitalia: pygophore with a dorsal V-shaped indentation; aedeagus U-shaped, apically broad distally, with a posterior hooklike extension and a pair of apical spinelike processes. Xth segment with a pair of very small processes arising from the base.

Holotype ♂, AUSTRALIA: Queensland: Babinda, IX.1919, F. Muir (AM).

*Remarks.* While the shape of the pygophore suggests this species is correctly assigned to the present genus, the aedeagus does not conform with the pattern usual for the genus.

**Austrotartessus rubrivenosus** (Evans), **new combination**

FIG. 16D

*Tartessus rubrivenosus* Evans, 1942: 156 (Western Australia: Dedari—type in BMNH).

Length: ♂, 6 mm. Coloration: apricot brown. Face, anteclypeus, lora and maxillary plates brown sparsely mottled with black; frontoclypeus and vertex brown. Pronotum yellowish brown. Scutellum orange with pale and dark brown markings. Tegmen hyaline apricot brown apically, in part smoky; veins pink with brown bars. ♂ genitalia: aedeagus as in FIG. 16D.

*Distribution.* Australia: Western Australia.

**Austrotartessus hattonensis** F. Evans, **new species**

FIG. 16A-C

Length: ♂, 7 mm; ♀, 8 mm. Coloration: brown. Face brown, sometimes mottled in part with dark brown. Pronotum and scutellum brown. Tegmen pale hyaline brown; veins dark brown. ♂ genitalia: pygophore broad, apically rounded; aedeagus broadly U-shaped. Xth segment with a pair of downwardly directed processes arising from the base.

Holotype ♂, AUSTRALIA: Queensland: Finch Hatton Gorge, 8.XII.1961, D.K. McAlpine (AM). Allotype ♀, Queensland: Eungella National Park, 18.XII.1966, B. Cantrell (QM).

*Remarks.* While resembling other species in the genus by having a U-shaped aedeagus, *A. hattonensis* differs in having an only slightly divided pygophore.

**Austrotartessus issa** (Kirkaldy), **new combination**

FIG. 15Q

*Tartessus issa* Kirkaldy, 1907: 45 (Queensland: Nelson—type in BISHOP).

Length: ♀, 8 mm. Coloration: except for dark brown eyes, pale yellowish brown. Crown bearing the ocelli declivous. Tegmen pale hyaline brown; veins pale brown. ♀, VIIth abdominal sternum as in FIG. 15Q.

*Distribution.* Australia: Queensland (Dunk I, Kirrama Range).

*Remarks.* As the holotype of the above species is a ♀ it cannot with certainty be ascribed to a particular generic grouping. It is tentatively ascribed to the new genus because of head characteristics and the shape of the VIIth abdominal sternum of the ♀.



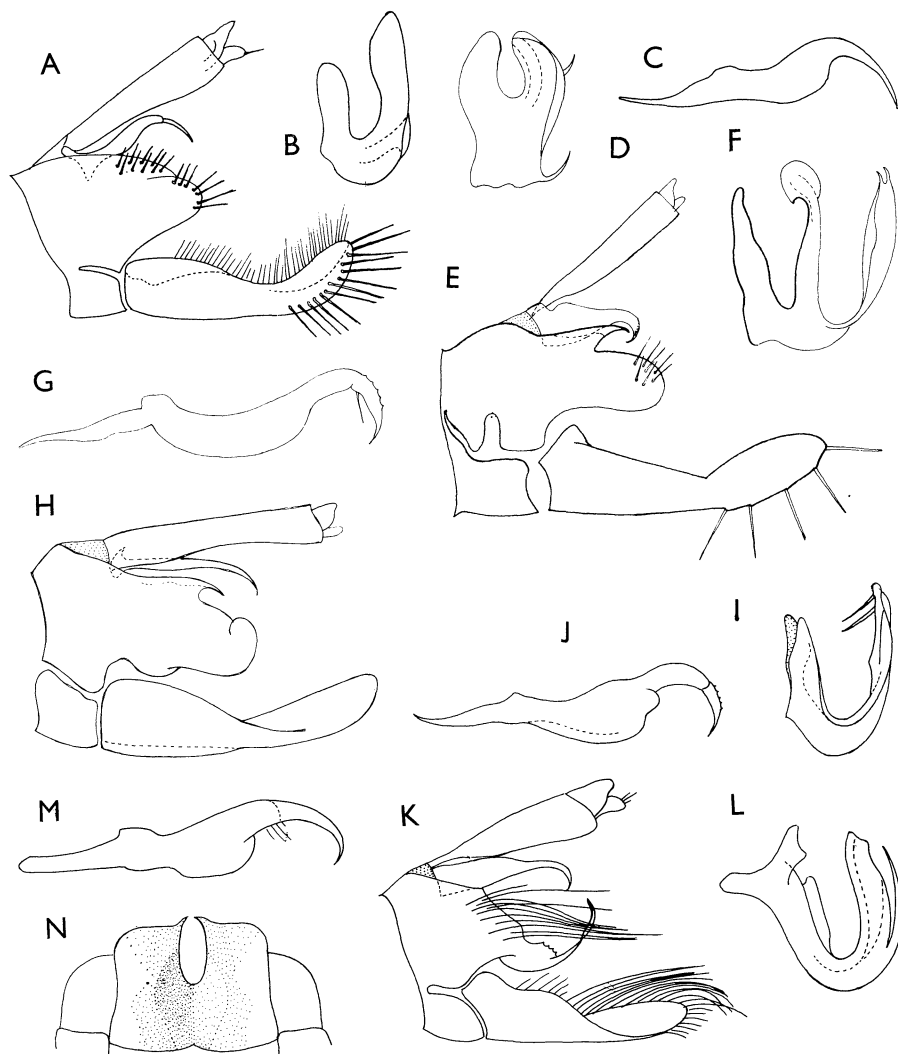


FIG. 16. A-C, *Austrotartessus hattonensis*: A, ♂ genitalia; B, aedeagus; C, paramere. D, *A. rubriventrosus*, aedeagus. E-G, *A. numinus*: E, ♂ genitalia; F, aedeagus; G, paramere. H-J, *A. orionis*: H, ♂ genitalia; I, aedeagus; J, paramere. K-N, *A. flavobrunneus*: K, ♂ genitalia; L, aedeagus; M, paramere; N, ♀ sternum VII.

### ***Austrotartessus numinus* F. Evans, new species**

FIG. 16E-G

Length: ♂, 7 mm. Coloration: mottled brown. Face pale yellowish brown. Crown, pronotum and scutellum pale brown evenly mottled with yellowish brown. Tegmen pale hyaline yellowish brown; veins brown with white bars. ♂ genitalia: pygophore with a V-shaped dorsal emargination; aedeagus W-shaped, the median lobe roundly apically enlarged, the posterior one with a pair of short apical extensions. Xth segment with a pair of basally broad, apically hook-shaped processes arising from a collarlike base.

Holotype ♂, AUSTRALIA: Queensland: Cairns, XII.1969, J.G. Brooks (AM).

*Remarks.* The W-shaped aedeagus of this species serves to distinguish it from others in the genus.

**Austrotartessus oriomis** F. Evans, new species

FIG. 16H–J

Length: ♂, 6.8–7.8 mm. General coloration: pale mottled brown. Face pale brown; pronotum and scutellum pale brown with lighter colored spots. ♂ genitalia: pygophore dorsally emarginate, the dorsal lobe with a broad, apical spine; aedeagus U-shaped with a pair of anteriorly directed spines. Xth segment with a pair of slender processes arising from the base.

Holotype ♂, PNG: NEW GUINEA (SE): W Distr, Oriomo Govt. Stn, 16.X.1960, J.L. Gressitt (BISHOP 11,705). Paratypes: 2♂, IRIAN: New Guinea (SW): Eramboe, 90 km ex Merauke, Maa (BISHOP, Evans coll.).

*Remarks.* Distinguished from other species in the genus by the shape of the aedeagus.

**Austrotartessus flavobrunneus** F. Evans, new species

FIG. 16K–N

Length: ♂, 7.5 mm. Coloration: orange-brown. Head and thorax orange-brown. Tegmen hyaline brown, costal area broadly and veins dark brown. ♂ genitalia: pygophore narrowing to a slender, curved, posterior extension; aedeagus U-shaped with a posterior, narrow, vertical process. Xth segment with a pair of hook-shaped processes arising from a broad, collarlike base. ♀: VIIth sternum deeply medially emarginate.

Holotype ♂, AUSTRALIA: Queensland: Kuranda, 200 m, 13.III.1955, J.L. Gressitt (AM).

*Remarks.* This species is distinguished by the unusual shape of the pygophore.

**Austrotartessus iokaste** (Kirkaldy), new combination

FIG. 15R

*Tartessus iokaste* Kirkaldy, 1907: 48 (Queensland: Cairns—type in BISHOP).

Length: ♀, 7.8 mm. Coloration: golden yellowish brown. Face flat. Crown well defined, slightly longer in center than against eyes. Tegmen pale hyaline brown; veins similar in color. ♀: VIIth abdominal sternum as in FIG. 15R.

*Distribution.* Australia: Queensland.

*Remarks.* As the type of the above species is a ♀ and no ♂ specimens have been seen, its placement in the new genus must be provisional.

**Borditartessus** F. Evans, new genus

Small, golden-yellow to yellowish brown insects. Crown roundly continuous with the face. ♂ genitalia: pygophore rounded posteriorly; aedeagus resembling an inverted and distorted S. Xth segment with a pair of long, acute processes arising from near the base.

*Type-species.* *Tartessus latus* Evans.

*Distribution.* Australia.

*Remarks.* This genus can be distinguished by the shape of the aedeagi of the comprised species.

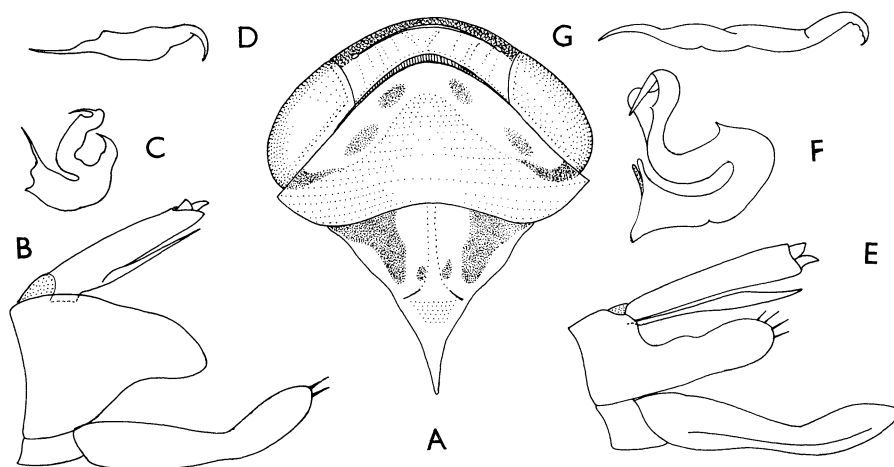


FIG. 17. A-D, *Borditartessus latus*: A, crown of head and thorax; B, ♂ genitalia; C, aedeagus; D, paramere. E-G, *B. casulaensis*: E, ♂ genitalia; F, aedeagus; G, paramere.

### ***Borditartessus latus* (Evans), new combination**

FIG. 17A-D

*Tartessus latus* Evans, 1942: 156 (Western Australia: Dedari—type in BMNH).

Length: ♂, 5.5 mm. Coloration: pale brown. Face pale brown, frontoclypeus somewhat darker. Pronotum and scutellum pale brown. Tegmen pale brown, vitreous. ♂ genitalia as in FIG. 17B-D.

*Distribution.* Australia: Western Australia.

### ***Borditartessus casulaensis* F. Evans, new species**

FIG. 17E-G

Length: ♂, 7 mm. Coloration: apricot yellow and pale brown. Head and thorax apricot yellow. Tegmen pale hyaline brown or vitreous; veins pale or dark brown. ♂ genitalia as in FIG. 17E-G.

Holotype ♂, AUSTRALIA: New South Wales: Cabramatta, 4.II.1971, M.I. Nikitin (AM). Paratype, 1 ♂: New South Wales: Casula, Nikitin (AM).

*Remarks.* This species differs from the type-species in size and in pygophore shape.

### ***Eutartessus* F. Evans, new genus**

Slender, golden brown insects ranging in length from 8–11 mm. Crown, bearing ocelli, longest against eyes. Tegmen pale hyaline or pale vitreous brown; veins, anal and costal margins dark brown or black. ♂ genitalia: pygophore boat-shaped; aedeagus variable in shape, complex, sometimes with a pair of broad, vertical processes; parameres apically serrate. Xth segment with a pair of long and slender, or short and broad, processes arising from, or from near, the base. ♀: VIIth abdominal sternum long, narrowing posteriorly, sometimes with lateral flanges.

*Type-species.* *Eutartessus cantrelli*, n. sp.

*Distribution.* Australia.

*Remarks.* This genus differs from the closely related *Protartessus*, n. gen. in usually

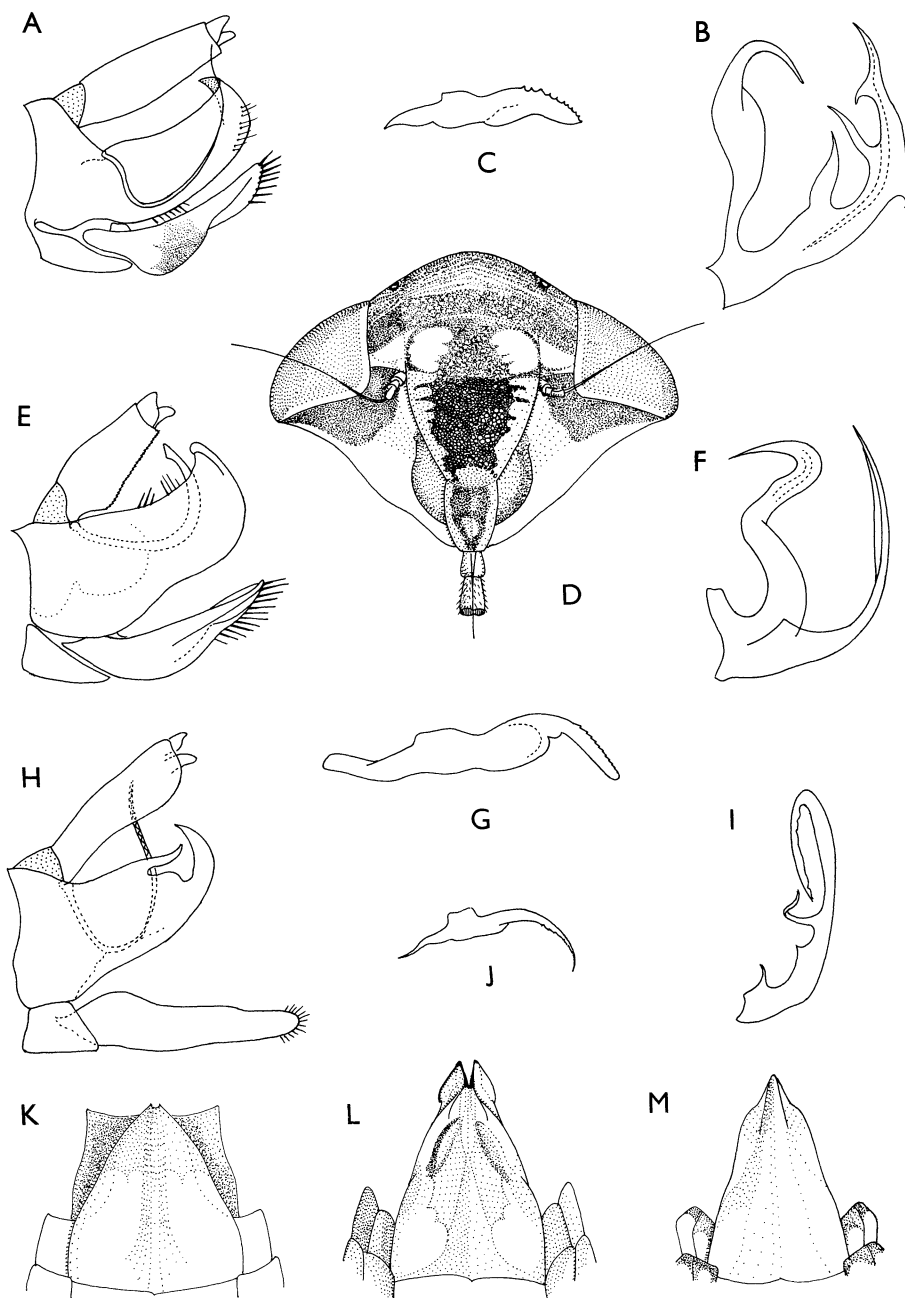


FIG. 18. A-C, *Eutartessus cantrelli*: A, ♂ genitalia; B, aedeagus; C, paramere. D-G, *E. whiamensis*: D, face; E, ♂ genitalia; F, aedeagus; G, paramere. H-K, *E. gressitti*: H, ♂ genitalia; I, aedeagus; J, paramere; K, ♀ sternum VII. L, *E. whiamensis*, ♀ sternum VII. M, *E. cantrelli*, ♀ sternum VII.

having boat-shaped pygophores with hook-shaped processes and apically acute VIIth abdominal sternum in the ♀.

**Eutartessus cantrelli** F. Evans, **new species**

FIG. 18A-C, M

Length: ♂, 9-10 mm; ♀, 9-11 mm. Coloration: golden brown. Tegmen vitreous, pale brown, costal and anal margins dark brown. ♂ genitalia as in FIG. 18A-C.

Holotype ♂, AUSTRALIA: Queensland: Crystal Cascades, nr Cairns, 6.IX.1966, B. Cantrell (QM). Allotype ♀, Queensland: Babinda, F. Muir (BISHOP 11,706a).

*Remarks.* This species is distinguished by the characteristic shape of the aedeagus.

**Eutartessus whiamensis** F. Evans, **new species**

FIG. 18D-G, L

Length: ♂, 8 mm; ♀, 8-9 mm. Head yellowish with a variable pattern of dark brown and black. Pronotum dark brown, black in center. Scutellum anteriorly brown or black, apex pale yellow. Tegmen vitreous brown, anal and costal margins black; veins black. ♂ genitalia as in FIG. 18E-G.

Holotype ♂, AUSTRALIA: New South Wales: Royal National Park, 20.III.1965, D.K. McAlpine (AM). Allotype ♀, New South Wales: Whiam Whiam State Forest, nr Lismore, D.K. McAlpine (AM).

*Remarks.* This species is distinguished by the characteristic shape of the aedeagus.

**Eutartessus gressitti** F. Evans, **new species**

FIG. 18H-K

Length: ♂, 7.8 mm; ♀, 9 mm. Coloration: golden brown. Face with a black band posteriorly, dark brown in center. Pronotum and scutellum golden brown. ♂ genitalia as in FIG. 18H-J.

Holotype ♂, AUSTRALIA: Queensland: Mt Glorious, 18.II.1961, L. & M. Gressitt (AM). Allotype ♀, New South Wales: Huonbrook, 30.I.1961, D.K. McAlpine (AM). Paratypes: 2♂, same data as holotype (Evans coll.).

*Remarks.* While the ♂ genitalia of this species resemble those of the type-species in general features, they differ from them in having the pygophore dorsally emarginate and the VIIth sternum of the ♀ differently shaped.

**Eutartessus brunensis** F. Evans, **new species**

FIG. 19A-C

Length: ♂, 10 mm. Coloration: cupreous brown. Face brown, black in center. Pronotum cupreous; scutellum dull brown. ♂ genitalia as in FIG. 19A-C.

Holotype ♂, AUSTRALIA: Queensland: Cairns, XII.1969, J.G. Brooks (AM). Paratypes, 2♂, same data as holotype (Evans coll.).

*Remarks.* The ♂ genitalia of this species closely resemble those of the type-species, but it is considered that the aedeagus is sufficiently different to justify the recognition of a separate species.

**Eutartessus aesi** F. Evans, **new species**

FIG. 19D-F

Length: ♂, 10 mm. Coloration: cupreous brown. Face black in center. Pronotum brown. Scutellum dark brown. ♂ genitalia as in FIG. 19D-F.

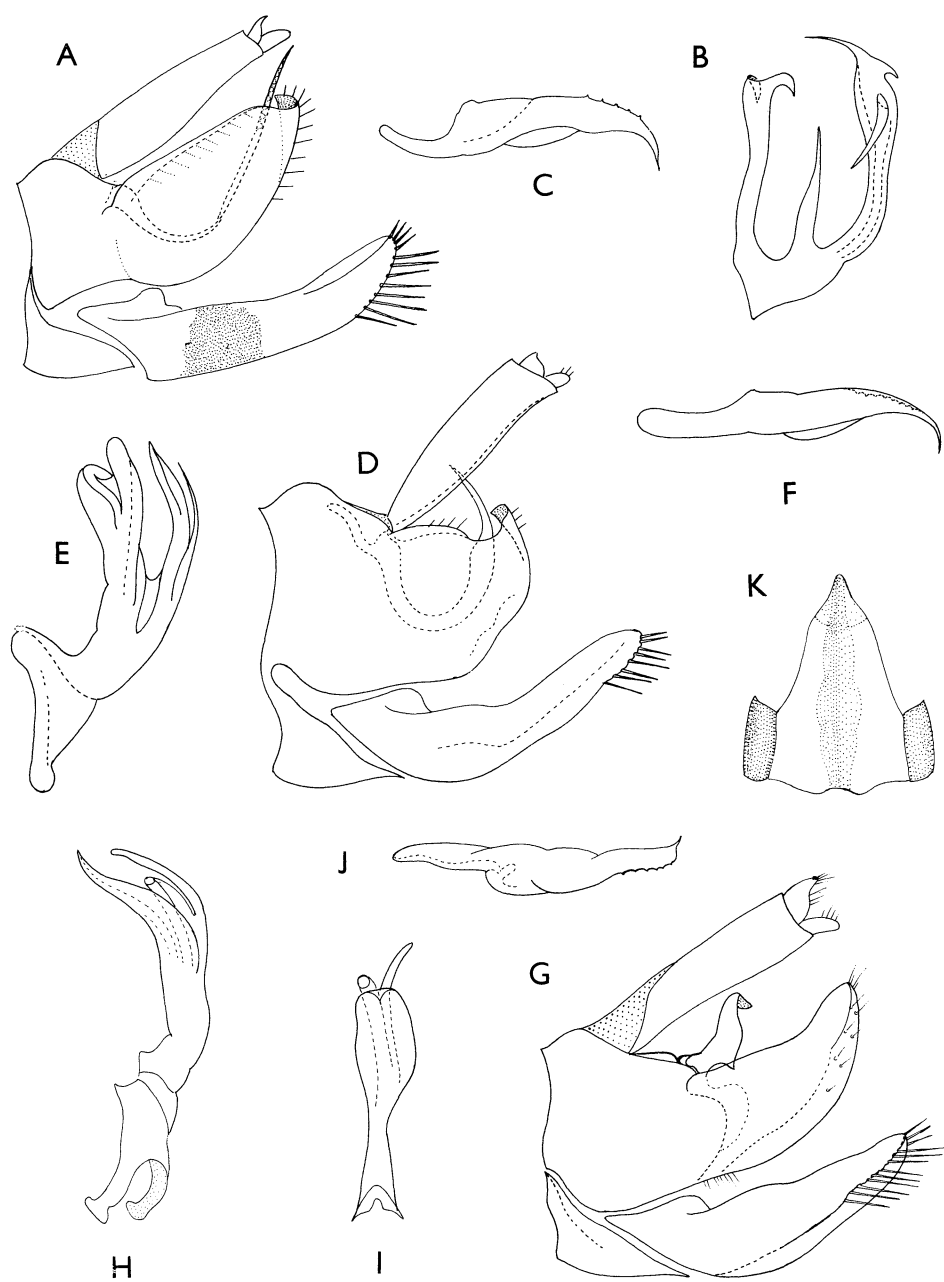


FIG. 19. A–C, *Eutartessus brunensis*: A, ♂ genitalia; B, aedeagus; C, paramere. D–F, *E. aesi*: D, ♂ genitalia; E, aedeagus; F, paramere. G–K, *E. brooksi*: G, ♂ genitalia; H–I, aedeagus and basal plate; J, paramere; K, ♀ sternum VII.

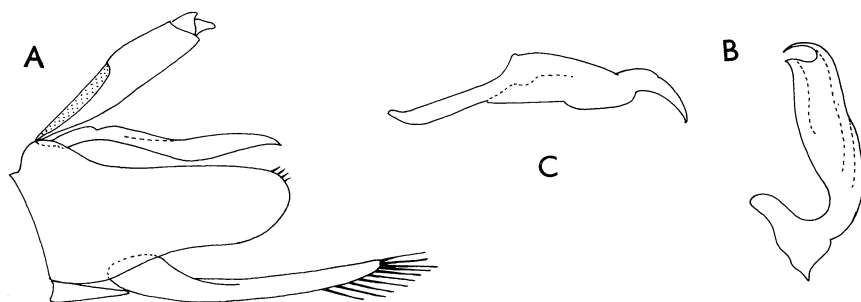


FIG. 20. *Alotartessella campbelli*: A, ♂ genitalia; B, aedeagus; C, paramere.

Holotype ♂, AUSTRALIA: Queensland: Cairns, XII.1969, J.G. Brooks (AM).

*Remarks.* This species is distinguished by the characteristic shape of the aedeagus.

#### ***Eutartessus brooksi* F. Evans, new species**

FIG. 19G-K

Length: ♂, 9 mm; ♀, 10.6 mm. Face pale yellowish brown, sometimes with the lora, postclypeus in part, and genae black. Crown, pronotum and scutellum anteriorly yellowish or smoky brown; scutellum posteriorly pale yellow. Tegmen vitreous subapically, and costal margin broadly black, or brown; external margin black; veins brown and black. ♂ genitalia as in FIG. 19G-J.

Holotype ♂, AUSTRALIA: Queensland: Cairns, 4.XI.1971, J.G. Brooks (AM). Allotype ♀, Queensland: Mt Misery, W of Mossman, XI.1974, M.S. Moulds (AM).

*Remarks.* This species is characterized by the shape of the aedeagus, which is of a simpler nature than those of other species in the genus. It is distinguished also by the shape of the paired processes on the Xth segment.

#### ***Alotartessella* F. Evans, new genus**

Small, pale green or orange insects. Face, anteclypeus bulbous, narrowest posteriorly; frontoclypeus oval, convex; transverse antennal ledges in alignment with hind margins of eyes. Crown of equal length throughout, anteriorly carinate. Tegmen apically acute. ♂ genitalia: pygophore long, approximately parallel-sided, rounded apically; aedeagus columnar, subapically emarginate. Xth segment with a pair of long, ribbonlike processes arising from the base.

*Type-species.* *Tartessella campbelli* Evans.

*Distribution.* Australia.

#### ***Alotartessella campbelli* (Evans), new combination**

FIG. 20A-C

*Tartessella campbelli* Evans, 1937: 57 (Northern Territory: Newcastle Waters—type in ANIC).

Length: ♂, 7 mm. ♂ genitalia as in FIG. 20A-C.

*Distribution.* Australia: Northern Territory (Mt Olga); Western Australia (South Cape Crossing, Coastal Highway).

*Remarks.* The type-species resembles members of *Tartessella* in head characteristics but differs considerably in those provided by the ♂ genitalia, also in having well

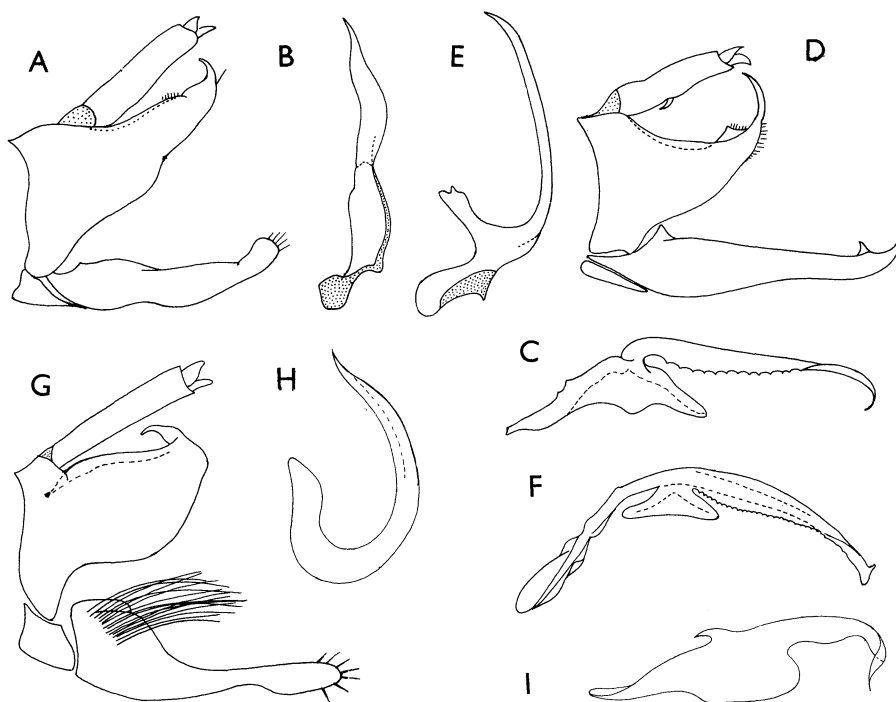


FIG. 21. A–C, *Plexitartessus pulchellus*: A, ♂ genitalia; B, aedeagus; C, paramere. D–F, *P. smithersi*: D, ♂ genitalia; E, aedeagus; F, paramere. G–I, *P. hambledonensis*: G, ♂ genitalia; H, aedeagus; I, paramere.

developed Xth segment processes. It resembles *Microtartessus idyia* in the shape of the aedeagus but not in other significant characters.

### ***Plexitartessus* F. Evans, new genus**

Pale insects, ranging in length from 8–14 mm with the head and thorax largely yellow. Crown roundly or narrowly produced. Tegmen pale hyaline brown or vitreous, sometimes with ill-defined pale fasciae; veins pale or dark brown or black. ♂ genitalia: pygophore narrowing posteriorly, sometimes apically acute or hook-shaped, or deeply divided into 2 parts; aedeagus simple, sometimes curved; parameres strongly elbowed basally. Xth segment lacking processes. ♀: VIIth abdominal sternum sloping laterally towards center, medially notched.

*Type-species.* *Tartessus pulchellus* Spångberg.

*Distribution.* New Guinea and eastern Australia.

*Remarks.* This genus differs from others in color and ♂ genitalia characteristics.

### ***Plexitartessus pulchellus* (Spångberg), new combination**

FIG. 21A–C

*Tartessus pulchellus* Spångberg, 1878: 10 (Cape York Peninsula—type in STOCKHOLM).

Length: ♂, 8.7 mm; ♀, 10–11 mm. Crown flat, of even length with eyes at each side. Head and thorax



yellow. Tegmen hyaline brown with whitish fasciae and 2 dark brown oval markings between R and the costal margin, claval margin beside scutellum narrowly black. ♂ genitalia as in FIG. 21A-C.

*Distribution.* Australia: Queensland (Claudie River and Kuranda).

**Plexitartessus smithersi** F. Evans, **new species**

FIG. 21D-F

Length: ♂, 7.8 mm. Closely resembling the type-species in shape and coloration. Differing in characters provided by the ♂ genitalia. Thus, the pygophore is shorter and more apically acute; the aedeagus narrower, parallel-sided and very considerably longer, and the subgenital plates bear a strong subapical spine.

Holotype ♂, AUSTRALIA: Queensland: Silver Plains Homestead, 24.VI.1960, C.N. Smithers (AM).

**Plexitartessus hambledonensis** F. Evans, **new species**

FIG. 21G-I

Length: ♂, 9 mm. Coloration: yellow and black. Head rounded apically, dark yellow. Pronotum and scutellum concolorous with head. Tegmen vitreous, pale yellow, costal margin broadly, anal margin narrowly, and veins black. ♂ genitalia as in FIG. 21G-I.

Holotype ♂, AUSTRALIA: Queensland: Hambledon, XI.[19]21 (Pemberton Collection) (AM).

*Remarks.* While the ♂ genitalia of this species resemble those of the type-species, they differ from them in having considerably broader pygophores and hirsute subgenital plates.

**Plexitartessus itonias** (Kirkaldy), **new combination**

FIG. 22A-C

*Tartessus itonias* Kirkaldy, 1907: 44 (Queensland: Cairns—type in BISHOP).

Length: ♂, 8 mm. Closely resembling the type-species in shape and coloration. Differing in characters provided by the ♂ genitalia. Thus, the hind margin of the pygophore is bilobed, the dorsal lobe being hooklike and the ventral one very long and narrow; the aedeagus is U-shaped, with a subapical spine, and the subgenital plates bear a cluster of long apical spines.

*Distribution.* Australia: Queensland.

**Plexitartessus macalpinei** F. Evans, **new species**

FIG. 22D-F

Length: ♂, 8.5 mm. Coloration: yellow and black. Head yellow, ante- and postclypeus largely black and a broad black transverse band between the eyes. Pronotum and scutellum brownish yellow, muscle impressions on latter brown. Tegmen vitreous, pale yellowish, costal margin broadly, anal margin narrowly, and veins black. ♂ genitalia as in FIG. 22D-F.

Holotype ♂, AUSTRALIA: Queensland: Finch Hatton Gorge, 8.XI.1961, D.K. McAlpine (AM).

*Remarks.* This species differs from others in the genus in characters provided by the pygophore.

**Plexitartessus extremus** F. Evans, **new species**

FIG. 22G-K

Length: ♂, 8.6 mm. Coloration: yellow and black. Head yellow with a broad, black band between the eyes. Width of crown less than length of each eye. Pronotum pale coffee brown. Scutellum pale brownish

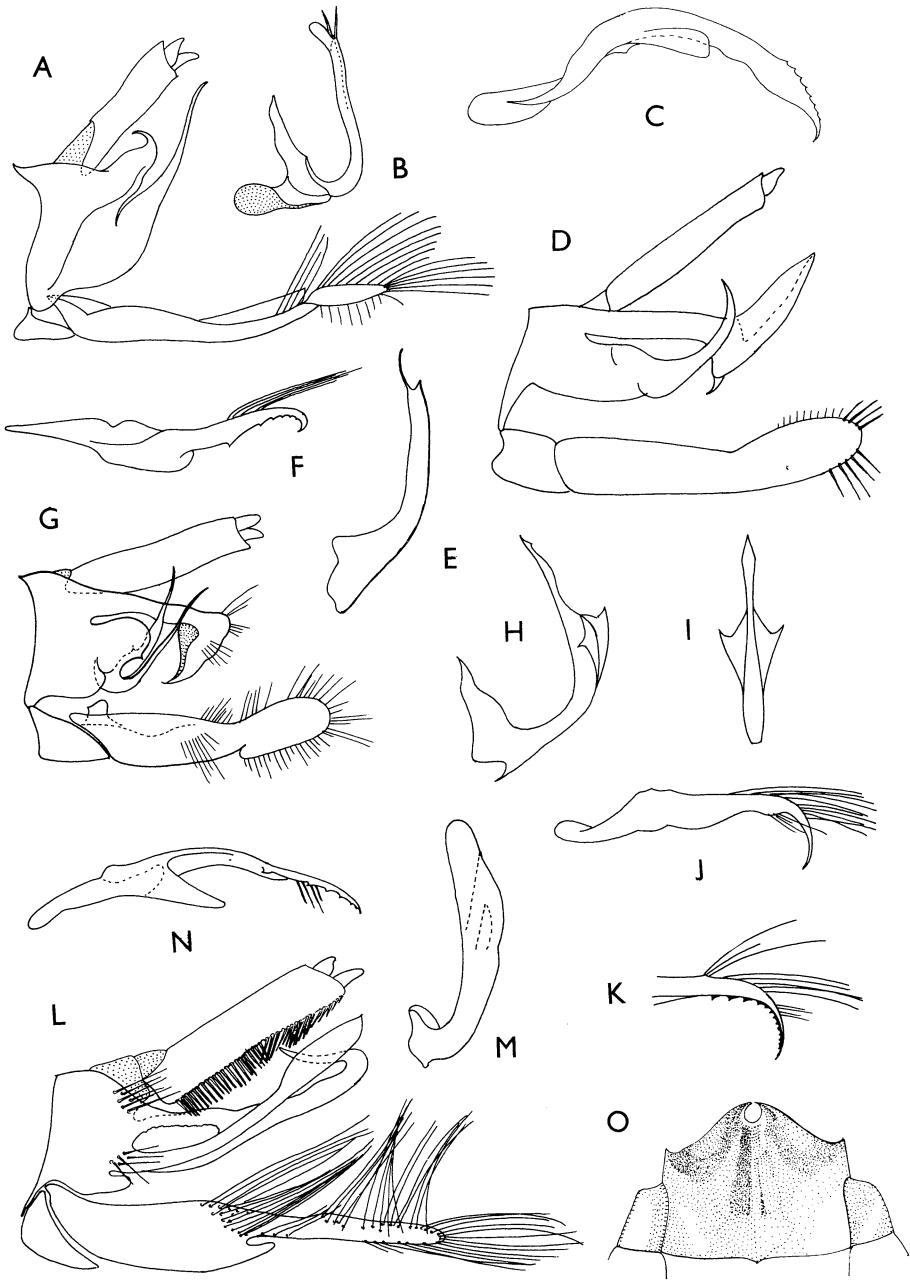


FIG. 22. A-C, *Plexitartessus itonias*: A, ♂ genitalia; B, aedeagus; C, paramere. D-F, *P. macalpinei*: D, ♂ genitalia; E, aedeagus; F, paramere. G-K, *P. extremus*: G, ♂ genitalia; H-I, aedeagus; J, paramere; K, apex of paramere. L-O, *P. brandti*: L, ♂ genitalia; M, aedeagus; N, paramere; O, ♀ sternum VII.

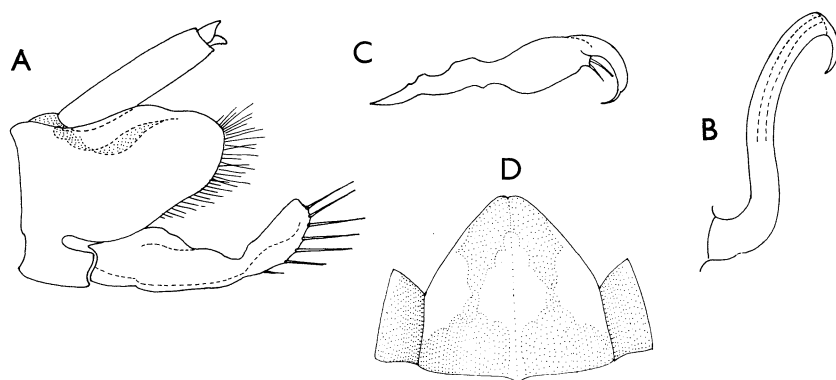


FIG. 23. *Flavitartessus flavibasis*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII.

yellow, lateral muscle impressions brown. Tegmen vitreous, pale yellowish, costal margin broadly, anal margin narrowly, and veins black. ♂ genitalia as in FIG. 22G-K.

Holotype ♂ and allotype ♀, AUSTRALIA: Queensland: nr Poona Lake, Cooloola, 13.III.1970, E. Dahms (QM). Paratype: 1 ♀, same data as holotype (Evans coll.).

*Remarks.* This species resembles *P. macalpinei*, n. sp. in having divided pygophores but differs from it in having a pair of long narrow processes arising from their ventral margin.

#### **Plexitartessus brandti** F. Evans, **new species**

FIG. 22L-O

Length: ♂, 12-13 mm; ♀, 13-14 mm. Coloration: brown and yellow. Head yellow with a broad black transverse band between eyes. Crown short, longest against eyes. Pronotum yellow, medially brown. Scutellum with 3 brown longitudinal stripes. Tegmen vitreous, testaceous, apically pale hyaline brown, costal margin broadly dark brown, external margin of clavus black, veins brown. ♂ genitalia as in FIG. 22L-N.

Holotype ♂, PNG: NEW GUINEA (SE): Kiunga, Fly Riv, 14.IX.1957, W.W. Brandt (BISHOP 11,707). Allotype ♀, same data as holotype (BISHOP).

*Remarks.* This species is distinguished by the shape of the aedeagus and the pygophore.

#### **Flavitartessus** F. Evans, **new genus**

Yellow and black insects with a bold color pattern. ♂ genitalia: pygophore broadly rounded posteriorly; aedeagus consisting of a curved, apically hook-shaped column. Xth segment with a pair of sinuous, or spinelike, processes arising from the base. ♀: VIIth abdominal sternum helmet-shaped, slightly medially indented.

*Type-species.* *Bythoscopus flavibasis* Walker.

*Distribution.* New Guinea and New Britain.

*Remarks.* As well as by characters provided by the ♂ genitalia, this genus is distinguished by the coloration of the type-species.

**Flavitartessus flavibasis** (Walker), **new combination**

FIG. 23A–D

*Bythoscopus flavibasis* Walker, 1870: 320 (Aru I—type in BMNH).

Length: ♂, 8.8 mm; ♀, 11 mm. Face and hind margin of crown black. Remainder of crown, pronotum, scutellum, clavus proximally, fore and middle legs black. ♂ genitalia as in FIG. 23A–C.

*Distribution.* PNG: New Guinea (NE: Wau, Lae, Torricelli Mts); PNG: Bismarck Arch. (New Britain); Irian: New Guinea (NW: Vogelkop, Ifar).

**Tartessops** F. Evans, **new genus**

Brown and black insects, sometimes with orange markings and sometimes with a pale crown and thorax, ranging in length from 8–12 mm. Crown of variable length. Pronotum anteriorly produced. Tegmen pale, or dark, hyaline brown, or black, the costal and sometimes also the claval margin broadly black; veins brown or black. ♂ genitalia: pygophore narrowing posteriorly, of variable shape; aedeagus columnar, curved or U-shaped, usually with paired apical and sometimes also subapical acute extensions. Xth segment with a pair of variably shaped processes arising from a collarlike base. ♀: VIIth abdominal sternum usually laterally sinuous and medially emarginate.

*Type-species.* *Bythoscopus colligatus* Walker.

*Distribution.* New Guinea and New Britain.

*Remarks.* This genus is distinguished by characters provided by the ♂ genitalia of the comprised species, also by the shape of the VIIth abdominal sterna of ♀'s.

**Tartessops colligatus** (Walker), **new combination**

FIG. 24A–E

*Bythoscopus colligatus* Walker, 1870: 319 (New Guinea—type in BMNH).

Length: ♂, 8 mm; ♀, 9 mm. Coloration: bronze. Face, anteclypeus, lora, and maxillary plates black with reddish-brown markings; postclypeus, frons, and vertex yellowish. Crown roundly continuous with the face, yellowish, slightly shorter in the center than against the eyes. Pronotum and scutellum yellowish brown. Tegmen shiny, hyaline cupreous brown; veins pale and dark brown. ♂ genitalia: pygophore narrowing posteriorly; aedeagus curved with a pair of acute, apical, backwardly directed spines. Xth segment with a pair of parallel-sided hook-shaped processes. ♀: VIIth abdominal segment laterally rounded, posteriorly sinuate.

*Distribution.* PNG: New Guinea (NE: Kassam); Irian: New Guinea (NW: Vogelkop).

**Tartessops warisensis** F. Evans, **new species**

FIG. 24F–J

Length: ♂, 7.8 mm. Coloration: brown. Face black with reddish-brown muscle impressions on postclypeus. Crown and thorax pale brownish yellow. Tegmen hyaline cupreous brown, apically pale brown. ♂ genitalia resembling those of the type-species in general features but differing in the proportions of the several parts and in the shape of the apical spines on the aedeagus.

Holotype ♂, IRIAN: NEW GUINEA (NW): Waris S of Hollandia, 450–500 m, 1.VIII.1959, T.C. Maa (BISHOP 11,708). Allotype ♀, same data as holotype (BISHOP).

*Remarks.* This species differs from the type-species in coloration and in minor ♂ genitalia characteristics.

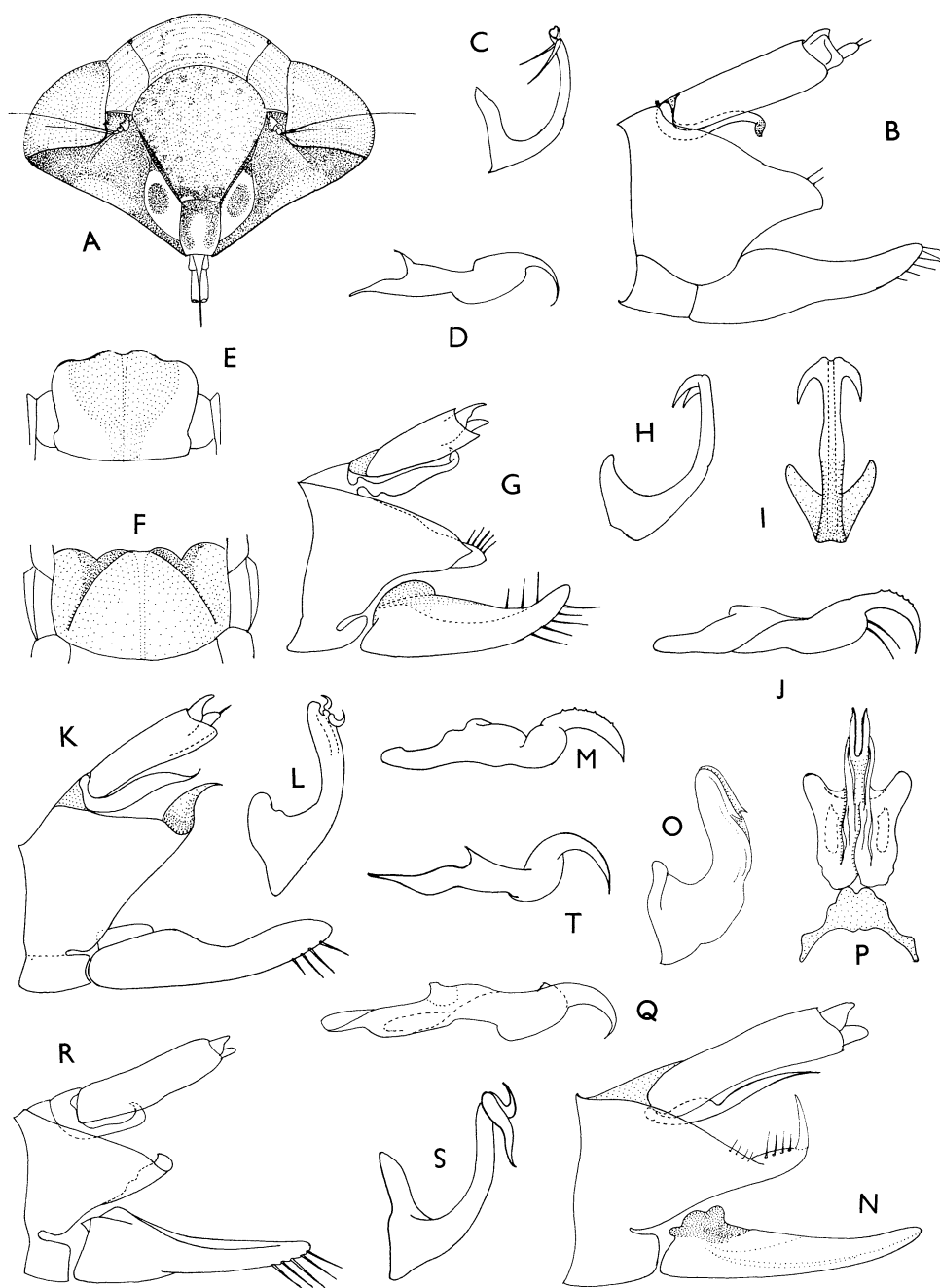


FIG. 24. A-E, *Tartessops colligatus*: A, face; B, ♂ genitalia; C, aedeagus; D, paramere; E, ♀ sternum VII. F-J, *T. warisensis*: F, ♀ sternum VII; G, ♂ genitalia; H-I, aedeagus; J, paramere. K-M, *T. huonensis*: K, ♂ genitalia; L, aedeagus; M, paramere. N-Q, *T. manokwarensis*: N, ♂ genitalia; O-P, aedeagus; Q, paramere. R-T, *T. tiensis*: R, ♂ genitalia; S, aedeagus; T, paramere.

**Tartessops huonensis** F. Evans, **new species**

FIG. 24K-M

Length: ♂, 9 mm. Coloration: brown. Face black, sparsely mottled with brown. Crown and thorax yellowish. Tegmen pale hyaline brown with a broad, dark brown longitudinal streak. ♂ genitalia: pygophore with a large, apical, spinelike extension; aedeagus curved with a pair of apical hooklike spines. Xth segment with a pair of parallel-sided processes arising from a collarlike base.

Holotype ♂, PNG: NEW GUINEA (NE): Huon Penin., Pindiu, 800 m, 22.IV.1963, J. & M. Sedlacek (BISHOP 11,709).

*Remarks.* This species is distinguished by the presence of a strong spur situated on the apex of the pygophore.

**Tartessops manokwarensis** F. Evans, **new species**

FIG. 24N-Q

Length: ♂, 8 mm; ♀, 9 mm. Coloration: brown. Face, maxillary plates, lora and anteclypeus laterally, black; remainder yellow. Crown pronotum and scutellum yellow. Tegmen largely dark smoky brown; clavus and costal margin narrowly pale orange-brown. ♂ genitalia: pygophore apically acute; aedeagus short, curved, with a pair of short apical, vertical extensions. Xth segment with a pair of long, spearlike processes arising from the base.

Holotype ♂, IRIAN: NEW GUINEA (NW): Vogelkop, Kebar Val, W of Manokwari, 550 m, 4.I.1962, L.W. Quate (BISHOP 11,710). Allotype ♀, 1 ♀ paratype, same data as holotype (BISHOP).

*Remarks.* This species is distinguished by the shape of the apex of the pygophore.

**Tartessops tiensis** F. Evans, **new species**

FIG. 24R-T

Length: ♂, 8 mm. Coloration: black. Face brown and black with pale brown markings. Crown short, longest against eyes. Pronotum black, anteriorly mottled with brown. Scutellum black. Tegmen, including veins, shining black. Fore and middle legs pale brown; hind legs, in part, brown. ♂ genitalia: pygophore narrowing anteapically; aedeagus curved, with a pair of long apical spinelike processes. Xth segment with a pair of apically hook-shaped processes arising from a collarlike base.

Holotype ♂, PNG: BISMARCK ARCH.: NEW BRITAIN: Ti, Nakanai Mt, 28.VII.1956, E.J. Ford, Jr (BISHOP 11,711).

*Remarks.* This species differs from others in the genus in coloration and minor ♂ genitalia differences.

**Tartessops gorokensis** F. Evans, **new species**

FIG. 25A-C

Length: ♂, 9 mm. Coloration: pale brown with a pinkish tinge. Face pale brown with a transverse pink stripe posterior to the postclypeus. Crown and thorax pale brown mottled with pink. Tegmen pale hyaline brown; veins dark brown. ♂ genitalia: pygophore posteriorly bilobed, the dorsal lobe considerably wider than the ventral one; aedeagus curved with 2 long backwardly directed apical processes. Xth segment with a pair of slightly curved, parallel-sided processes arising from the base.

Holotype ♂, PNG: NEW GUINEA (NE): Karimui, S of Goroka, 1000 m, 5.VI.1961, J.L. & M. Gressitt (BISHOP 11,712).

*Remarks.* This species is distinguished by characters provided by the ♂ genitalia.

**Tartessops bispinus** F. Evans, **new species**

FIG. 25D-F

Length: ♂, 7.2 mm. Coloration: very dark and yellowish brown. Head and pronotum shining blackish brown. Scutellum and clavus of tegmen pale brown, remainder of tegmen very dark brown. ♂ genitalia: pygophore apically rounded with a short, rounded protuberance; aedeagus curved, columnar, with a pair of backwardly directed apical processes. Xth segment with a pair of proximally broad and distally narrow processes arising from a collarlike base.

Holotype ♂, IRIAN: NEW GUINEA (NW): Waris, S of Hollandia, 450 m, 25.VIII.1959, T.C. Maa (BISHOP 11,713).

*Remarks.* This species is distinguished by characters provided by the ♂ genitalia.

**Tartessops hardyi** F. Evans, **new species**

FIG. 25G-J

Length: ♂, ♀, 10 mm. Coloration: brown. Face pale brownish yellow, anteclypeus in part, and postclypeus anteriorly, dark brown. Crown of even length, together with the pronotum and scutellum, pale yellowish. Tegmen pale hyaline brown. Ventral surface of thorax and femora, in part, black. ♂ genitalia: pygophore apically swollen, spinous; aedeagus slightly curved with 2 pairs of downwardly directed apical spines; subgenital plate short, spined with an acute subapical extension. Xth segment with a pair of long, parallel-sided processes arising from near the base.

Holotype ♂, IRIAN: NEW GUINEA (NW): Bodem, 11 km SE of Oeberfaren, 7.VII.1959, T.C. Maa (BISHOP 11,714). Allotype ♀ NEW GUINEA (NW): Hollandia-Binnen, 50 m, 17.VIII.1957, D. Elmo Hardy (BISHOP).

*Remarks.* This species is distinguished by ♂ genitalia characters and particularly by the shape of the subgenital plates.

**Tartessops karimuensis** F. Evans, **new species**

FIG. 25K-N

Length: ♂, 9 mm. Coloration: brown. Head and thorax pale yellowish brown. Tegmen, including veins, pale brown. ♂ genitalia: pygophore rounded apically, spinous; aedeagus columnar with 2 pairs of spines, the apical ones branched and the subapical ones downwardly curved. Xth segment with a pair of hook-shaped processes arising from a collarlike base.

Holotype ♂, PNG: NEW GUINEA (NE): Karimui, 3.VI.1961, J.L. & M. Gressitt (BISHOP 11,715).

*Remarks.* *T. karimuensis* differs from other species in the genus in ♂ genitalia characters.

**Tartessops rossumensis** F. Evans, **new species**

FIG. 25O-R

Length: ♂, 9 mm. Coloration: brown. Face anteriorly black mottled with yellow, posteriorly brown lightly mottled with dark brown. Crown, pronotum and scutellum pale brown mottled with brownish yellow. Tegmen dark and clavus pale, hyaline brown. ♂ genitalia: pygophore rounded with an acute extension arising from the inner dorsal margin; aedeagus with 2 pairs of posteriorly directed apical spines. Xth segment with a pair of seemingly bisegmented spanner-shaped processes.

Holotype ♂, PNG: BISMARCK ARCH.: NEW BRITAIN: Rossum, 6 km E of Lorengau, 180 m, 23.XII.1959, T.C. Maa (BISHOP 11,716). Paratype: 1♂, ADMIRALTY IS: Manus I, Maa (BISHOP).

*Remarks.* This species differs from others in the genus in characters provided by the ♂ genitalia.

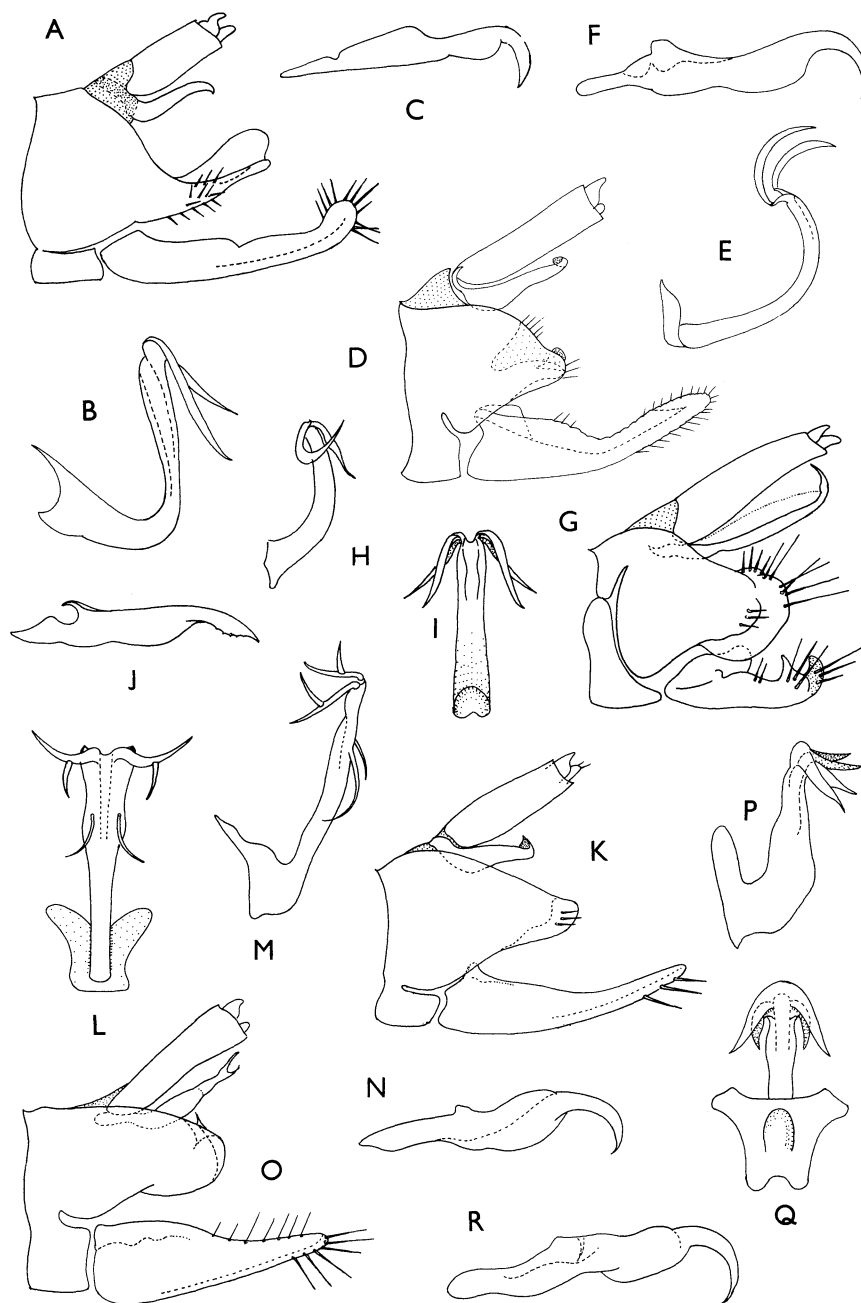


FIG. 25. A-C, *Tartessops gorokensis*: A, ♂ genitalia; B, aedeagus; C, paramere. D-F, *T. bispinus*: D, ♂ genitalia; E, aedeagus; F, paramere. G-J, *T. hardyi*: G, ♂ genitalia; H-I, aedeagus; J, paramere. K-N, *T. karimuensis*: K, ♂ genitalia; L-M, aedeagus; N, paramere. O-R, *T. rossumensis*: O, ♂ genitalia; P-Q, aedeagus; R, paramere.



**Tartessops colmani** F. Evans, **new species**

FIG. 26A-E

Length: ♂, 8.2 mm; ♀, 9 mm. Coloration: pale brown. Head and thorax pale brownish yellow. Tegmen, including the veins, hyaline brown. ♂ genitalia: pygophore broadly hook-shaped with an internal marginal spine; aedeagus columnar with a pair of apical and another of subapical processes. Xth segment with a pair of broadly hook-shaped processes arising from a collarlike base. ♀: VIIth abdominal sternum laterally concave, medially emarginate.

Holotype ♂, PNG: NEW GUINEA (NE): Bulolo, 900 m, 27.III.1968, P. Colman (BISHOP 11,717). Allotype ♀: NEW GUINEA (NE): Wau, E.J. Ford (BISHOP).

*Remarks.* This species differs from others in the genus in characters provided by the ♂ genitalia.

**Tartessops quadrispinus** F. Evans, **new species**

FIG. 26F-I

Length: ♂, 8.5 mm. Coloration: golden brown. Head, pronotum and scutellum evenly golden brown. Tegmen hyaline brown, sometimes, apart from clavus, smoky, with a pale, small, distal marking in the costal area; veins dark brown, in clavus pale brown. ♂ genitalia: pygophore apically recurved; aedeagus curved, columnar, with 2 pairs of apical processes. Xth segment with a pair of apically hook-shaped processes usually arising from a collarlike base.

Holotype ♂, PNG: NEW GUINEA (NE): N slope Mt Strong, 2600-3000 m, 8.I.1968, J. & M. Sedlacek (BISHOP 11,718). Paratype: 1♂, NEW GUINEA (NE): Bulldog Rd, S of Edie Creek, G.A. Samuelson (BISHOP).

*Remarks.* This species differs from others in the genus in characters provided by the ♂ genitalia.

**Tartessops aurantica** F. Evans, **new species**

FIG. 26J-M

Length: ♂, 8 mm. Coloration: golden brown. Face of head golden brown, frons narrowly margined with orange. Crown orange. Thorax and tegmen golden brown; veins pale and dark brown. ♂ genitalia: pygophore narrowing apically; aedeagus with a pair of apical and a pair of subapical processes, the latter strongly curved. Xth segment with a pair of short processes arising from a collarlike base.

Holotype ♂, PNG: NEW GUINEA (NE): Kassam, 48 km E of Kainantu, 1350 m, 7.XI.1959, T.C. Maa (BISHOP 11,719).

*Remarks.* This species differs from others in the genus in characters provided by the ♂ genitalia.

**Tartessops antedens** (Walker), **new combination**

FIG. 26N-Q

*Bythoscopus antedens* Walker, 1870: 316 (New Guinea—type in BMNH).

Length: ♂, 10 mm; ♀, 12 mm. Face, except for yellow maxillary plates, black. Crown anteriorly black, posteriorly pale yellow. Pronotum and scutellum black, the latter margined with yellow. Tegmen orange-brown; clavus, costal area and veins black. Ventral surface of thorax and abdomen black. Legs yellow. ♂ genitalia: pygophore tapering posteriorly with a short, lobelike process arising from the dorsal margin posteriorly and a small lobe near the base of the Xth segment; aedeagus narrowly U-shaped with 2 paired and a single acute processes. Xth segment with a pair of very short processes arising from a collarlike base. ♀: VIIth abdominal sternum wider than long, hind margin sinuous.

*Distribution.* Irian: New Guinea (NW: Biak I); Ceram and Amboina.

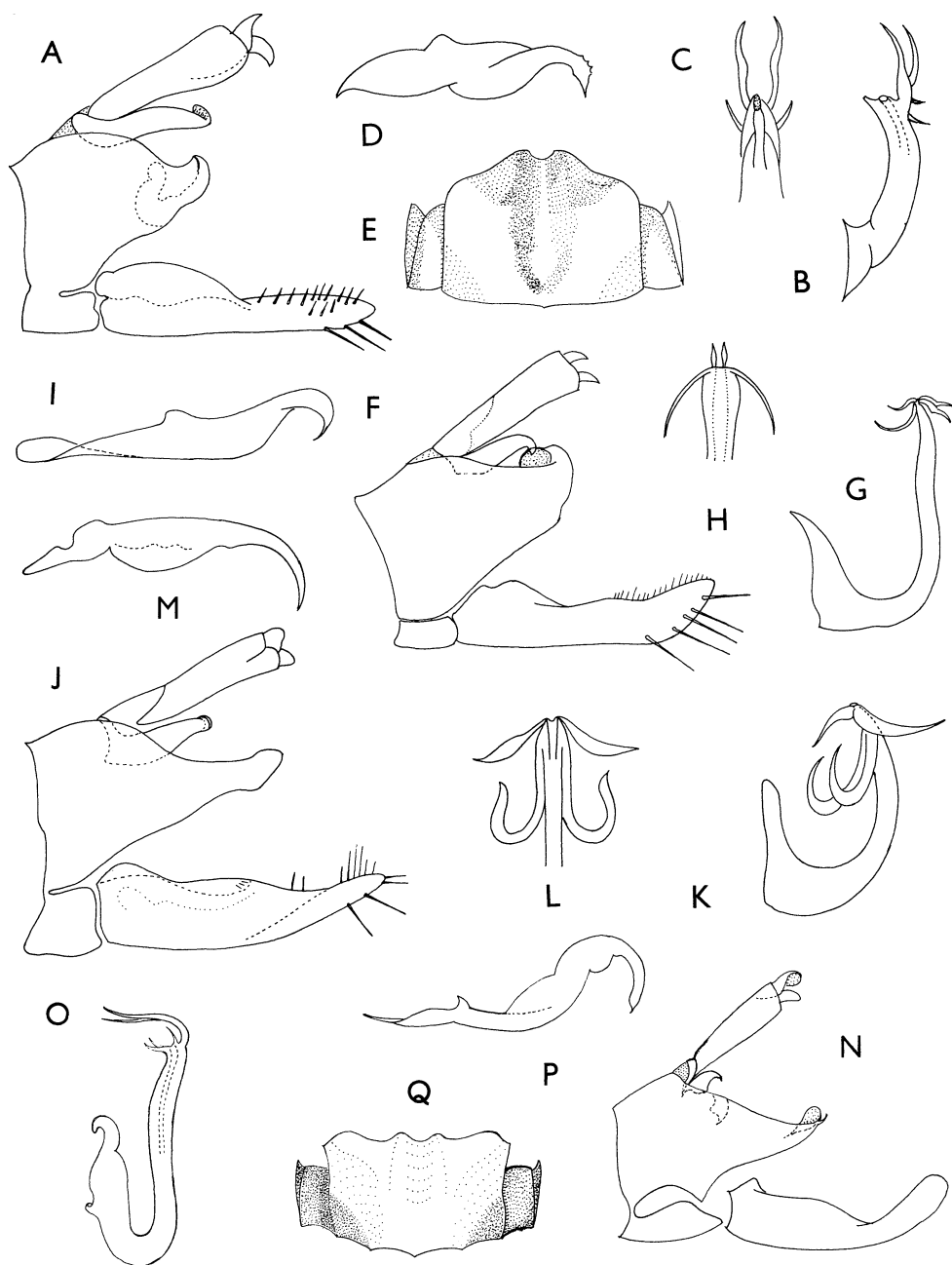


FIG. 26. A-E, *Tartessops colmani*: A, ♂ genitalia; B-C, aedeagus; D, paramere; E, ♀ sternum VII. F-I, *T. quadrispinus*: F, ♂ genitalia; G-H, aedeagus; I, paramere. J-M, *T. aurantica*: J, ♂ genitalia; K-L, aedeagus; M, paramere. N-Q, *T. antecedens*: N, ♂ genitalia; O, aedeagus; P, paramere; Q, ♀ sternum VII.

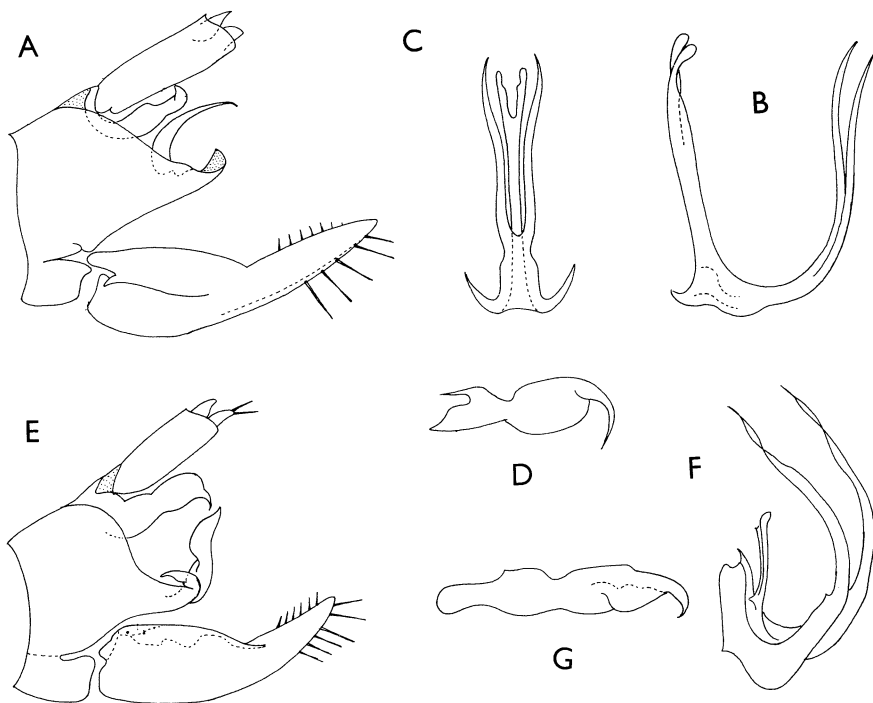


FIG. 27. A-D, *Tartessops peculiaris*: A, ♂ genitalia; B-C, aedeagus; D, paramere. E-G, *T. roseus*: E, ♂ genitalia; F, aedeagus; G, paramere.

**Remarks.** *T. antecedens* superficially more closely resembles species in the genus *Phytotartessus* than ones in *Tartessops*. It is included in the last-named genus because of genitalia resemblances.

***Tartessops peculiaris* F. Evans, new species**

FIG. 27A-D

Length: ♂, 8 mm. Coloration: yellow and brown. Face of head, anteclypeus and maxillary plates black; postclypeus and vertex pinkish. Crown, pronotum and scutellum yellow. Tegmen hyaline brown. ♂ genitalia: pygophore apically acute with a curved, spinelike process arising from the dorsal margin; aedeagus U-shaped with 2 posterior filamentous processes. Xth segment with a pair of broad, hooklike processes arising from a collarlike base.

Holotype ♂, IRIAN: NEW GUINEA (NW): Vogelkop, Suruarai, SW of Lake Anggi Giji, 1900 m, 27.II.1963, R. Straatman (BISHOP 11,720).

**Remarks.** This species, which can be distinguished by the shape of the aedeagus, is only tentatively assigned to the genus *Tartessops*.

***Tartessops roseus* F. Evans, new species**

FIG. 27E-G

Length: ♂, 8 mm. General coloration: pale brown. Face of head pale yellowish brown, pinkish posteriorly. Crown of even length, together with pronotum and scutellum pale brown. ♂ genitalia: pygophore

with a pair of differently shaped apical processes; aedeagus with a short, anterior, vertical process and a pair of long, posterior, ribbonlike ones.

Holotype ♂, PNG: NEW GUINEA (SE): Mt Giluwe, 2550 m, 27.V.1963, J. Sedlacek (BISHOP 11,721).

*Remarks.* This species is closely related to *T. peculiaris*, from which it differs in minor ♂ genitalia characteristics.

### **Phytotartessus F. Evans, new genus**

Brown insects distinguished by having a black transverse band margined with yellow on the apex of the head. ♂ genitalia: pygophore apically emarginate; aedeagus with 2 differently shaped apical processes and sometimes also a small subapical spine. Xth segment with a pair of long, slender, spearlike processes arising from the base. ♀: VIIth abdominal sternum rounded apically, slightly concave laterally.

*Type-species.* *Phytotartessus transversus*, n. sp.

*Distribution.* New Guinea.

### **Phytotartessus transversus F. Evans, new species**

FIG. 28A–C

Length: ♂, 7–8 mm; ♀, 10 mm. Coloration: brown. Face, as far as anterior margins of eyes, reddish brown with a median black marking; posteriorly, pale yellowish with a broad black transverse stripe between the eyes. Crown yellowish. Pronotum dark brown or black, mottled with pale brown. Scutellum dark brown, apically pale. Tegmen hyaline brown, costal margin black; veins dark brown. ♂ genitalia: pygophore bilobed, the dorsal lobe emarginate; aedeagus U-shaped, with 2 differently shaped, curved apical processes.

Holotype ♂, IRIAN: NEW GUINEA (NW): Bodem, 100 m, 11 km SE of Oeberfaren, 7.VII.1959, T.C. Maa (BISHOP 11,722). Allotype ♀ and 3 ♀ paratypes, same data as holotype (BISHOP).

*Remarks.* This species differs from others in the genus in coloration and in characters provided by the ♂ genitalia.

### **Phytotartessus madangensis F. Evans, new species**

FIG. 28D–G

Length: ♂, 8 mm. Coloration: black and brown. Face anteriorly, as far as hind margin of postclypeus, brown with black markings, posteriorly pale yellow with a wide transverse black band between the eyes. Crown pale yellow. Pronotum and scutellum black, the former sparsely mottled with brown anteriorly. Tegmen dark hyaline brown; veins broadly black. ♂ genitalia: pygophore emarginate, with a strong dorsal spinelike process; aedeagus with 2 differently shaped curved apical processes and a small subapical spine.

Holotype ♂, PNG: NEW GUINEA (NE): Madang, 28.X.1958, J.L. Gressitt (BISHOP 11,723).

*Remarks.* This species differs from others in the genus in coloration and ♂ genitalia characteristics.

### **Phytotartessus nabirensis F. Evans, new species**

FIG. 28H–K

Length: ♂, 8 mm; ♀, 9 mm. Coloration: brown. Face dark brown as far as the antennal ledges and with a central black marking. Apex of head black, broadly margined with yellow. Pronotum brown, mottled with pale brown. Scutellum brown. Tegmen hyaline brown. ♂ genitalia: pygophore deeply emarginate; aedeagus J-shaped with a short clublike extension and a long, curved apical spine.

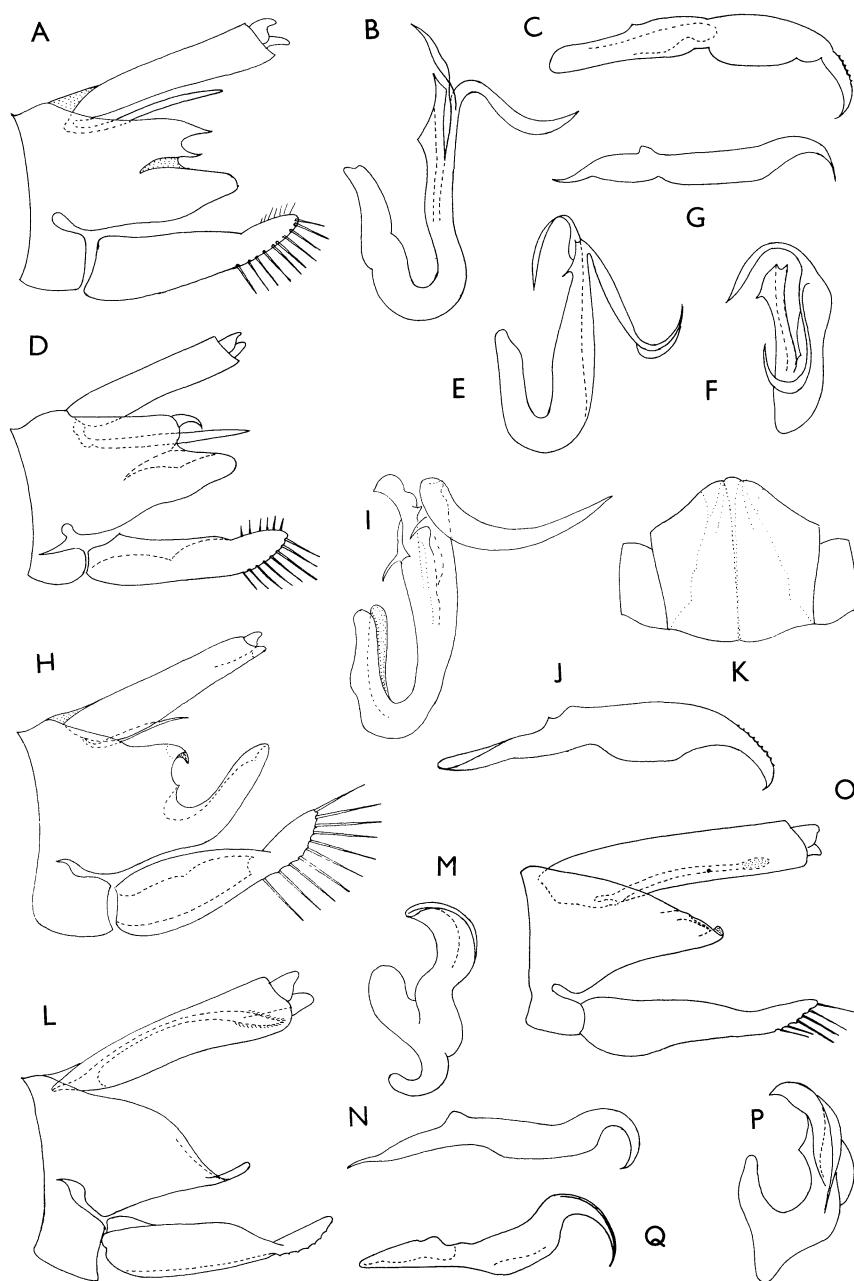


FIG. 28. A-C, *Phytotartessus transversus*: A, ♂ genitalia; B, aedeagus; C, paramere. D-G, *P. madangensis*: D, ♂ genitalia; E-F, aedeagus; G, paramere. H-K, *P. nabirensis*: H, ♂ genitalia; I, aedeagus; J, paramere; K, ♀ sternum VII. L-N, *P. dimifensis*: L, ♂ genitalia; M, aedeagus; N, paramere. O-Q, *P. scabrifrons*: O, ♂ genitalia; P, aedeagus; Q, paramere.

Holotype ♂, IRIAN: NEW GUINEA (NW): Nabire, S of Geelvink Bay, 9.VII.1962, J.L. Gressitt (BISHOP 11,724). Allotype ♀ and 1 ♀ paratype, same data as holotype (BISHOP).

*Remarks.* This species differs from others in the genus in color and ♂ genitalia characters.

**Phytotartessus scabrifrons (Walker), new combination**

FIG. 28O–Q

*Bythoscopus scabrifrons* Walker, 1870: 321 (New Guinea—type in BMNH).

Length: ♂, 9.3 mm. Coloration: yellowish brown. Face black, maxillary plates and frons anteriorly, narrowly brown. Crown, pronotum and scutellum ochreous brown. Tegmen hyaline brown; veins black. ♂ genitalia: pygophore narrowing posteriorly; aedeagus broadly U-shaped, lacking processes. Xth segment unusually long with a pair of long, parallel-sided processes arising from the base.

*Distribution.* PNG: New Guinea (NE: Mt Missim); Irian: New Guinea (NW: Mt Bodem).

**Phytotartessus dimifensis F. Evans, new species**

FIG. 28L–N

Length: ♂, 9.3 mm. Coloration: brown. Closely resembling *P. scabrifrons* in size, shape and coloration. Differing in characters provided by the ♂ genitalia. Thus, the pygophore terminates as a long fingerlike lobe and the aedeagus has a broad, apically rounded process arising from the base anteriorly.

Holotype ♂, PNG: NEW GUINEA (SE), Kiunga, Fly Riv, 21.X.1957, W.W. Brandt (BISHOP 11,725).

**Duatartessus F. Evans, new genus**

Sturdy brown insects ranging in length from 7–12 mm. Face flattened, pale orange-brown with a dark transverse stripe posteriorly. Tegmen dark golden brown; veins brown, or black, orange on clavus. ♂ genitalia: pygophore emarginate or bilobed posteriorly, the dorsal lobe variable in shape; aedeagus U- or W-shaped. Xth segment with a pair of long spinelike processes arising from the base. ♀: VIIth abdominal sternum truncate and sinuous or sloping towards the medially emarginate apex.

*Type-species.* *Bythoscopus badius* Walker.

*Distribution.* New Guinea; Malaysia.

*Remarks.* *Duatartessus*, n. gen. resembles *Austrotartessus*, n. gen. in having a divided pygophore and in characters provided by the aedeagus.

**Duatartessus badius (Walker), new combination**

FIG. 29E–H

*Bythoscopus badius* Walker, 1870: 321 (New Guinea—type in BMNH).

Length: ♂, 7 mm; ♀, 8 mm. Coloration: yellowish or dark chestnut brown. ♂ genitalia: pygophore elongate, dorsally emarginate; aedeagus W-shaped. Xth segment with a pair of broadly based, apically narrow, hook-shaped processes. ♀: VIIth abdominal sternum truncate, sinuate, medially emarginate.

*Distribution.* Irian: New Guinea (NW: Bodem, Cyclops Mts, Waris, Ifar, Kebar Val); PNG: New Guinea (NE: Maprik, Karimui).

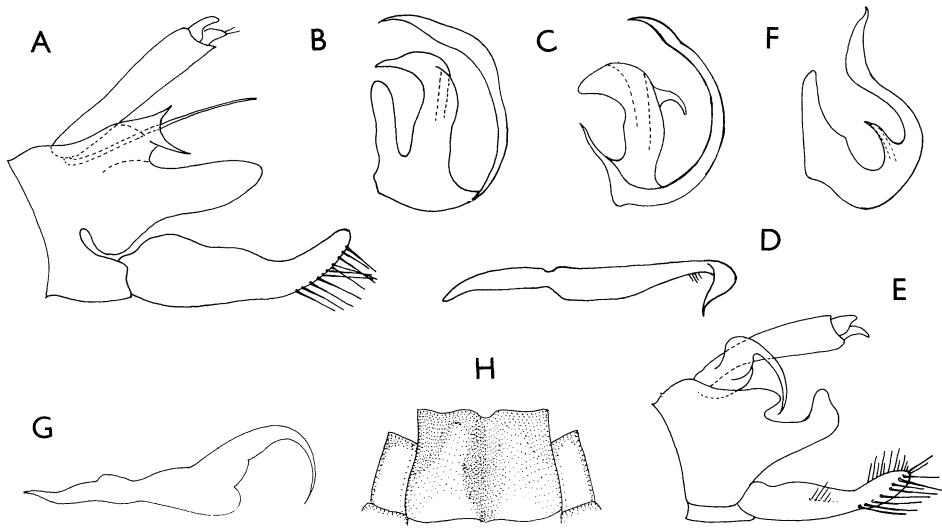


FIG. 29. A-D, *Duartartessus malleus*: A, ♂ genitalia; B-C, aedeagus; D, paramere. E-H, *D. badius*: E, ♂ genitalia; F, aedeagus; G, paramere; H, ♀ sternum VII.

#### ***Duartartessus malleus* F. Evans, new species**

FIG. 29A-D

Length: ♂, 8 mm; ♀, 9 mm. Coloration: yellowish or orange-brown and dark brown. Pronotum and scutellum orange or yellowish brown. Tegmen dark hyaline brown; veins dark brown. ♂ genitalia: apex of dorsal lobe of pygophore widely spanner-shaped; aedeagus with a pair of apically curved extensions of which the proximal one, which may bear a large spinelike lateral extension, is considerably broader than the distal one.

Holotype ♂, IRIAN: NEW GUINEA (SW): Vogelkop-Bomberi, 700 m, 4.V.1959, J.L. Gressitt (BISHOP 11,726). Allotype ♀, same data as holotype (BISHOP).

*Remarks.* This species differs from others in the genus in ♂ genitalia characteristics.

#### ***Duartartessus sepikensis* F. Evans, new species**

FIG. 30A-E

Length: ♂, 12 mm. Coloration: orange-brown. ♂ genitalia: dorsal lobe of pygophore club-shaped, ventral lobe narrowing posteriorly; aedeagus U-shaped, the proximal lobe widely parallel-sided with a basal spinelike process; distal lobe slender with 1 or a pair of small lateral projections.

Holotype ♂, PNG: NEW GUINEA (NE): Sepik Distr, Dreikikir, 350 m, 22.VI.1961, J.L. & M. Gressitt (BISHOP 11,727). Paratypes: NEW GUINEA (NE): 2♂, 1, Torricelli Mts, Brandt (BISHOP), 1, Maprik, Maa (BISHOP).

*Remarks.* This species is closely related to *D. malleus*, n. sp., from which it differs in pygophore shape.

#### ***Duartartessus torricellensis* F. Evans, new species**

FIG. 30F-I

Resembling *D. sepikensis*, n. sp. in general characteristics; differing in having the pygophore more deeply divided, the dorsal lobe larger and differently shaped, and

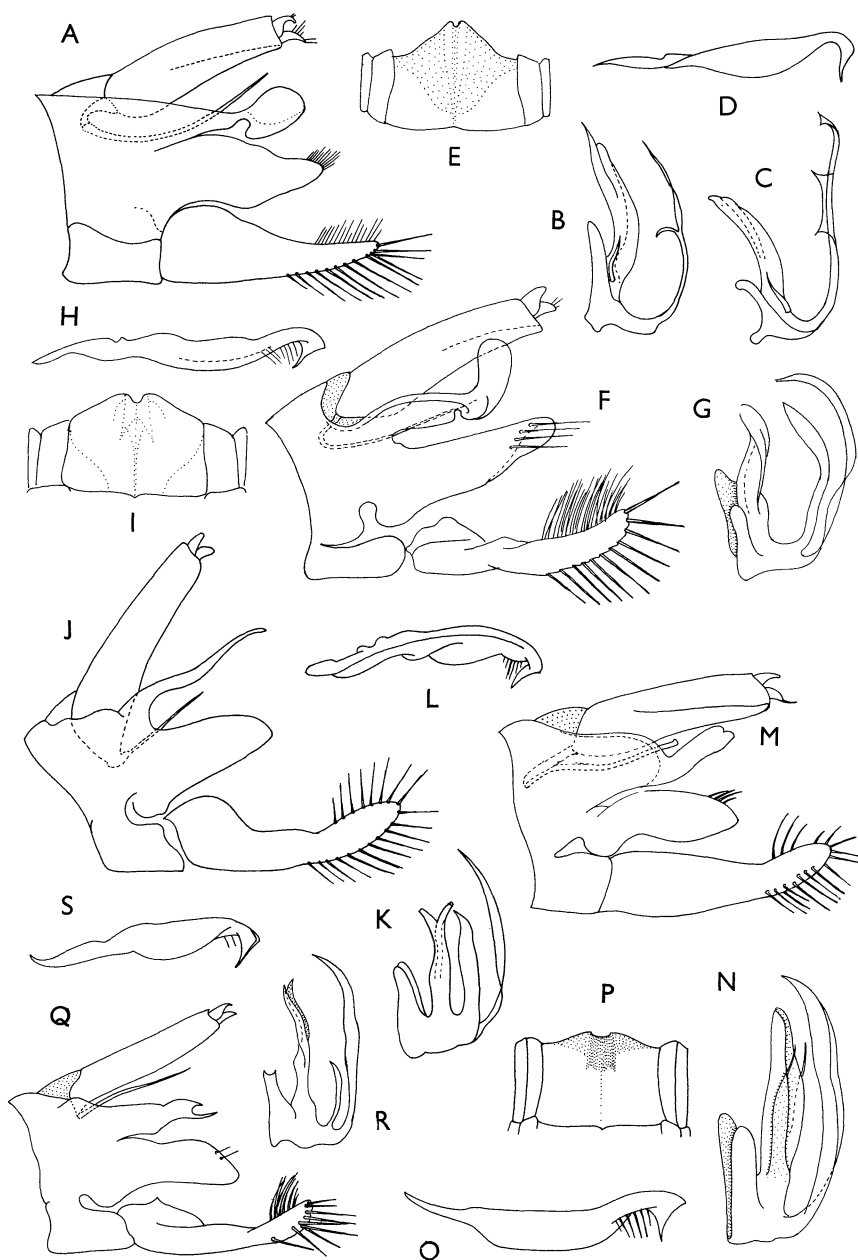


FIG. 30. A-E, *Duatartessus sepihensis*: A, ♂ genitalia; B-C, aedeagus; D, paramere; E, ♀ sternum VII. F-I, *D. torricellensis*: F, ♂ genitalia; G, aedeagus; H, paramere; I, ♀ sternum VII. J-L, *D. spadix*: J, ♂ genitalia; K, aedeagus; L, paramere. M-P, *D. gilvus*: M, ♂ genitalia; N, aedeagus; O, paramere; P, ♀ sternum VII. Q-S, *D. daradensis*: Q, ♂ genitalia; R, aedeagus; S, paramere.



particularly in the presence on the aedeagus of a median vertical process lacking in *D. sepikensis*.

Holotype ♂, PNG: NEW GUINEA (NE): Torricelli Mts, Siaute, sea level, 9.XI.1958, W.W. Brandt (BISHOP 11,728). Allotype ♀, NEW GUINEA (NE): Maprik, 150 m, 17.I.1960, T.C. Maa (BISHOP).

**Duatartessus gilvus** F. Evans, **new species**

FIG. 30M-P

Length: ♂, 10 mm; ♀, 12 mm. Coloration: pale orange-brown. ♂ genitalia: dorsal lobe of deeply divided pygophore, parallel-sided, apically rounded and medially emarginate; aedeagus U-shaped, with a pair of slender vertical processes arising from near the base of the proximal arm. Xth segment with a pair of narrow processes arising from a produced base.

Holotype ♂, IRIAN: NEW GUINEA (NW): Ifar, 400-500 m, 23.VI.1959, T.C. Maa (BISHOP 11,729). Allotype ♀, same data as holotype (BISHOP).

*Remarks.* This species is closely allied to *D. daradensis*, n. sp., from which it differs in ♂ genitalia characters.

**Duatartessus spadix** F. Evans, **new species**

FIG. 30J-L

Length: ♂, 11 mm. Coloration: orange-brown. ♂ genitalia: dorsal lobe of divided pygophore long, narrow and sinuate; ventral lobe apically rounded; aedeagus W-shaped, the proximal extension apically bifurcate. Xth segment with a pair of spinelike processes arising from the base.

Holotype ♂, PNG: NEW GUINEA (NE): Feramin, 180 m, 1.VI.1959, W.W. Brandt (BISHOP 11,730).

*Remarks.* This species differs from others in the genus in characters provided by the ♂ genitalia.

**Duatartessus daradensis** F. Evans, **new species**

FIG. 30Q-S

Length: ♂, 10 mm. Coloration: orange and brown. Pronotum and scutellum orange. Tegmen hyaline brown; veins black; on clavus orange. ♂ genitalia: dorsal lobe of pygophore apically spanner-shaped, ventral lobe approximately parallel-sided; aedeagus W-shaped, the middle vertical extension considerably the shortest.

Holotype ♂, PNG: NEW GUINEA (SE): Daradae, nr Javareire, Musgrove, 100 m, 4.X.1959, J.L. Gressitt (BISHOP 11,731). Paratype: IRIAN: NEW GUINEA (NW): 1♂, Vogelkop, Gressitt (BISHOP).

*Remarks.* This species differs from others in the genus in characters provided by the ♂ genitalia.

**Infulatartessus** F. Evans, **new genus**

Shining brown insects 8-10 mm in length with the thorax usually paler in color than the rest of the body. Vertex of head with a dark mottled band. Crown longest against eyes. Tegmen golden hyaline or chestnut or smoky brown; veins brown or black. ♂ genitalia: pygophore narrowing posteriorly, usually apically rounded, sometimes with an external spinelike process; aedeagus sometimes with a short, or a long, curved vertical process and with a pair of long, ribbonlike processes posteriorly. Xth segment with a pair of short or long, curved or straight processes arising from the base. ♀: VIIth abdominal sternum truncate, sinuate, medially emarginate.

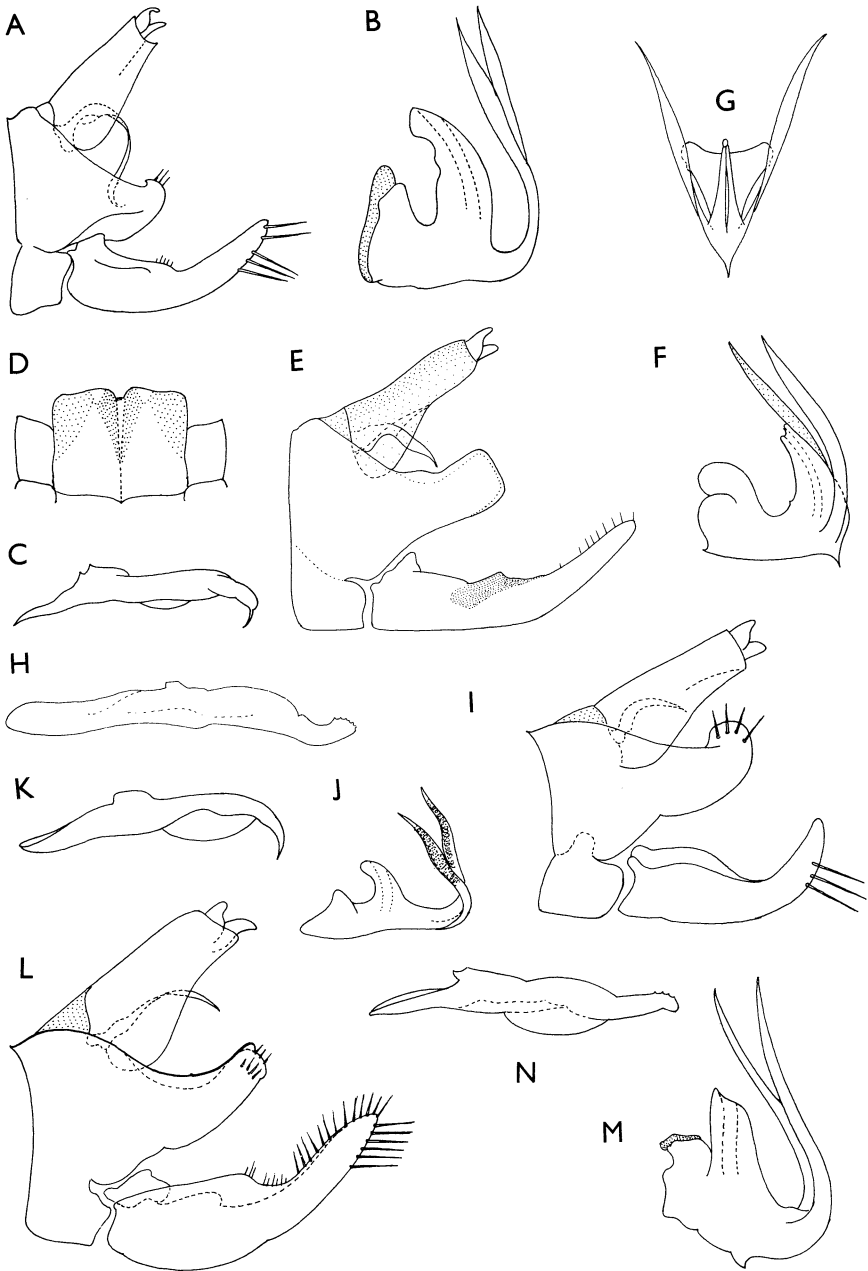


FIG. 31. A-C, *Infulatartessus nondugensis*: A, ♂ genitalia; B, aedeagus; C, paramere. D, *I. morobensis*, ♀ sternum VII. E-H, *I. stellensis*: E, ♂ genitalia; F-G, aedeagus; H, paramere. I-K, *I. morobensis*: I, ♂ genitalia; J, aedeagus; K, paramere. L-N, *I. eliptamensis*: L, ♂ genitalia; M, aedeagus; N, paramere.

*Type-species.* *Infulatartessus nondugensis*, n. sp.

*Distribution.* New Guinea.

*Remarks.* This genus differs from others in coloration and ♂ genitalia characters.

***Infulatartessus nondugensis* F. Evans, new species**

FIG. 31A-C

Length: ♂, 8 mm; ♀, 9 mm. Coloration: brown. Face brownish yellow with a transverse mottled, rugose band between the eyes. Pronotum and scutellum yellowish brown. Tegmen hyaline brown; veins pale and dark brown. ♂ genitalia: pygophore narrowing posteriorly, rounded and broadly hook-shaped apically; aedeagus with a large, proximal, vertical flange and a pair of distal, vertical, ribbonlike processes. Xth segment with a pair of long, narrow, curved, downwardly directed processes. ♀: VIIth abdominal sternum truncate, medially emarginate.

Holotype ♂, PNG: NEW GUINEA (NE): Wau, 1200 m, 14.VI.1961, J.L. Gressitt (BISHOP 11,732). Paratypes: NEW GUINEA (NE): 2♂, 1, same data as holotype, 1, Ahl Val, Nondugl, Gressitt (BISHOP).

*Remarks.* This species differs from others in the genus in coloration and ♂ genitalia characters.

***Infulatartessus stellensis* F. Evans, new species**

FIG. 31E-H

Length: ♂, 9 mm; ♀, 10 mm. Coloration: brown. Face pale brownish yellow with scattered brown markings on frontoclypeus and a mottled brown and yellow transverse band posteriorly between the eyes. Pronotum and scutellum brown, former with obscure, scattered, pale markings. Tegmen hyaline brown; veins brown. ♂ genitalia: pygophore posteriorly truncate; aedeagus with a broadly based vertical flange from which arise, posteriorly, 2 long, ribbonlike processes. Xth segment with a pair of short, curved processes arising from the base.

Holotype ♂, IRIAN: NEW GUINEA (NW): Star Mts, Sibil Val, 1245 m, 18.X.1961, L.W. Quate (BISHOP 11,733). Paratype: 1♂, same data as holotype (BISHOP).

*Remarks.* This species differs from others in the genus in coloration and ♂ genitalia characters.

***Infulatartessus morobensis* F. Evans, new species**

FIG. 31D, I-K

Length: ♂, 8.5 mm. Coloration: brown. Face pale brown with a reddish mottled transverse band posteriorly between the eyes. Pronotum and scutellum brown. Tegmen hyaline brown; veins pale brown. ♂ genitalia: pygophore roundly club-shaped, apically spined; aedeagus with a small, proximal, backwardly directed, curved flange and posteriorly a pair of vertical, ribbonlike processes. Xth segment with a pair of short, curved processes arising from the base.

Holotype ♂, PNG: NEW GUINEA (NE): Morobe Distr, Wau, 1200 m, 17.III.1965, J. & M. Sedlacek (BISHOP 11,734).

*Remarks.* This species differs from others in the genus in coloration and ♂ genitalia characters.

***Infulatartessus eliptamensis* F. Evans, new species**

FIG. 31L-N

Length: ♂, 10 mm. Coloration: brown. Face pale brownish yellow; ante- and postclypeus mottled with black and a transverse mottled black and yellow band between the eyes posteriorly. Pronotum and scutellum pale mottled brown. Tegmen hyaline brown; veins dark brown. ♂ genitalia: pygophore broadly

hook-shaped, apically spined; aedeagus with a large, proximal, backwardly directed, curved flange and a pair of distal, long ribbonlike extensions. Xth segment with a pair of slender, apically curved processes arising from the base.

Holotype ♂, PNG: NEW GUINEA (NE): Eliptamin Val, 1200–1350 m, 8.I.1959, W.W. Brandt (BISHOP 11,735). Paratype: 1♂, same data as holotype (BISHOP).

*Remarks.* This species is closely related to *I. stellensis*, n. sp., from which it differs in minor ♂ genitalia characters.

The 4 species that follow are of less certain affinity to the type-species than those described above. They have been referred to this genus on characters provided by the aedeagus.

**Infulatartessus hibernia** F. Evans, **new species**

FIG. 32A–E

Length: ♂, 8 mm; ♀, 9 mm. Coloration: pale brown. Face pale brown with a mottled dark brown band posteriorly between the eyes. Pronotum and scutellum pale brown. Tegmen hyaline brown; veins dark brown. ♂ genitalia: pygophore apically acute; aedeagus U-shaped with a long anterior, and a pair of short, apical processes. Xth segment with a pair of short, hook-shaped processes arising from the base. ♀: VIIth abdominal sternum, transverse, medially emarginate.

Holotype ♂, PNG: BISMARCK ARCH.: NEW IRELAND (SW): ridge above “Camp Bishop,” 15 km up Kait Riv, 250–450 m, 9.VII.1958, J.L. Gressitt (BISHOP 11,736). Allotype ♀, NEW IRELAND: Schleinitz Mts, Lelet Plateau, X.1959, W.W. Brandt (BISHOP). Paratype: 1♀, ADMIRALTY IS: Manus I, Momote, Maa (BISHOP).

*Remarks.* This species is distinguished by having a U-shaped aedeagus and unusually shaped parameres.

**Infulatartessus daulensis** F. Evans, **new species**

FIG. 32F–I

Length: ♂, 8 mm. Coloration: brown. Face pale yellowish brown, the frons faintly mottled with pink, the hind margin narrowly black. Pronotum and scutellum pale yellowish brown. Tegmen pale vitreous brown; veins brown. ♂ genitalia: pygophore narrowing posteriorly, rounded apically; aedeagus curved, subapically emarginate with a pair of inwardly turned apical spines. Xth segment with a pair of long, narrow, basally curved processes.

Holotype ♂, PNG: NEW GUINEA (NE): Daulo Pass, 2500 m, 4.VII.1957, D. Elmo Hardy (BISHOP 11,737). Paratype: 1♂, NEW GUINEA (NE): Mt Otto, 2200 m, Gressitt (BISHOP).

*Remarks.* This species is distinguished by characters provided by the ♂ genitalia, in particular by the shape of the aedeagus.

**Infulatartessus scutei** F. Evans, **new species**

FIG. 32J–L

Length: ♂, 8 mm. Coloration: pale and dark brown. Face yellow, hind margin of frons narrowly black. Pronotum and scutellum concolorous with the head. Tegmen dark hyaline brown; veins black. ♂ genitalia: pygophore narrowing to an acute apex, spinous; aedeagus J-shaped with a pair of apical, and another of smaller, subapical spines. Xth segment with a pair of long, whiplike processes arising from the base.

Holotype ♂, PNG: NEW GUINEA (NE): Mt Kaindi, 2350 m, 17.VI.1961, J.L. Gressitt (BISHOP 11,738). Paratype, 1♂, same data as holotype (BISHOP).

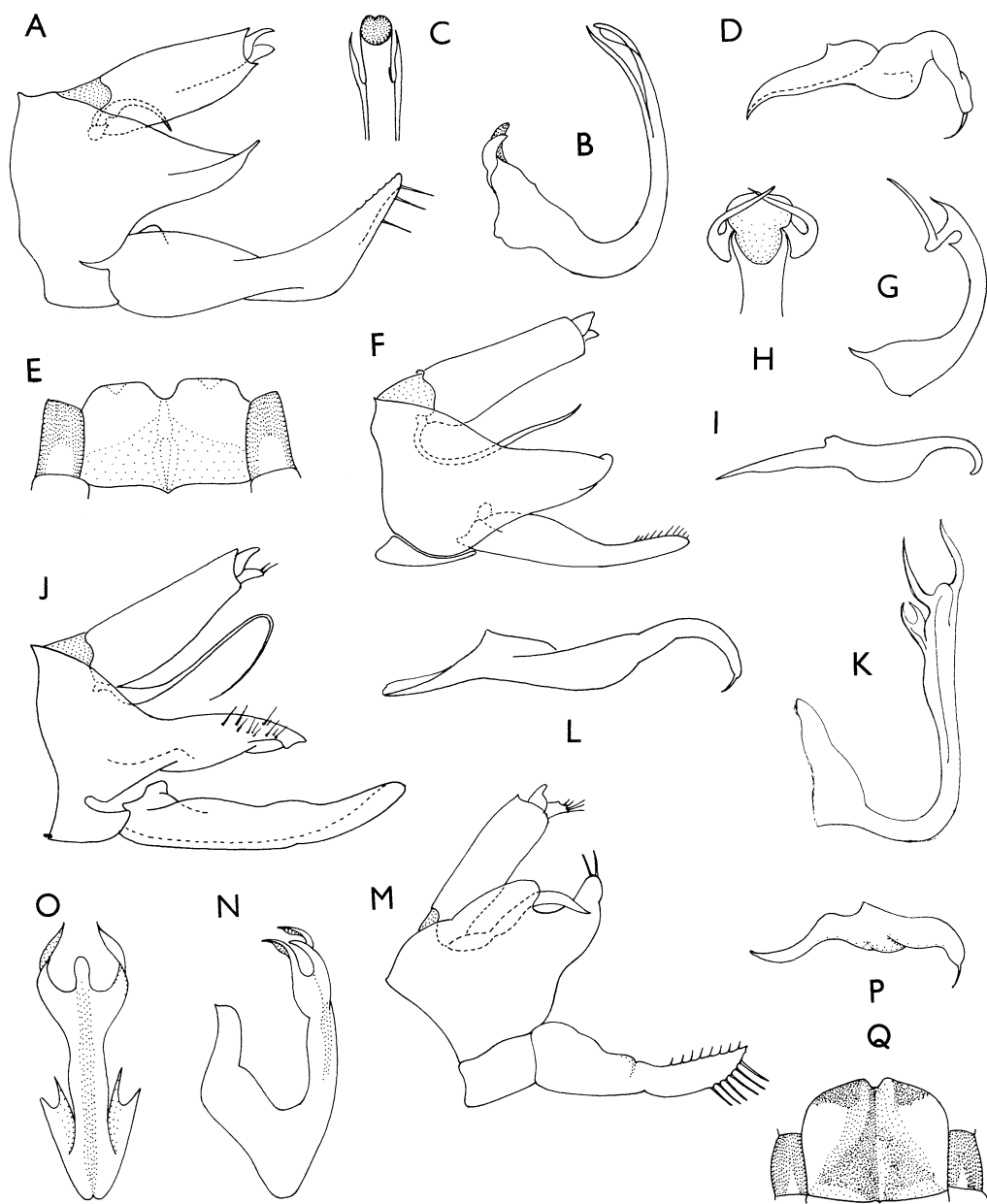


FIG. 32. A-E, *Infulatartessus hibernia*: A, ♂ genitalia; B-C, aedeagus; D, paramere; E, ♀ sternum VII. F-I, *I. daulensis*: F, ♂ genitalia; G-H, aedeagus; I, paramere. J-L, *I. scutei*: J, ♂ genitalia; K, aedeagus; L, paramere. M-Q, *I. incertus*: M, ♂ genitalia; N-O, aedeagus; P, paramere; Q, ♀ sternum VII.

**Remarks.** This species differs from others in the genus in characters provided by the ♂ genitalia.

**Infulatartessus incertus** F. Evans, new species

FIG. 32M–Q

Length: ♂, 9 mm; ♀, 9.8 mm. Coloration: brown. Face pale brown with a transverse mottled band posteriorly between the eyes and sometimes a mottled postclypeus. Pronotum pale or mottled brown. Scutellum pale brown, lateral muscle impressions sometimes dark brown. Tegmen pale vitreous brown; veins dark brown. ♂ genitalia: pygophore with an extensive dorsal lobe; aedeagus U-shaped with a median and paired apical processes. Xth segment with a pair of long, ribbonlike processes arising from the base. ♀: VIIIth abdominal sternum, apically rounded, medially emarginate.

Holotype ♂, PNG: NEW GUINEA (NE): Morobe Distr, Wau, 1200 m, 30.VI.1961, J. & J.H. Sedlacek (BISHOP 11,739). Allotype ♀, Morobe Distr, head of Wau Crk, 2000 m, Sedlacek (BISHOP). Paratypes: 2♂, 1♀, same data as holotype (BISHOP).

**Genus *Tartessus* Stål**

*Tartessus* Stål, 1865: 156 (type-species: *Bythoscopus malayus* Stål).

Orange or dark brown insects ranging in length from 9–12 mm. Face sometimes with a black, or brown, transverse band between the eyes. Tegmen orange or dark hyaline brown, sometimes in part smoky hyaline. ♂ genitalia: pygophore narrowing posteriorly or, if rounded, with a small internally based acute extension; aedeagus columnar with paired apical acute processes. Xth segment with a pair of spanner-shaped processes usually arising from a collarlike base. ♀: VIIIth abdominal sternum truncate, medially emarginate.

**Distribution.** Oriental Region and islands north of Australia.

Considerable confusion has attended the determination of the type-species of the genus *Tartessus*. Distant (1908) selected *Bythoscopus ferrugineus* Walker, 1851 as the type, on the grounds that Stål (1870) considered *malayus* Stål, 1859 to be a synonym of *ferrugineus*. Later authors have not accepted this synonymy, which genitalia examination has shown to be incorrect.

***Tartessus malayus* (Stål)**

FIG. 33A–E

*Bythoscopus malayus* Stål, 1859: 290 (Malacca—type in STOCKHOLM).

*Bythoscopus basivitta* Walker, 1870: 318.

Length: ♂, 9 mm. Coloration: orange. Face orange with or without one or a pair of transverse black bands posteriorly. Crown, pronotum, and scutellum orange. Tegmen pale hyaline orange, costal border and veins, except in the clavus, black. ♂ genitalia: pygophore apically rounded with a lobelike dorsal projection; aedeagus J-shaped, apically tapering and with 2 small apical spines. Xth segment with a pair of wide, spanner-shaped processes arising from a collarlike base.

**Distribution.** Malaysia; Philippine Is; Taiwan; Irian: New Guinea (NW: Biak I).

***Tartessus ferrugineus* (Walker)**

FIG. 33F–J

*Bythoscopus ferrugineus* Walker, 1851: 865 (Java—type in BMNH).

Length: ♂, 10 mm. Coloration: bright orange. Face flattened, with a transverse black band between the eyes posteriorly. Crown, pronotum and scutellum orange. Tegmen hyaline orange, costal margin broadly

black; veins black, orange in clavus. ♂ genitalia: pygophore apically acute; aedeagus narrowly columnar with a pair of anteriorly directed apical spinelike extensions. Xth segment with a pair of broad, hook-shaped processes arising from a collarlike base.

*Distribution.* Oriental Region.

### **Fedotartessus F. Evans, new genus**

Brown insects ranging in length from 9–10 mm with an incomplete narrow brown or black stripe at the apex of the head. ♂ genitalia: pygophore apically acute; aedeagus with 2 pairs of long terminal extensions and with a pair of long, vertical, slender posterior processes. Xth segment with a pair of spanner-shaped processes arising from a collarlike base.

*Type-species.* *Fedotartessus popensis*, n. sp.

*Distribution.* New Guinea; Borneo.

*Remarks.* *Fedotartessus*, n. gen. resembles *Tartessus* Stål in the shape of the paired processes which arise from the base of the Xth segment in the ♂. It differs in the shape of the aedeagus of the type-species. Specimens of 2 undescribed species from Borneo belonging to this genus have been seen.

### **Fedotartessus popensis F. Evans, new species**

FIG. 34A–C

Length: ♂, 9 mm. Coloration: brown. Face with a narrow, interrupted, dark brown apical stripe. ♂ genitalia as in FIG. 34A–C.

Holotype ♂, PNG: NEW GUINEA (SE): Popondetta, 60 m, 2.IX.1963, J. Sedlacek (BISHOP 11,740).

### **Macrotartessus F. Evans, new genus**

Large yellowish and dark brown insects. Crown bearing ocelli, angularly produced, of equal length throughout. ♂ genitalia: pygophore narrowing posteriorly with a long, lobelike process arising from the ventral margin; aedeagus U-shaped, with a pair of short anteapical processes; parameres almost straight. Xth segment with a pair of hook-shaped processes arising from the base.

*Type-species.* *Macrotartessus straatmani*, n. sp.

*Distribution.* New Guinea.

*Remarks.* While the type-species resembles species in the genus *Triviotartessus*, n. gen. in general appearance and coloration, and in having an anteapical black stripe on the face of the head, it differs in ♂ genitalia characters, particularly in the presence of paired ventral pygophore processes.

### **Macrotartessus straatmani F. Evans, new species**

FIG. 34D–F

Length: ♂, 12 mm. Face pale yellowish brown with an anteapical black band between the eyes; epistomal suture carinate. Crown, pronotum and scutellum pale yellowish brown. Tegmen hyaline brown. ♂ genitalia as in FIG. 34D–F.

Holotype ♂, PNG: NEW GUINEA (NE): 6 km W of Green Riv, 24.VI.1963, R. Straatman (BISHOP 11,741).

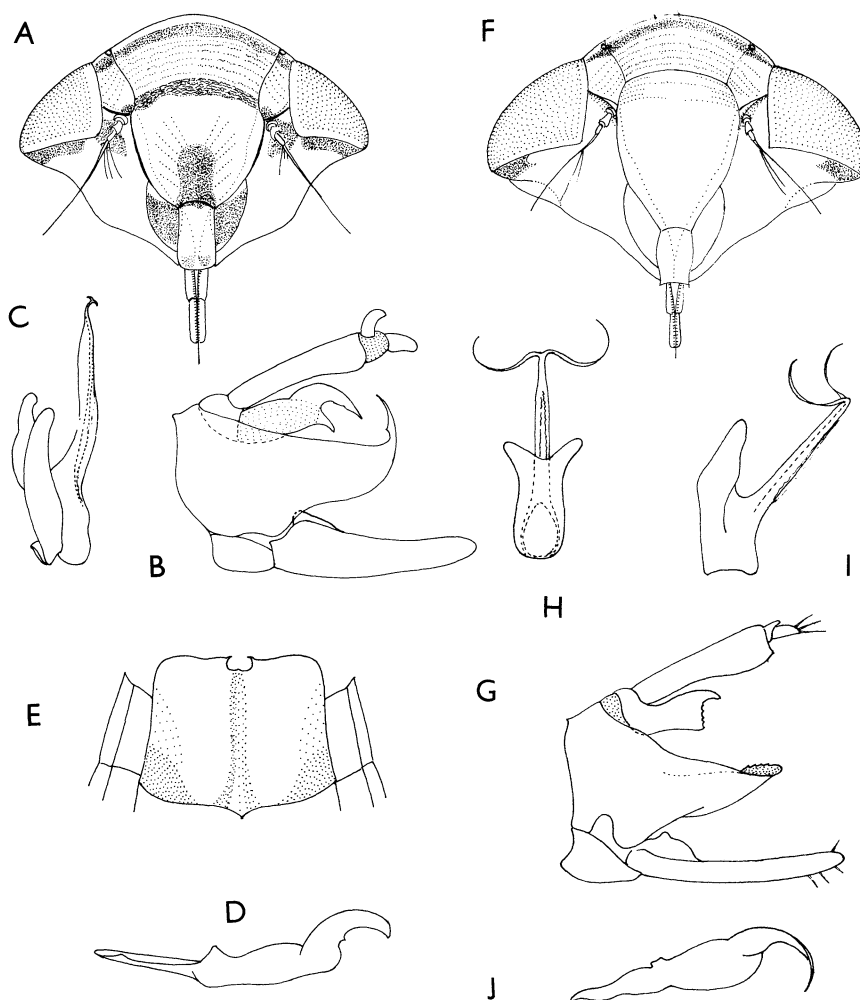


FIG. 33. A-E, *Tartessus malayus*: A, face; B, ♂ genitalia; C, aedeagus; D, paramere; E, ♀ sternum VII. F-J, *T. ferrugineus*: F, face; G, ♂ genitalia; H-I, aedeagus; J, paramere.

### **Triviotartessus F. Evans, new genus**

Brown insects ranging in length from 9–13 mm, usually with a transverse black stripe on the face posteriorly. Tegmen hyaline brown; veins pale or dark brown. ♂ genitalia: pygophore rounded or hook-shaped, sometimes also with a long, or short, spine-shaped process arising from the dorsal margin, apically spined; subgenital plates parallel-sided or widest in the center; aedeagus consisting of a pair of vertical processes arising separately from the base, of which the proximal one may be considerably the broadest. Xth segment usually lacking processes but sometimes with a parallel-sided ventral lobe. ♀: VIIth abdominal sternum variable in shape.

*Type-species.* *Tartessus trivialis* Spångberg.

*Distribution.* New Guinea.



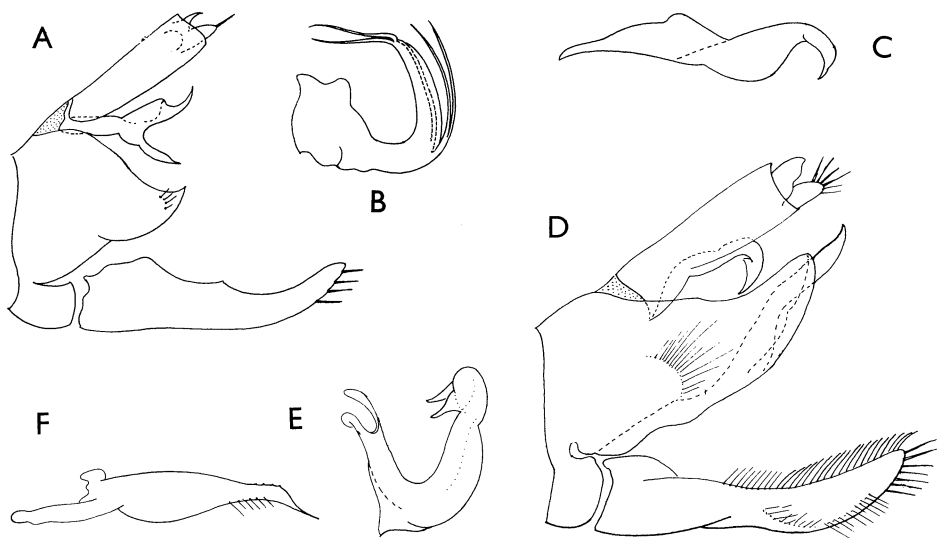


FIG. 34. A-C, *Fedotartessus popensis*: A, ♂ genitalia; B, aedeagus; C, paramere. D-F, *Macrotartessus straatmani*: D, ♂ genitalia; E, aedeagus; F, paramere.

**Remarks.** This genus is distinguished by the characteristic shape of the ♂ genitalia of the comprised species.

***Triviotartessus trivialis* (Spångberg), new combination**

FIG. 35E-I

*Tartessus trivialis* Spångberg, 1878: 5 (Mysol—type in STOCKHOLM).

Length: ♂, 10 mm; ♀, 12 mm. Coloration: brown. ♂ genitalia: pygophore rounded apically with a small spine arising from the dorsal margin; aedeagus consisting of 2 similar slender, curved processes; subgenital plates proximally broad. ♀: VIIth abdominal sternum as in FIG. 35i.

**Distribution.** Mysol; Irian: New Guinea (NW: Waris); PNG: New Guinea (NE: Amok).

***Triviotartessus hastus* F. Evans, new species**

FIG. 35A-D

Length: ♂, 11 mm; ♀, 13 mm. Uniformly brown in color, the costal area of the tegmen and the veins, in part, dark brown. ♂ genitalia with the pygophore and aedeagus resembling those of the type-species (FIG. 35A-C).

Holotype ♂ and allotype ♀, IRIAN: NEW GUINEA (NW): Hollandia (LEIDEN).

**Remarks.** This species can be distinguished by characteristics provided by the ♂ genitalia.

***Triviotartessus cheesmanae* F. Evans, new species**

FIG. 35J-M

Length: ♂, 13 mm. Coloration: pale brown. ♂ genitalia: pygophore parallel-sided, with a small apical spine; aedeagus consisting of a long, broad, curved proximal process and a shorter, slender distal one.

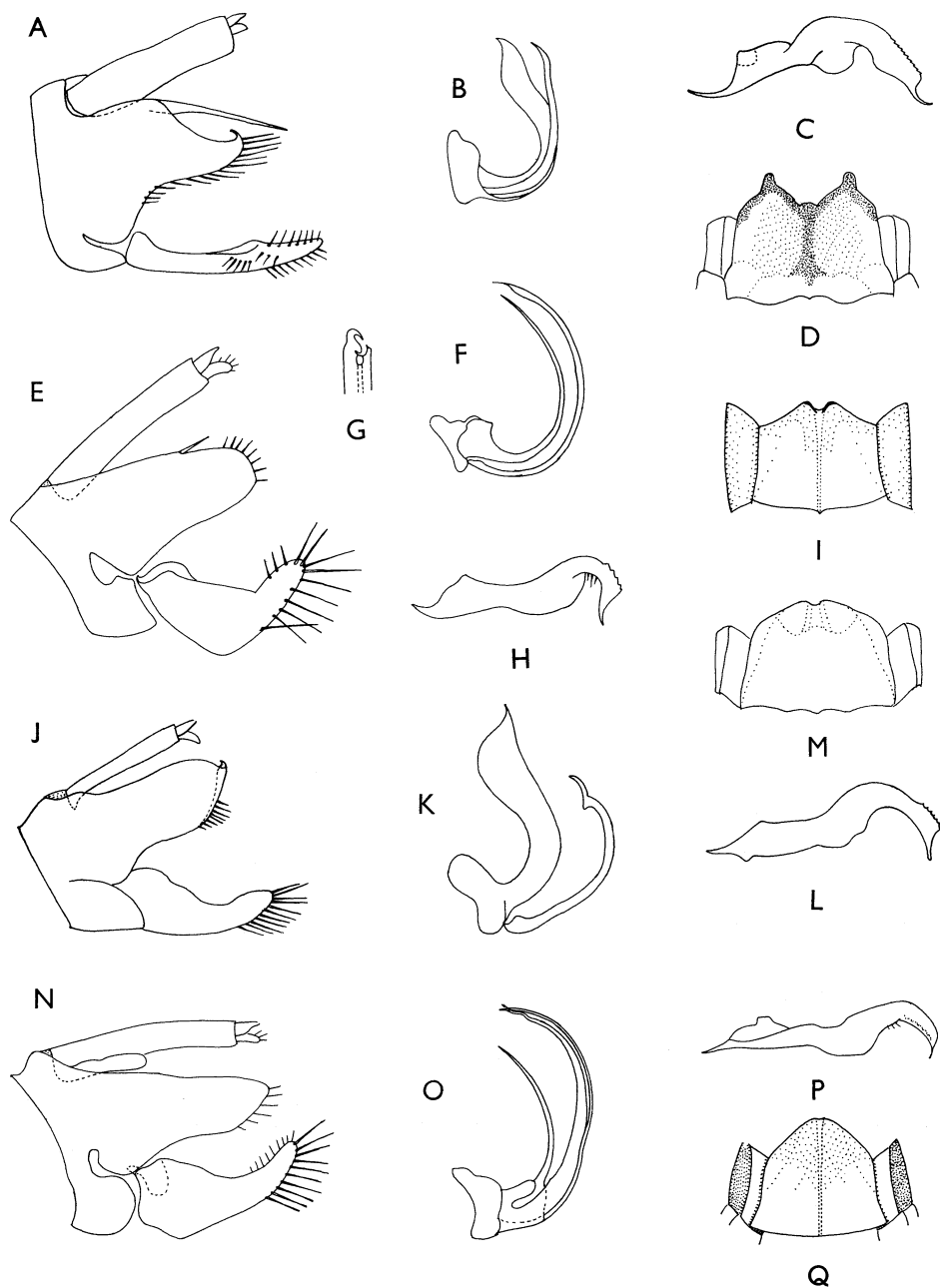


FIG. 35. A-D, *Triviotartessus hastus*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E-I, *T. trivialis*: E, ♂ genitalia; F-G, aedeagus; H, paramere; I, ♀ sternum VII. J-M, *T. cheesmanae*: J, ♂ genitalia; K, aedeagus; L, paramere; M, ♀ sternum VII. N-Q, *T. scrupulus*: N, ♂ genitalia; O, aedeagus; P, paramere; Q, ♀ sternum VII.

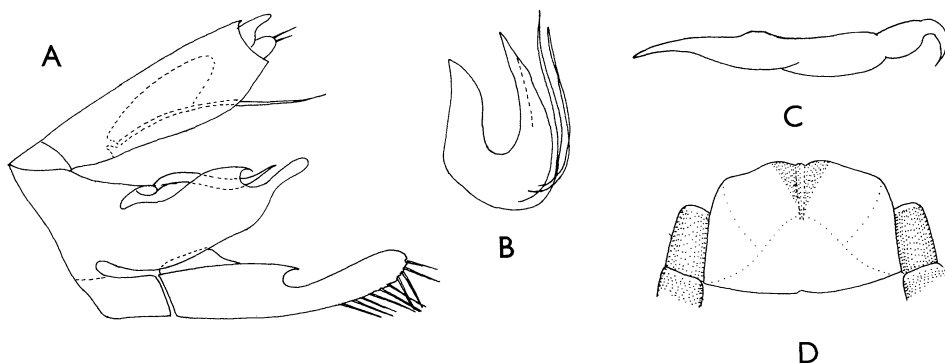


FIG. 36. *Milotartessus sananas*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII.

Holotype ♂, N NEW GUINEA: Mt Gyifrie, sea level, IV.1939, L.E. Cheesman (SAM).

*Remarks.* This species can be distinguished by ♂ genitalia characteristics.

#### **Triviotartessus scrupulus** F. Evans, **new species**

FIG. 35N-Q

Length: ♂, 9 mm; ♀, 11 mm. Coloration: brown. Face pale yellow, sometimes in part pinkish and with a black transverse stripe posteriorly. ♂ genitalia: pygophore narrowing posteriorly; subgenital plates proximally broad; aedeagus with a curved, proximal process and a longer, divided, slender distal one. Xth segment with a pair of short, parallel-sided lobes arising from the base.

Holotype ♂, IRIAN: NEW GUINEA (SW): Vogelkop, Bomberi, 800 m, 3.VI.1959, J.L. Gressitt (BISHOP 11,742). Allotype ♀, and 2♀ paratypes, same data as holotype (BISHOP).

*Remarks.* The above species is provisionally ascribed to this genus. It differs from the others assigned to it in having small Xth segment processes in the ♂ and in the aedeagus having 3 instead of only 2 extensions.

#### **Milotartessus** F. Evans, **new genus**

Brown to black insects ranging in length from 9–11 mm. ♂ genitalia: pygophore posteriorly emarginate, terminating as a fingerlike lobe and with a spinelike process arising from the inner, dorsal margin; aedeagus U-shaped with a pair of long, threadlike processes posteriorly; subgenital plates medially emarginate. Xth segment with a pair of spinelike processes arising at some distance from the base. ♀: VIIth abdominal sternum rounded laterally, slightly sinuate posteriorly.

*Type-species.* *Tartessus sananas* Distant.

*Distribution.* New Guinea.

*Remarks.* *Milotartessus*, n. gen. is closely related to the genus *Triviotartessus*, n. gen., but the ♂ genitalia of the type-species are considered sufficiently distinctive to justify its assignment to a separate genus.

**Milotartessus sananas (Distant), new combination**

FIG. 36A–D

*Tartessus sananas* Distant, 1912: 603 (New Guinea—type in BMNH).

Length: ♂, 9 mm; ♀, 11 mm. Face with a characteristic color pattern, anteriorly chestnut brown and black, posteriorly pale yellow with a median transverse broad black stripe. Pronotum and scutellum brown, or black, or brown and black. Tegmen dark hyaline brown, costal margin broadly and veins black. ♂ genitalia as in FIG. 36A–C.

*Distribution.* Irian: New Guinea (NW: W Sentani); PNG: New Guinea (NE: Upper Jimmi Valley).

**Genus *Sarpestus* Spångberg***Sarpestus* Spångberg, 1878: 10 (type-species: *Sarpestus specularis* Spångberg).

Slender yellow, dark brown and black insects ranging in length from 9–12 mm. Head yellow, hind margin of frons carinate. Crown declivous, of even length, or slightly longest against the eyes. Pronotum extending in front of the eyes, together with the scutellum, yellow. Tegmen vitreous or pale hyaline brown, broadly margined with black against the costal and claval margins; veins dark brown and black, M diverging from R close to the point of derivation of Rs. ♂ genitalia: pygophore narrowing posteriorly with a ventral subapical, and sometimes also a dorsal, hooklike extension; aedeagus curved, apically bilobed. Xth segment lacking processes. ♀: VIIth abdominal sternum broadly dome-shaped, slightly medially depressed.

*Distribution.* Mysol; New Guinea.

***Sarpestus bistriga* (Walker), new combination**

FIG. 37A–E

*Bythoscopus bistriga* Walker, 1870: 317 (New Guinea—type in BMNH).*Sarpestus specularis* Spångberg, 1878: 11. **New synonymy.**

Length: ♂, 9 mm; ♀, 12 mm. ♂ genitalia as in FIG. 37A–C.

*Distribution.* Mysol; PNG: New Guinea (NE: May River, Finisterre Range, Bainyik; SE: Sogeri); Irian: New Guinea (NW: Bodem).

***Sarpestus diaphanus* (Walker), new combination**

FIG. 37F–H

*Bythoscopus diaphanus* Walker, 1870: 321 (New Guinea—type in BMNH).

Length: ♂, 9 mm. Coloration considerably paler than that of type-species. ♂ genitalia as in FIG. 37F–H.

*Distribution.* Irian: New Guinea (NW: Geelvink Bay).

***Alosarpestus* F. Evans, new genus**

Closely resembling *Sarpestus* Spångberg in coloration and general appearance, also in having anomalous tegminal venation. Differing in characters provided by the ♂ genitalia as follows: pygophore with a pair of widely separated long, slender, posterior extensions; aedeagus columnar with a small, proximal, ventral prominence and a pair of apical spines. Xth segment lacking processes. ♀: VIIth abdominal sternum, narrowly cone-shaped.

*Type-species.* *Alosarpestus fakensis*, n. sp.

*Distribution.* New Guinea; New Britain.

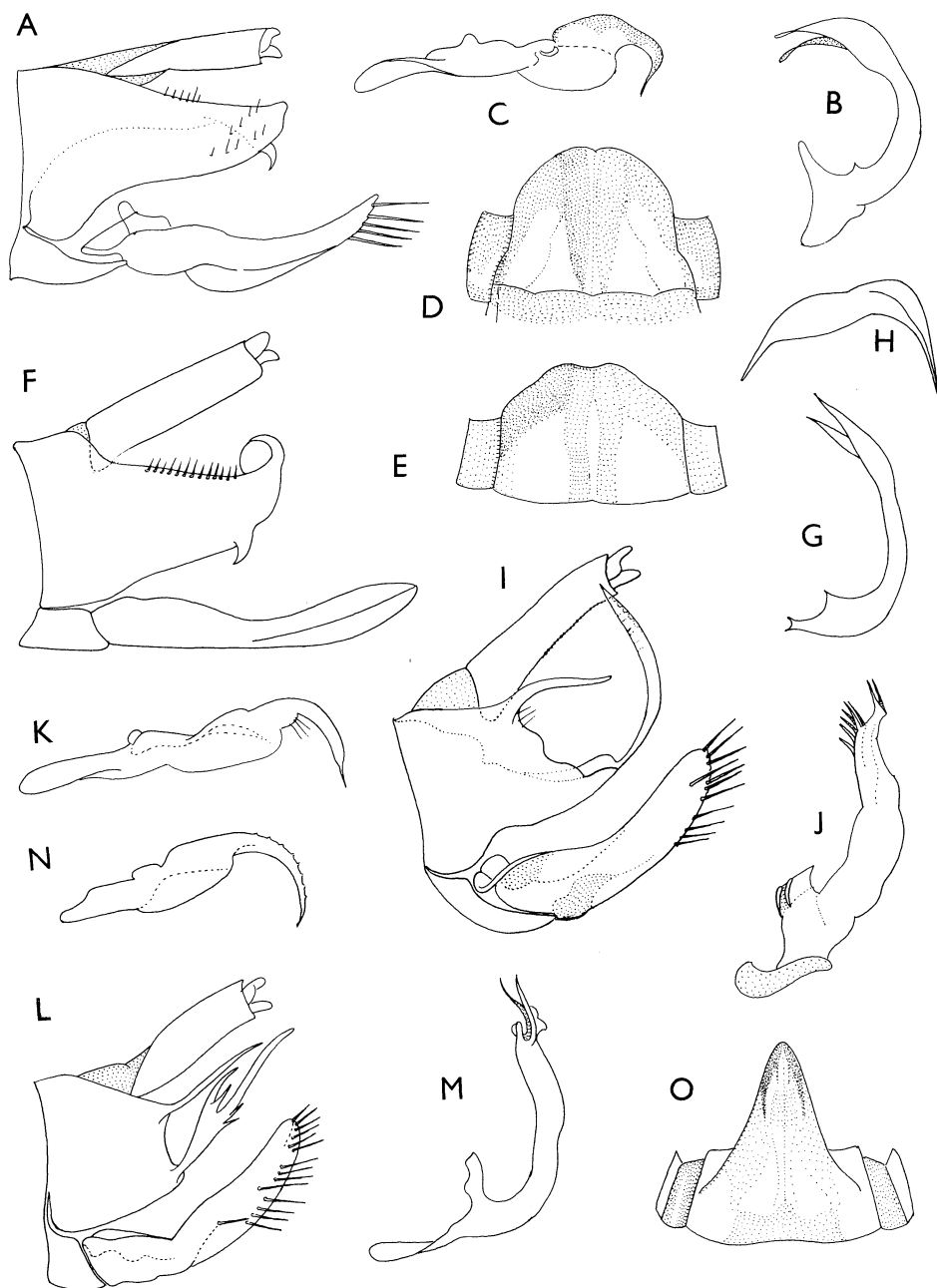


FIG. 37. A-E, *Sarpestus bistriga*: A, ♂ genitalia; B, aedeagus; C, paramere; D-E, ♀ sternum VII. F-H, *S. diaphanus*: F, ♂ genitalia; G, aedeagus; H, paramere. I-K, *Alosarpestus fakensis*: I, ♂ genitalia; J, aedeagus; K, paramere. L-O, *A. keravatensis*: L, ♂ genitalia; M, aedeagus; N, paramere; O, ♂ sternum VII.

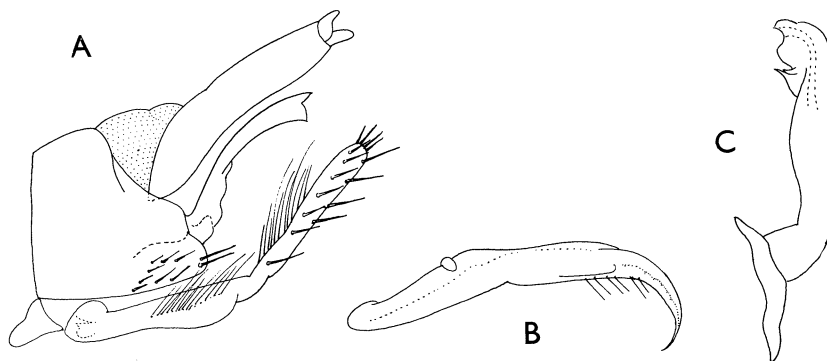


FIG. 38. *Iriartartessus maai*: A, ♂ genitalia; B, paramere; C, aedeagus.

### ***Alosarpestus fakensis* F. Evans, new species**

FIG. 37I-K

Length: ♂, 9 mm. Resembling *Sarpestus bistriga* Walker in coloration. ♂ genitalia as in FIG. 37I-K. Ventral extension of pygophore long, narrow and parallel-sided.

Holotype ♂, IRIAN: NEW GUINEA (SW): Vogelkop, Fak Fak, S coast of Bomberai, 4.VI.1959, T.C. Maa (BISHOP 11,743). Paratypes: 2♂, Vogelkop, Kebar Val, Quate (BISHOP).

### ***Alosarpestus keravatensis* F. Evans, new species**

FIG. 37L-O

Length: ♂, 10 mm. Closely resembling *Sarpestus bistriga* in coloration. Differing from *A. fakensis*, n. sp. in having the ventral extension of the pygophore very differently shaped and in the aedeagus having a longer and narrower basal process.

Holotype ♂ and allotype ♀, PNG: NEW BRITAIN: Vunabakan, 180 m, 10 km E of Keravat, 16.XI.1959, T.C. Maa (BISHOP 11,744). Paratype: 1♂, same data as holotype.

**Remarks.** While this species has ♂ genitalia of the same basic pattern as those of the type-species, it can be distinguished by having differently shaped pygophore processes.

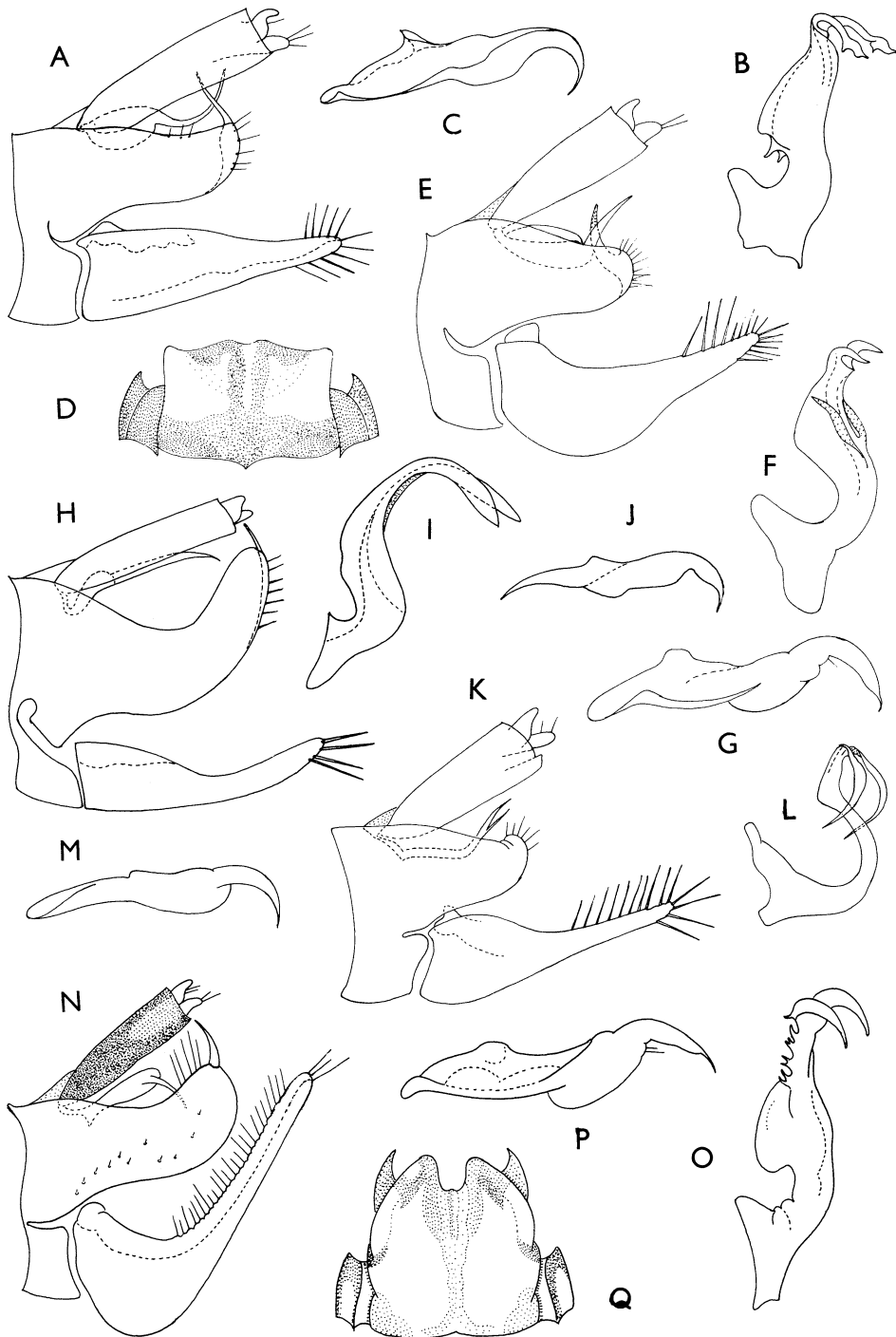
### ***Iriartartessus* F. Evans, new genus**

Slender, pale yellowish brown and pale brown insects. Crown bearing the ocelli, of even length, declivous. Tegmen largely vitreous. ♂ genitalia: pygophore with a long, parallel-sided, apical extension, ventrally spined; aedeagus columnar, apically swollen; subgenital plate narrow, heavily spined. Xth segment lacking processes.

**Type-species.** *Iriartartessus maai*, n. sp.

**Distribution.** New Guinea.

**Remarks.** This genus differs from others in characters provided by the ♂ genitalia and in particular by having long parallel-sided processes on the pygophore.



**Iriartessus maai** F. Evans, **new species**

FIG. 38A–C

Length: ♂, 10 mm. Head pale yellowish brown with a narrow dark brown apical band between the eyes. Pronotum pale yellowish brown with a pair of broad, brown, longitudinal markings. Scutellum pale yellowish brown. Tegmen vitreous and pale hyaline brown, apex and costal margin broadly smoky; veins brown, ♂ genitalia as in FIG. 38A–C.

Holotype ♂, IRIAN: NEW GUINEA (SW): Vogelkop, Fak Fak, S coast of Bomberai, 8.VI.1959, T.C. Maa (BISHOP 11,745).

**Philotartessus** F. Evans, **new genus**

Yellowish brown or brown insects ranging in length from 8–12 mm. Face pale brown with a dark brown or black scribble pattern of varying extent, often darker in ♂ than in ♀. Crown of head longer against the eyes than in the center. Pronotum, and sometimes also the scutellum, pale or dark mottled brown. Tegmen pale or dark hyaline brown, sometimes in part black; veins brown or black. ♂ genitalia: pygophore narrowing posteriorly, usually apically acute or hook-shaped; aedeagus usually of characteristic shape, proximally emarginate, with a pair of apical extensions. Xth segment with a pair of usually broadly based and apically acute processes. ♀: VIIth abdominal sternum variable in shape, usually sinuate and rounded laterally, medially emarginate.

*Type-species.* *Bythoscopus dimidiatus* Walker.

*Distribution.* New Guinea; Solomon Is.

*Remarks.* While the characteristic shape of the various parts of the genitalia and of the Xth segment processes of the ♂ readily enable the assignment of species to this genus, the selection of population representatives as “species” has proved very difficult.

For example, on their differing genitalia characters, each of the 3 species placed below as synonyms of the type-species would ordinarily merit specific recognition. However, if they were to be given this status, it would mean the acceptance also of an almost unlimited number of other species, each with a very restricted distribution.

Because of the interest of this evolutionary instability, figures of the genitalia of some 30 specimens were prepared as illustrations for this paper. However, for reasons of economy only 11 of these have been used, those retained either being associated with a published name or else having genitalia which differ strikingly from that of the type-species.

**Philotartessus dimidiatus** (Walker), **new combination**

*Bythoscopus dimidiatus* Walker, 1870: 319 (Dorey I = Manokwari I—type in BMNH). (FIG. 39A–D.)

*Bythoscopus cupreipennis* Walker, 1870: 321. (FIG. 39E–G.) **New synonymy.**

←

FIG. 39. A–D, *Philotartessus dimidiatus*: A, ♂ genitalia; B, aedeagus; C, paramere; D, ♀ sternum VII. E–G, type of *Bythoscopus cupreipennis* (synonym of *P. dimidiatus*): E, ♂ genitalia; F, aedeagus; G, paramere. H–J, type of *Bythoscopus semivenosus* (synonym of *P. dimidiatus*): H, ♂ genitalia; I, aedeagus; J, paramere. K–M, type of *Tartessus guttulatus* (synonym of *P. dimidiatus*): K, ♂ genitalia; L, aedeagus; M, paramere. N–Q, *Philotartessus wumensis*: N, ♂ genitalia; O, aedeagus; P, paramere; Q, ♀ sternum VII.



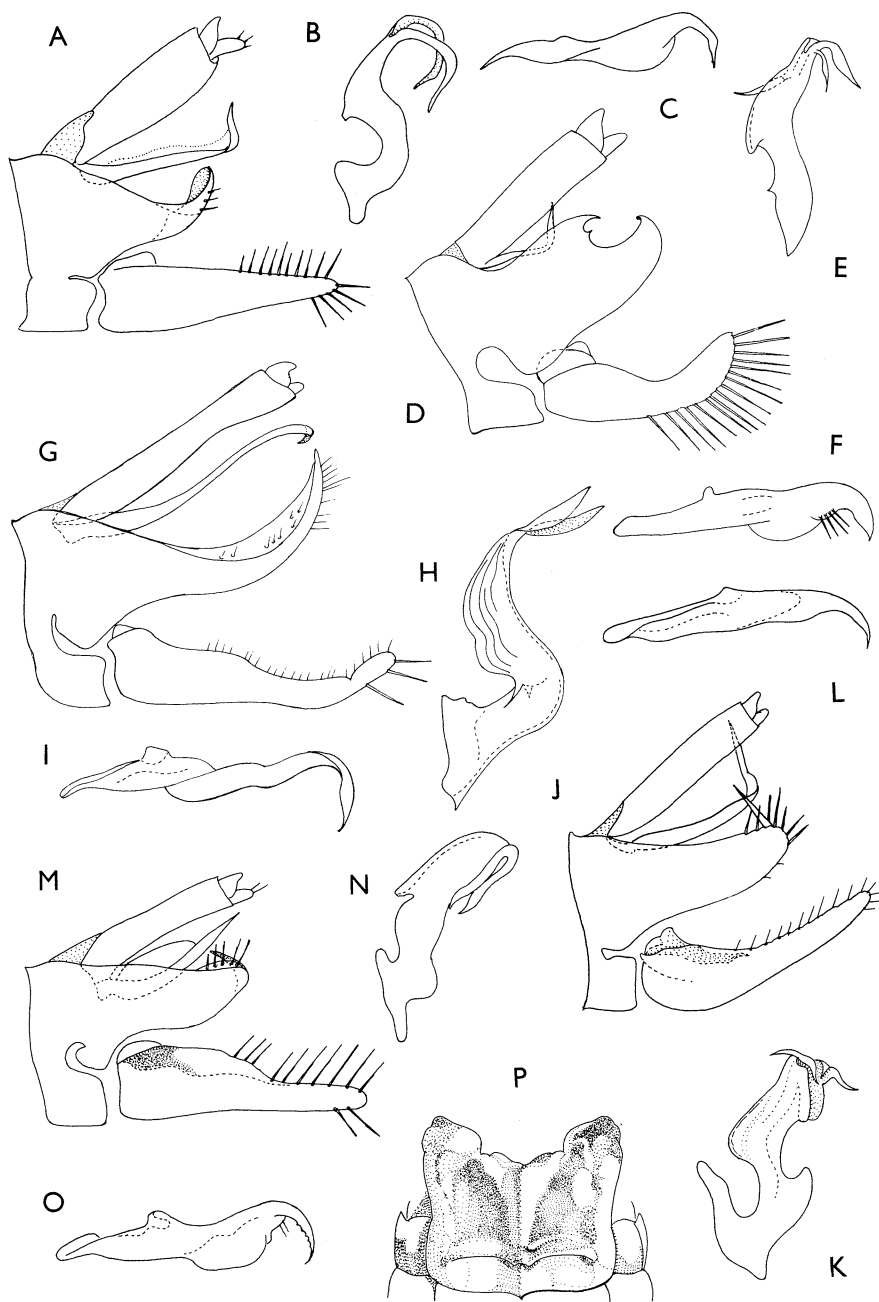


FIG. 40. A-C, *Philotartessus longipennis*: A, ♂ genitalia; B, aedeagus; C, paramere. D-F, *P. siautensis*: D, ♂ genitalia; E, aedeagus; F, paramere. G-I, *P. baliemensis*: G, ♂ genitalia; H, aedeagus; I, paramere. J-L, *P. wisselensis*: J, ♂ genitalia; K, aedeagus; L, paramere. M-O, *P. solomonensis*: M, ♂ genitalia; N, aedeagus; O, paramere. P, *P. polygrammus*, ♀ sternum VII.

*Bythoscopus semivenosus* Walker, 1870: 322. (FIG. 39H–J.) **New synonymy.**

*Tartessus guttulatus* Spångberg, 1878: 8. (FIG. 39K–M.) **New synonymy.**

Length: ♂, 7–9 mm; ♀, 10–12 mm. ♂ genitalia as in FIG. 39A–C.

*Distribution.* New Guinea.

***Philotartessus polygrammus* (Walker), new combination**

FIG. 40P

*Bythoscopus polygrammus* Walker, 1870: 317 (Morty I, New Guinea—type in BMNH).

Length: ♀, 12 mm. Coloration: pale mottled brown. Face pale brown irregularly mottled with dark brown and black. Pronotum yellowish brown mottled with brown. Scutellum pale yellow with brown markings. Tegmen pale brown, vitreous; apex and distal terminations of anal veins darker in color.

*Remarks.* This species is known only from the holotype.

***Philotartessus solomonensis* (Distant), new combination**

FIG. 40M–O

*Tartessus solomonensis* Distant, 1911: 388 (Solomon Is—type in BMNH).

Length: ♂, 9 mm; ♀, 11.5 mm. ♂ genitalia as in FIG. 40M–O.

*Distribution.* Solomon Is: Vella Lavella I (Pusisuna); PNG: Bougainville I (Kieta), New Guinea (NE: Mt Otto).

***Philotartessus wumensis* F. Evans, new species**

FIG. 39N–Q

Length: ♂, 9.2 mm. Coloration: pale and dark brown. Face yellowish brown densely mottled with dark brown and black. Pronotum mottled brown with a pair of dark brown longitudinal markings. Scutellum brown. Tegmen hyaline brown. ♂ genitalia as in FIG. 39N–Q.

Holotype ♂, PNG: NEW GUINEA (NE): Wum, upper Jimmi Val, 840 m, 19.VII.1955, J.L. Gressitt (BISHOP 11,746).

*Remarks.* While the ♂ genitalia of this species resemble those of the type-species in having an apical pygophore spine, they differ in characters provided by the aedeagus.

***Philotartessus longipennis* F. Evans, new species**

FIG. 40A–C

Length: ♂, 10 mm. Coloration: pale and dark brown. Face pale brown, muscle impressions on post-clypeus darker in color. Pronotum and scutellum pale yellowish brown. Tegmen dark hyaline brown; veins and costal margin broadly black. ♂ genitalia as in FIG. 40A–C.

Holotype ♂, PNG: NEW GUINEA (NE): Karimui, 1080 m, 8.VII.1963, J. Sedlacek (BISHOP 11,747).

*Remarks.* This species can be distinguished by characters provided by the ♂ genitalia.

***Philotartessus siautensis* F. Evans, new species**

FIG. 40D–F

Length: ♂, 10.2 mm. Coloration: pale brown. Face of head pale brown sparsely mottled with dark brown. Pronotum and scutellum pale brown. Tegmen hyaline brown; veins pale and dark brown, ♂ genitalia as in FIG. 40D–F.

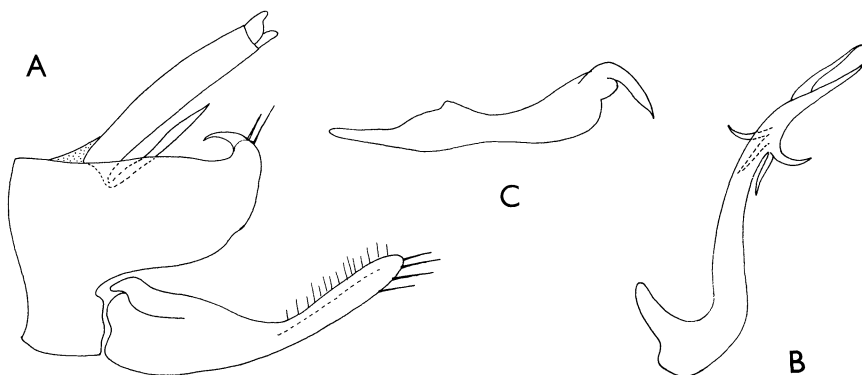


FIG. 41. *Philotartessus paradoxus*: A, ♂ genitalia; B, aedeagus; C, paramere.

Holotype ♂, PNG: NEW GUINEA (NE): Torricelli Mts, Siauts, sea level, 9.XI.1958, W.W. Brandt (BISHOP 11,748).

*Remarks.* This species can be distinguished by characters provided by the ♂ genitalia.

***Philotartessus baliemensis* F. Evans, new species**

FIG. 40G-I

Length: ♂, 10 mm. Coloration: brown. Face brown mottled with dark brown. Pronotum and scutellum brown evenly mottled with yellowish brown. Tegmen hyaline brown; veins dark brown. ♂ genitalia as in FIG. 40G-I.

Holotype ♂, IRIAN: NEW GUINEA (NW): Bokondini, 40 km N of Baliem Val, ca 1300 m, 16.XI.1961, L.W. Quate (BISHOP 11,749).

*Remarks.* This species can be distinguished by characters provided by the ♂ genitalia.

***Philotartessus wisselensis* F. Evans, new species**

FIG. 40J-L

Length: ♂, 10 mm. Coloration: brown. Face brown densely mottled with black. Pronotum and scutellum brown mottled with pale brown. Tegmen hyaline brown; veins brown. ♂ genitalia as in FIG. 40J-L.

Holotype ♂, IRIAN: NEW GUINEA (NW): Wisselmeren, Enarotodi, 1850 m, 2.VIII.1962, J. Sedlacek (BISHOP 11,750).

*Remarks.* This species can be distinguished by characters provided by the ♂ genitalia.

***Philotartessus paradoxus* F. Evans, new species**

FIG. 41A-C

Length: ♂, 9.8 mm. Coloration: cupreous. Face yellowish brown, frons and vertex mottled with dark brown. Crown considerably longer against the eyes than in the center. Pronotum and scutellum cupreous with yellowish-brown maculations. Tegmen hyaline cupreous; veins pale or dark brown. ♂ genitalia as in FIG. 41A-C.

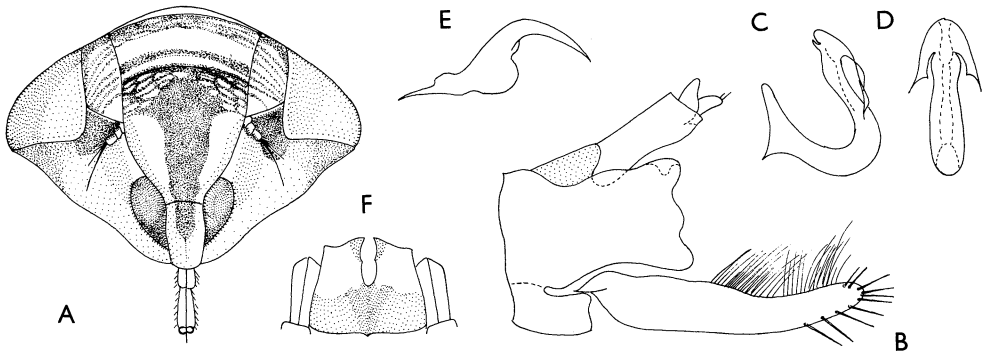


FIG. 42. *Calotartessus stalii*: A, face; B, ♂ genitalia; C–D, aedeagus; E, paramere; F, ♀ sternum VII.

Holotype ♂, PNG: NEW GUINEA (NE): Finisterre Range, Saidor, Gabumi, 24.VI.1952, W.W. Brandt (BISHOP 11,751). Paratype: 1♂, IRIAN: Cyclops Mts, Ifar, Gressitt; 2♂, Waris, Maa (all BISHOP).

*Remarks.* Although the above species differs from the type-species in aedeagus shape it has been assigned to this genus on other genitalia characteristics.

#### ***Philotartessus concolor* (Walker), new combination**

*Bythoscopus concolor* Walker, 1870: 317 (Mysol—type in BMNH).

Length: ♀, 8 mm. General coloration cupreous. Face yellowish brown, frontoclypeus and vertex densely mottled with brown. Pronotum cupreous mottled anteriorly with pale brown. Scutellum with a pair of bold yellow markings posteriorly. Tegmen, including the veins, cupreous.

*Distribution.* Mysol; New Guinea.

*Remarks.* The above species is assigned to the new genus because of the resemblance of the holotype (which lacks an abdomen) to specimens of *P. paradoxus*, n. sp. Although the type-locality lies outside the region covered in this study, it has been included because of the occurrence in West Irian Jaya (Vogelkop) of seemingly identical insects.

#### ***Calotartessus* F. Evans, new genus**

Sexually dimorphic insects, ♂ largely black, ♀ predominantly brown. Crown narrowly developed against the eyes. Pronotum anteriorly arched in front of the eyes. Tegmen dark hyaline brown, sometimes basally opaque black; veins, in part, black. ♂ genitalia: pygophore approximately rectangular, hind margin sinuous; aedeagus obliquely U-shaped with paired ventrally directed acute apical processes and sometimes with a short, posterior, vertical spur. Xth segment lacking processes. ♀: VIIIth abdominal sternum longer than wide, deeply medially emarginate.

*Type-species.* *Tartessus stalii* Signoret.

*Distribution.* New Caledonia.

**Calotartessus stalii** (Signoret), **new combination**

FIG. 42A-F

*Tartessus stalii* Signoret, 1880: 353 (New Caledonia—whereabouts of type unknown).

*Tartessus reuteri* Signoret, 1880: 361.

*Tartessus coronatus* Distant, 1920: 468.

Length: ♂, 7 mm; ♀, 9 mm. ♂ genitalia as in FIG. 42B-E.

*Distribution.* New Caledonia.

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