

Figs. 131-133. *Phaciocephalus sigaleon*, new species: 131, medioventral process of pygofer; 132, aedeagus, right side; 133, aedeagus, left side.

process of pygofer distally, genital styles, anal segment of ♂, pregenital sternite of ♀ and anal segment, rather dilute fuscous. Tegmina yellowish white or yellow, orange in posterior 1/2, a diffuse band from 1st fork of M to apical margin posterior to R, dilute fuscous. Wings white, dilute fuscous at apical angle, sordid white posteriorly, veins concolorous in white areas, elsewhere fuscous.

♂. Anal segment moderately long, in lateral view slightly widening distally, latero-apical angles each produced and deflexed, bluntly rounded apically. Pygofer with medioventral process longer than broad at base (about 1.5 : 1), directed dorsocaudad, narrower at apex than at base, apical margin shallowly convex with angles smoothly rounded, lateral margins in basal 2/3 converging distad, parallel in apical 1/3, devoid of processes. Aedeagus with a median longitudinal flange ventrally in distal 1/2, a group of 4 spinose processes arising dorsally on left near apex, 1 process bearing a small secondary spine, a group of 4 spinose processes arising on right dorsally near apex, one process bearing a small secondary spine, all directed cephalad. Genital styles as in *P. silanio*. Length, 2.9 mm; tegmen, 4.3 mm.

♀. Pregenital sternite produced caudad at middle in a quadrate lobe about 2× as broad at base as long in middleline, distal margin shallowly rounded. Length, 3.5 mm; tegmen, 5.1 mm.

Holotype ♂ (BISHOP 7085), Samoa: Upolu, Afiamalu, 670 m. 4.VII.1940, beating shrubs. E. C. Zimmerman. Paratypes: 4♂♂, 3♀♀, same data.

Most members of this species are at once distinguishable from other Samoan species by their orange yellow and white coloration, as contrasted with bold fuscous and white. The presence of a median flange ventrally in the distal half of the aedeagus sets this species well apart from those of the *tutuila* complex, and this difference is reinforced by the form of the medioventral process of the pygofer. A distal ventral median keel is found in the aedeagus of the Fijian *P. vitiensis* but *P. sigaleon* differs abundantly from *P. vitiensis* in other details of aedeagal ornamentation.

Two females from Tiavi, taken on *Alpinia* (15.VI.1940, Swezey & Zimmerman), of uniform pearly white hue, are tentatively assigned to this species.

Family ACHILIDAE Stål

Genus **Tangina** Melichar

Tangina Mel., 1903: 44 (haplotype: *Tangina bipunctata* Melichar, 1903: *ibid.*).

Eurynomeus Kirkaldy, 1906c: 422 (haplotype: *E. australiae* Kirk., 1906: *ibid.* n. syn.).

Since completing my generic revision of Achilidae (Fennah 1950) I have been able to examine topotypic material of *Tangina bipunctata* Melichar. In this species the vertex is about as long as broad, a little declivous, and there is a well-defined triangular areolet on each side apically. The lateral carinae of the pronotal disc are straight, and each is not twice as long as the median carina, but in *T. quadrilineata* Melichar they are concave and follow the hind margin of the pronotum for a little distance before entering it. By reason of the presence of areolets on the vertex, and of the slightly variable structure of the pronotal disc, species of this genus keys (Fennah 1950: 47) to *Usana* or *Phenelia*, but are readily distinguishable from both by the presence of a piceous spot on the mesopleura and by the tegminal venation in the area of the stigma.

Genus **Eurynomella** Fennah, new genus

Eurynomeus Muir, 1921: 571 (nec Kirkaldy, 1906).—Fennah 1950: 120.

The characters of *Eurynomeus* given by me (1950: 120) were based on *E. granulatus* Muir and *E. niger* Muir and with the addition of the following characters serve to define *Eurynomella*.

Tegmina with stigmal cell not nearly 2× as long as broad. Posterior margin of 7th (pregenital) sternite in ♀ broadly concave, at middle almost, or even entirely, overlapped by posterior margin of 6th sternite. First valvifers with ventral margin strongly produced, meeting or even overlapping one another in middle line.

Type species: *Eurynomeus granulatus* Muir, 1921: 571.

This genus, which runs to *Eurynomeus* in my key (1950: 47–54) is distinguished from all others except *Haitiana* and *Paraphypia* by the presence of a carina laterobasally on the frons in addition to the carina that demarcates the lateroapical areolet on each side. From *Haitiana* it is distinguished by the proportions of the frons; from *Paraphypia* it differs in having fewer supernumerary carinae laterobasally on the frons, in having 2 carinae at each side of the pronotum between eye and tegula, in the presence of pustules on the pronotum behind the eyes, in the relatively shorter stigmal cell (which is twice as long as broad in *Paraphypia*), in the concave posterior margin of the pregenital sternite (in contrast to a straight margin in *Paraphypia*), and the mesally produced ventral margins of the first valvifers (which are not at all produced in *Paraphypia*).

Family TROPIDUCHIDAE Stål

Genus **Vanua** Kirkaldy

Vanua Kirk. 1906: 415 (haplotype: *V. vitiensis* Kirk., 1906: 416, = *Cixius respiciendus* Walker, 1858: 322).

38. *Vanua buxtoni* Muir

Vanua buxtoni M., 1927b: 90.

TONGA IS.: 3♂♂, 4♀♀, Vavau I., Mangia, II.1956, Krauss; 1♂, Neiafu, II.1956; 1♂, Pangai, II.1956; 1♂, 1♀, Holonga, II.1956, Krauss.

Genus *Macrovanua* Fennah

Macrovanua Fen., 1950: 12 (orthotype: *Vanua angusta* Muir, 1921: 579).

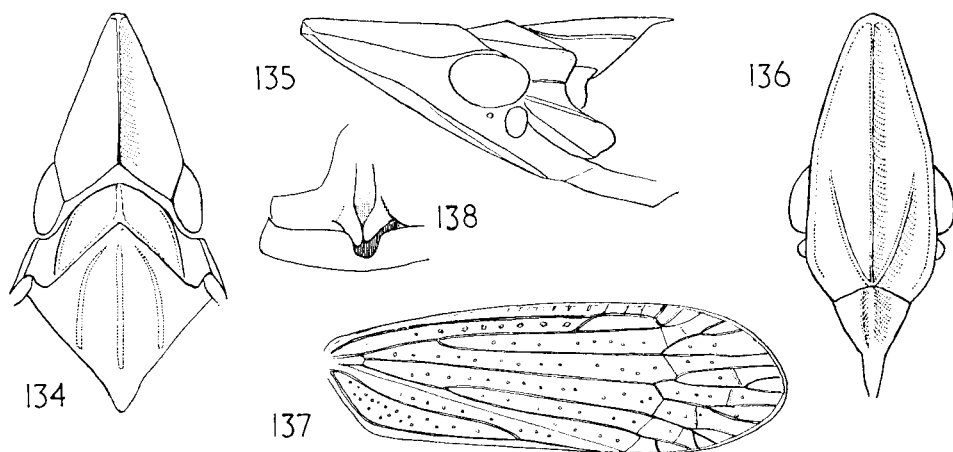
Species of this genus, as in those of allied genera, have the 2nd antennal segment ovoid or cylindrical, ocelli small, rostrum surpassing mesotrochanters but not reaching post-trochanters, and subapical segment longer than apical, post-tibia with 3 lateral spines and 6 apically, and basal metatarsal segment with 5 apical spines.

39. *Macrovanua amicalis* Fennah, new species Figs. 134–138.

♀. Vertex a little longer in middle line than broad at anterior margin of eyes (1.2 : 1), in profile with dorsal margin horizontal; disc shallowly tectiform. Frons 2× as long in middle line as broad at widest part, oblique carinae reaching basad to level of anterior margin of eyes. Tegmina with transverse veinlets of precostal area present only in distal 1/2, Sc+R forking at same level as fork of Cu 1. Green; eyes red, post-tibial and post-tarsal spines black. Seventh (pregenital) sternite with a U-shaped excavation at middle of posterior margin. First valvulae of ovipositor each produced in a subconical lobe at base of its mesal border, lobes of each side not quite symmetrical. Length, 9.1 mm; tegmen, 8.0 mm.

Holotype ♀ (BISHOP 7086), Tonga Is: Eua I., Ohonua, II. 1956, N. L. H. Krauss

This species differs from *M. angusta* Muir (from Niue) in the vertex being relatively longer and, in side view horizontal, not upcurved, in Sc+R forking level with the fork



Figs. 134–138. *Macrovanua amicalis*, new species: 134, vertex, pronotum and mesonotum; 135, head, pronotum and mesonotum, lateral view; 136, frons and clypeus; 137, tegmen; 138, basal portions of 1st valvulae of ovipositor, and greater part of pregenital sternite.

of Cu 1, and not basad of it, and in the common claval vein being relatively shorter, and, in the female, in the posterior margin of the pregenital sternite being excavated in a U-shape medially, as contrasted with an emargination that is twice as broad as deep in *angusta*. From *M. demissa* Fenn. (Taveuni, Fiji Is.) it differs in the horizontal profile of the vertex, in the relatively much narrower precostal area of the tegmina, in the more basad position of the forks of Sc+R and Cu 1, and in the fewer transverse veinlets in the membrane.

Family ISSIDAE Spinola

Genus *Atylana* Melichar

Atylana Mel., 1906: 198, 320 (logotype: *Tylana intrusa* Mel., 1906: 200).

The Samoan and Tongan species of this genus fall into two distinct groups, and would seem to have been derived from two immigrant ancestors. The connection between them and species in the New Hebrides is close. They may be separated as follows.

Head in profile with sides of head above eyes extremely short; vertex declivous; frons oblique, markedly extending anteriorly distad; eye with posterior margin strongly oblique. Pygofer with a weak but distinct carina in middle line ventrally

..... **maculifrons**

Head in profile with sides of head above eyes not extremely short, and easily seen; vertex little declivous, if at all; frons vertical or nearly so, not oblique or markedly extending distad anteriorly; eye with posterior margin weakly rounded, very little oblique, so that eyes appear round. Pygofer devoid of a median carina ventrally

..... **sinis**

40. *Atylana maculifrons* (Muir), new combination

Capelopterus maculifrons M., 1921: 581.

Vertex broader at base than long in middle (2.0 : 1); frons longer in middle line than broad (slightly more than 1.1 : 1). Wings with veins of R and M distad of R-M cross-vein not nearly parallel, converging as they approach apical margin, cell R much wider at base than at apex, R-M cross-vein strongly arcuate.

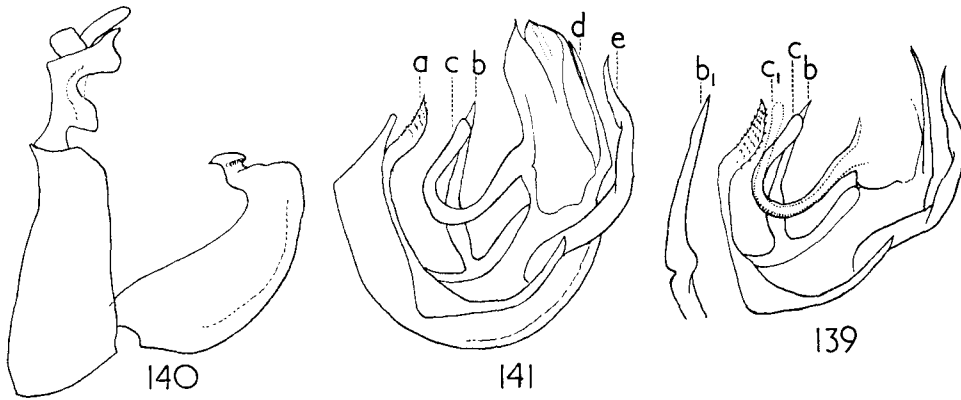
Tegmina with darker portions fuscous.

Genitalia as figured (fig. 139); the pair of processes marked (b) each moderately and abruptly constricted at 1/4 from base, and distinctly swollen just above constriction; the processes marked (c) each slender and widely U-shaped.

SAMOA: 1♂, Tutuila, Mapusaga, 28.V.1953, on 'Mile-a-minute', C. P. Hoyt; 1♀, Pago-pago, 18.IV.1924, E. H. Bryan, Jr.

41. *Atylana maculifrons manuana* Fennah, new subspecies Figs. 139-141.

♂. Vertex broader at base than long in middle (2.3 : 1); frons longer in middle line than broad (slightly more than 1.1 : 1). Wings with veins of R and M distad of R-M cross-vein not nearly parallel, converging as they approach apical margin, cell R much



Figs. 139-141. *Atylana maculifrons* (Muir): 139, spinose armature of aedeagus (viewed from left side), with processes b_1 and c_1 (broken line) as found in typical subspecies, remainder as found in *A. maculifrons manuana*, new subspecies; 140, *A. maculifrons manuana*, new subspecies: ♂ anal segment, pygofer and left genital style; 141, ditto, aedeagus, left side, (a) lateral processes, (b) mediodorsal process, (c) apicodorsal processes, (d) medioventral processes, (e) lateroventral process.

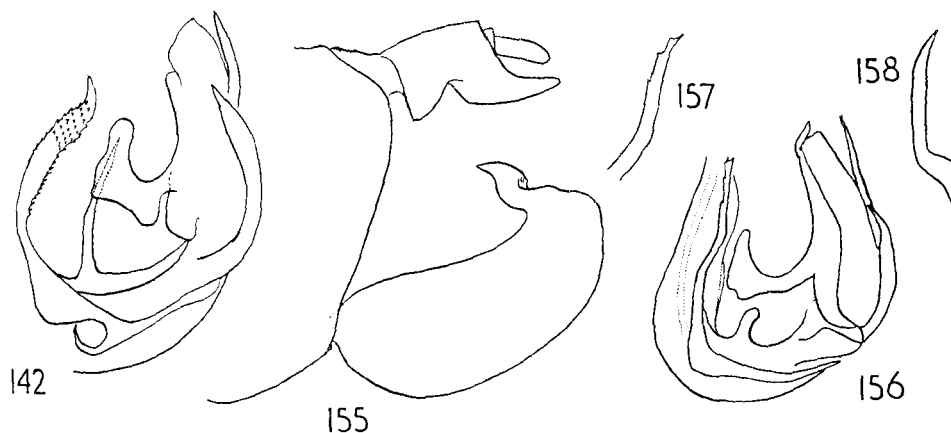
wider at base than apex, R-M cross-vein strongly arcuate. Tegmina marked as in *C. maculifrons* with darker portions greenish-fuscous. Genitalia as figured; aedeagus with the pair of processes marked (b) each slightly and not abruptly constricted at middle, not swollen above constriction; the processes marked (c) each moderately slender and rather narrowly U-shaped. Length 4.6 mm; tegmen, 4.8 mm.

Holotype ♂ (BISHOP 7087), Samoa: Manua, Ofu, 27. II. 1926, A. F. Judd. Paratype: nymph, Manua, Tau, 20. II. 1926, A. F. Judd.

This subspecies is not very close to typical *A. maculifrons*. The proportions of the vertex and the differences between processes of the male genitalia mentioned in the description suffice to distinguish the two subspecies, but a side-by-side comparison of the respective male genitalia show other slight differences that are difficult to convey in a description. It may be that this population represents a distinct species, but its proximity to typical *A. maculifrons* is very evident when its characters are compared with those of the following new species.

42. *Atylana castanea* Fennah, new species Fig. 142.

Vertex broader at base than long in middle (nearly 2.2 : 1), frons as long in middle line as broad, or a little broader than long. Tegmina with apical margin slightly more oblique than in *A. maculifrons*. Wings with veins of R and M distad of R-M cross-vein parallel or nearly so, not converging as they approach apical margin, cell R about as wide at base as at apex, R-M cross-vein straight, or practically so. Tegmina marked approximately as in *A. maculifrons*, with an ovate hyaline spot extending inward from middle of costal margin, bordered by a broad castaneous band, corium distad of this spot usually lighter castaneous, veins ferruginous.



Figs. 142, 155-158. 142, *Atylana castanea*, new species: aedeagus, left side; 155, *Atylana intrusa* Melichar, ♂ anal segment, pygofer, and left genital style; 156, aedeagus, left side; 157, apical portion of lateral process; 158, posterior view of right lateroventral process.

♂. Genitalia as figured; aedeagus with the pair of processes marked (b) each weakly sinuate, not constricted, the processes marked (c) each broad, and rather short, with dorsal margin U-shaped, ventral margin broadly produced ventrad in a subquadrate lobe. Length, 4.9 mm; tegmen, 5.1 mm.

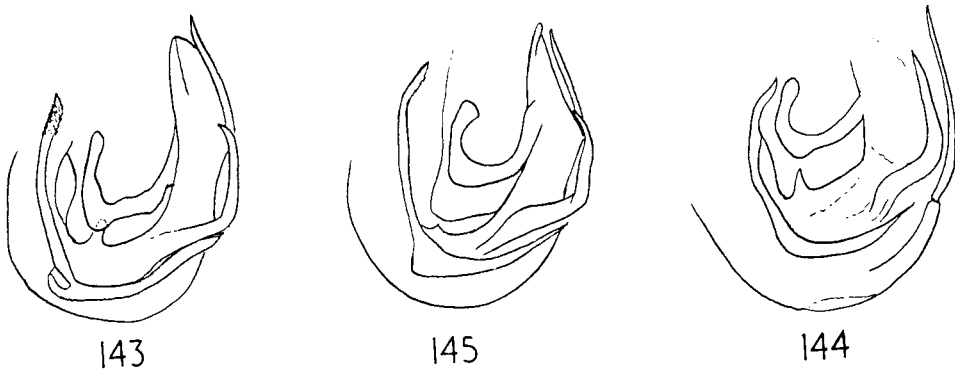
♀: length, 6.8 mm; tegmen, 6.9 mm.

Holotype ♂ (BMNH), Samoa: Upolu, Malololelei, 600 m, VII.1924, P. A. Buxton & G. H. Hopkins. Paratypes: 1♂, 3♀♀, same data; 1 mutilated ♀ specimen, Tapueleele, II.1955, N. L. H. Krauss; 1♂, Vailima, IX.1925, Buxton & Hopkins; 2♀♀, Apia, 29.III.1924, Buxton & Hopkins.

This species can be distinguished from *A. maculifrons* by the dark warm chestnut coloration of the darker parts of the tegmina, and the reddish brown veins. The wing venation sets this species well apart from the other two, and the greater degree of separation is well supported by the features of the aedeagus, which differ not only in the elements described, but also in the pair of posterolateral processes (e) which are blade-like in the present species, but twice constricted on the inner surface in the two sub-species of *A. maculifrons*.

43. *Atylana sinis* Fennah, new species Figs. 143-145.

Vertex broader at base than long in middle (2.1 : 1), anterior margin sharply obtusely angulate at middle, frons very little longer in middle line than broad (not as much as 1.1 : 1), ♂ with median carina distinctly present at base, between anterior margin of vertex and united sublateral carinae. Light testaceous to ochraceous; frons, except for testaceous sprinkling, median portion of clypeus, a dilute suffusion on vertex, interpustular areas of anterior 1/2 of pronotal disc and mesal 1/2 of lateral fields of pronotum, mesopleura, coxae, femora except at base and at apex, protibiae and mesotibiae in basal 1/2 and at apex, protarsi and mesotarsi at apex, abdominal terga anteriorly and medially, a suffusion laterally on ventrites and on pygofer basally, fuscous. Tegmina semihyaline, tinged ochr-



Figs. 143-145. *Atylana sinis* new species: 143, *A. sinis sinis* ssp. typ., Aedeagus, left side; 144, *A. sinis upoluana*, new subspecies, aedeagus, left side, simplified to show only processes; 145, *A. sinis tutuilana*, new subspecies: aedeagus, left side.

aceous, an irregular ovate band from costa at basal 1/4 extending obliquely to Cu 1 at middle, then deeply rounding again to costa just distad of middle, castaneous fuscous; veins, and intracellular pustules, ochraceous. Wings semihyaline, grayish white with fuscous veins.

♂. Genitalia as figured. Anal segment with lateral margins each produced ventrad base in a trapezoidal lobe; aedeagus with processes marked (a) each not as long distad of point of attachment as basad of it, processes (c) each rather strongly widened near middle. Length, 4.0-4.6 mm; tegmen, 4.1-4.7 mm.

♀. Length, 5.5 mm; tegmen, 5.0 mm.

Holotype ♂ (BISHOP 7088) Samoa: Savaii, Fanga, II.1955, N. L. H. Krauss. Paratypes: 1♀, 2 nymphs, same data; 1♂, Puapua, II.1955, Krauss.

This species is distinguished by the characters given above, and by numerous differences in the conformation of the aedeagal processes, among which one of the most conspicuous is the reduction of the pair of processes marked (b) in *A. maculifrons* to weakly sclerotised and very short stumps in *A. sinis*.

There are three insular forms that are here recognised as subspecies.

44. *Atylana sinis sinis* Fennah, new subspecies Fig. 143.

Vertex broader at base than long in middle (2.1 : 1), anterior margin sharply obtusely angulate at apex, frons a little longer in middle line than broad (scarcely 1.1 : 1), in ♂ with median carina distinctly present at base, between anterior margin of vertex and united sublateral carinae. Male: Anal segment of male with lateral margins each produced ventrad near base in a trapezoidal lobe.

♂. Length, 4.0 mm; tegmen, 4.1 mm.

45. *Atylana sinis upoluana* Fennah, new subspecies Fig. 144.

♂. Vertex broader at base than long in middle (2.2 : 1), anterior margin bluntly obtusely subangulate at apex, frons a little longer in middle line than broad (1.1 : 1), me-

dian carina not present basally. Infuscation of body more extensive than in typical subspecies. Anal segment with lateral margins each produced ventrad near base in a deeply convex lobe. Length, 4.5 mm; tegmen, 4.7 mm.

Holotype ♂ (BMNH) of subspecies, Samoa: Upolu, Aleipata, IV.1924, P. A. Buxton and G. H. Hopkins.

This subspecies is distinguished by proportions of the vertex, the absence of all trace of a median carina at the base of the frons, by size, by the shape of the male anal segment and by slight differences in the shape of the aedeagal processes.

46. *Atylana sinis tutuilana* Fennah, new subspecies Fig. 145.

Vertex broader at base than long in middle (nearly 2.3 : 1), anterior margin bluntly obtusely subangulate at apex, frons a little longer in middle line than broad (1.1 : 1), ♂ with median carina not present basally. Infuscation of body less than in typical subspecies.

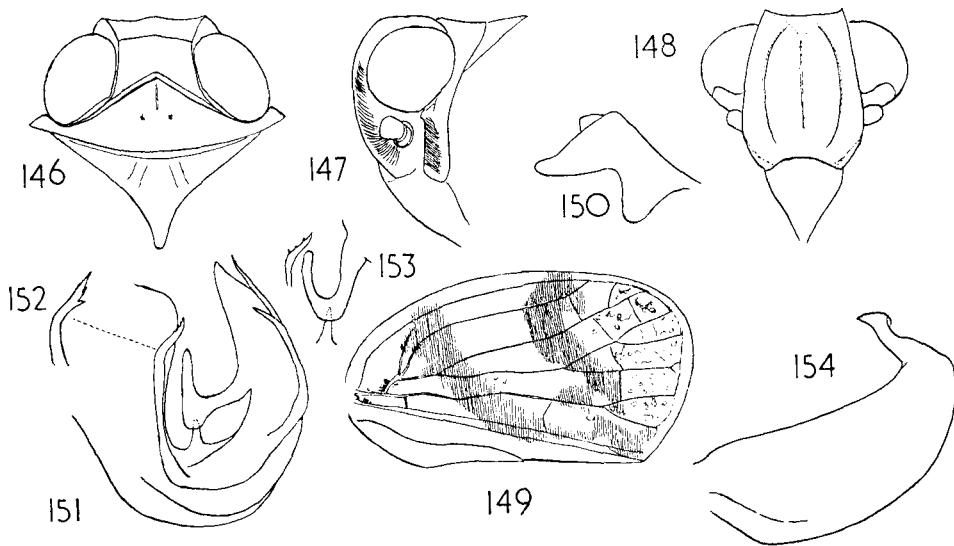
♂. Anal segment with lateral margins each produced ventrad near base in a deeply convex lobe. Length, 4.0 mm; tegmen, 4.2 mm.

♀. Length, 5.0 mm; tegmen, 5.1 mm.

Holotype ♂ (BISHOP 7089) of subspecies, Samoa: Tutuila, Mapusaga, 25.V.1953, on 'Mile-a-minute', C. P. Hoyt. Paratypes: 1♀, same data; 1♀, Fagatoga, 29.III.1926, A. F. Judd; 1♂, Fagaitua, E. H. Bryan, Jr.; 3♂♂, Tafuna, 20.I.1952, J. L. Gressitt. This subspecies is distinguished by the shape of the anterior margin of the vertex, by the absence of a median carina near the base of the frons, by the length of the tegmina, and by the lighter coloration of the body. From the population in Upolu this subspecies is also distinguished by the distinctly greater convexity of the apical angle of the tegmina.

47. *Atylana crataeis* Fennah, new species Figs. 146-154.

♂. Vertex broader at base than long in middle (2.0 : 1), anterior margin subangulately rounded at middle, frons vertical, not inclined anteriorly distad, longer in middle line than broad (1.1 : 1) median carina present between basal margin and united sub-lateral carinae, and also distinct on middle of disc. Tegmina as in *A. sinis*. Wings with M simple to apex, 1st apical cell (R) quadrate, as in *A. sinis*, second cell quadrate, as broad as first (in type specimen). Light orange brown to ochraceous; frons, except for testaceous sprinkling, median portion of clypeus, interpustular areas of anterior 1/2 of pronotal disc and mesal 1/2 of lateral fields of pronotum, mesopleura, coxae, femora except at base and at apex, protibiae and mesotibiae chiefly in basal 1/2 and at apex, protarsi and mesotarsi at apex, castaneous-fuscous, sometimes very dark. Tegmina semihyaline, tinged ochraceous, in ♂ an irregular ovate band from costa at basal 1/4 extending obliquely to Cul at middle, then deeply rounding again to costa just distad of middle, dark to dilute castaneous-fuscous; in both sexes veins and intracellular pustules, ochraceous. Wings semihyaline, grayish white with fuscous veins. Anal segment with lateral margins each produced ventrad near base in a deeply convex lobe. Aedeagus as figured; lateral processes (a) each with anterior limb oblique, directed latero-dorsad distally, apicodorsal processes (c) moderately widened at middle with lower margin abruptly angulate, mediodorsal processes (b) small, each rather short, not or only weakly sclerotised. Genital styles as in *A. sinis*. Length, 4.0 mm; tegmen, 4.3 mm.



Figs. 146-154. *Atylana crateis*, new species: 146, vertex, pronotum and mesonotum; 147, head in profile; 148, frons and clypeus; 149, tegmen; 150, ♂ anal segment, left side; 151, aedeagus, left side (Haamonga specimen); 152, apex of lateral process (Haamonga); 153, apex of lateral process, mediodorsal process and apicodorsal process of specimen from Tuanikavele; 154, left genital style.

♀. Length, 4.0 mm; tegmen, 5.0 mm.

Holotype ♂ (Mus. Godeffroy, No. 4842), Tonga Is.: Tongatabu.

Paratypes: 2♂♂, 7♀♀, Tongatabu, Haamonga, II.1956, N. L. H. Krauss.

The vertical frons serves to place this species near to *A. sinis*, and it is separated from the latter by the relatively narrower vertex, the distinct, though incomplete, median carina on the frons, and, in the aedeagus, by the angulate shape of the apicodorsal processes in combination with the short but distinct mediodorsal processes.

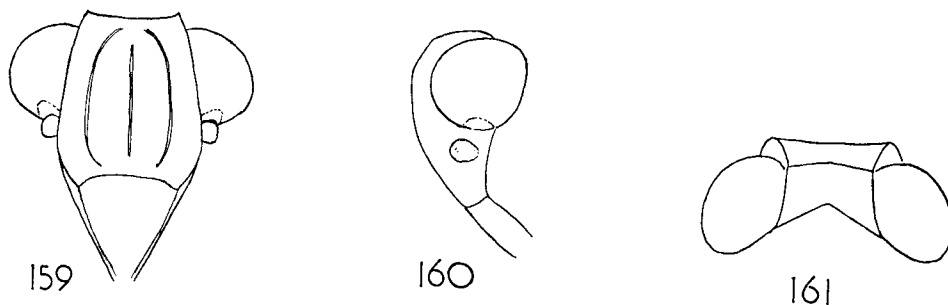
Three males, Vavau, nr. Tuanikevale, cliff, 45 m, J. F. Hoffmeister, are assigned to this species, but may prove to be subspecifically distinct from the typical population when longer series can be compared.

48. *Atylana intrusa* Melichar Figs. 155-158, 159-161.

Tylana (Atylana) intrusa Mel., 1906: 207.

This species was founded by Melichar on specimens from Upolu, Ovalau and from unspecified localities in Fiji. As it is likely that this collection contained more than one species, I now designate a male from Ovalau from the collection in the Hamburg Museum, and labelled '*intrusa*' by Melichar, as the lectotype, and supplement the original description with the following data obtained from an examination of this specimen.

♂. Vertex broader at base than long in middle (2.6 : 1) anterior margin almost straight; frons vertical, longer in middle line than broad (1.1 : 1), median carina weakly present between basal margin and united sublateral carinae, and moderately distinct on disc.



Figs. 159-161. *Atylana intrusa* Melichar: 159, Frons and clypeus; 160, head in profile; 161, vertex.

Wings with M simple to apex, apical cell R and apical cell M equal in width. Clypeus infuscate laterally as well as anteriorly. Coloration otherwise as in *A. sinis*. Anal segment with lateral margins each produced ventrad near base in a deeply convex lobe; apical margin acutely rounded. Aedeagus as figured; lateral processes (a) with anterior limb ascending, sinuate, with only 4 or 5 minute spicules distally, apicodorsal processes (c) strongly widened at middle, with lower margin deeply or subrectangulately rounded and upper margin only shallowly concave, mediodorsal processes (b) each finger-like, weakly sclerotised. Length, 4.5 mm; tegmen, 4.6 mm.

Lectotype ♂ (Mus. Godeffroy No. 2862a), Fiji Is.: Ovalau.

The shape of the anal segment and of the aedeagal processes serve to define this species. The vertical frons and weak mediodorsal processes on the aedeagus show it to be closely related to the Samoan *A. sinis*.

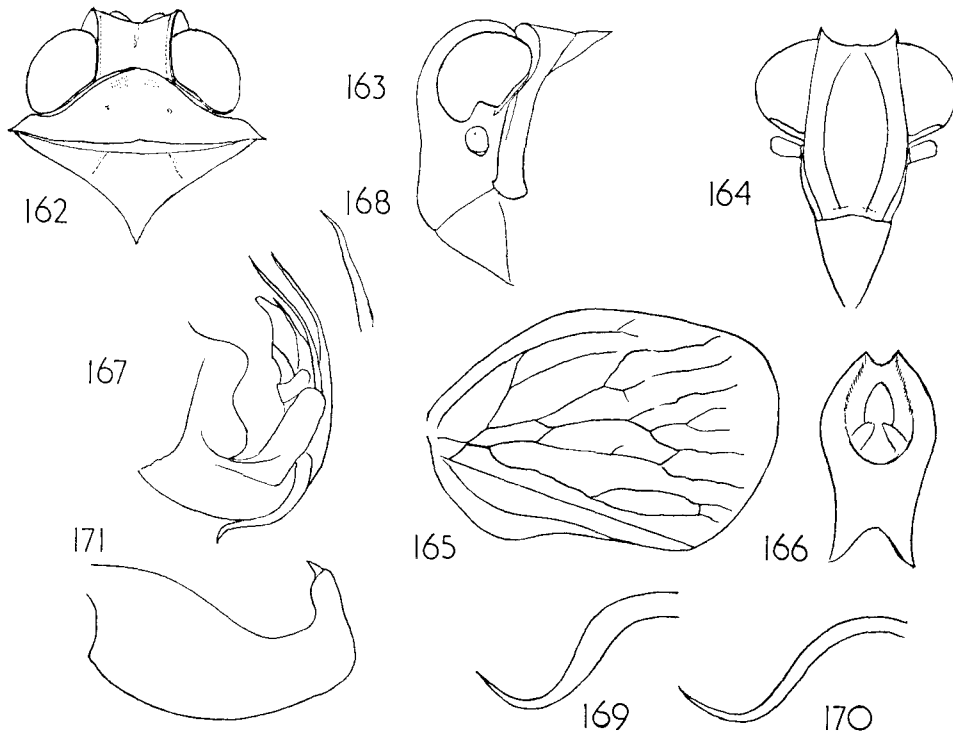
Genus *Scalabis* Stål

Tylana (*Scalabis*) Stål, 1870: 762 (logotype: *Tylana* (*S.*) *philippina* Stål, 1870: 762).

49. *Scalabis calvena* Fennah, new species Figs. 162-171.

Vertex broader at base than long in middle line (nearly 1.5 : 1), lateral margins moderately elevated above eyes, frons longer than broad (1.7 : 1), in profile strongly oblique, width of gena at apex equal to width of eye in lateral view.

♂. Light reddish brown, so heavily sprinkled with small stramineous or ochraceous spots as to appear light testaceous. Tegmina translucent, light yellowish brown, venation stramineous. Anal segment moderately long, in lateral view only very slightly decurved distad of anal foramen, narrowly sulcate in middle line distally. Aedeagus U-shaped in profile, dorsolateral margins each produced in a broad lobe with its distal margin sinuate, concave at middle; phallobase bifid distally, ventral margin terminating in a pair of porrect, slender spinose processes directed dorsad, each weakly sinuate near apex, 2 pairs of long spinose processes basad of these processes, the inner pair shorter, taeniate in their basal 2/3, abruptly narrowing at 2/3 from base and aciculate in apical 1/3; the outer pair long, moderately curved, feebly sinuate at apex; dorsal margin of aedeagus terminating in a broad crescentic sclerite, flanked laterally by a pair of subspatulate membranous



Figs. 162-171. *Scalabis calvena*, new species: 162, vertex, pronotum and mesonotum; 163, head, pronotum and mesonotum, lateral view; 164, frons and clypeus; 165, tegmen; 166, ♂ anal segment; 167, aedeagus, left side (Neiafu specimen); 168, apex of medioventral process of aedeagus (Nukualofa specimen); 169, lateral process of aedeagus (Nukualofa specimen); 170, lateral process of aedeagus (Neiafu specimen); 171, genital style, left side.

lobes; phallus with a pair of long stout spinose processes ventrolaterally, each curved cephalad below aedeagus then incurved to cross its fellow in middle line. Genital styles as figured. Length, 4.0 mm; tegmen, 4.2 mm.

♀. Ground color darker than in ♂; clypeus and legs mostly fuscous, disc of frons and genae mostly yellowish brown with an orange-red suffusion. Tegmina yellowish brown with paler venation, the oblique depression between R and fork of Cu1, and distal portion of cell between post-claval veins, fuscous; sometimes with a shallowly curved pale band from base to apical margin, mostly along M. Length, 4.5 mm; tegmen, 5.2 mm.

Holotype ♂ (BISHOP 7090), Tonga: Tongatabu I., Nukualofa, II.1956, N. L. H. Krauss. Paratypes: 1♀, same data; 2♀♀, Haamonga, II.1956, Krauss; 2♀♀, Eua I., Ohonua, II.1956, Krauss. 1♂, Vavau I., Neiafu, II.1956, Krauss.

This species comes nearest, in the form of the anal segment and ♂ genitalia to *Scalabis betulus* (Fennah) n. comb. (*Capelopterus betulus* Fennah, 1950: 93) but differs from this, as from all other Fijian species, in the outline of the lateral lobes at the base of the aedeagus and in the distally aciculate inner processes of the phallobase.

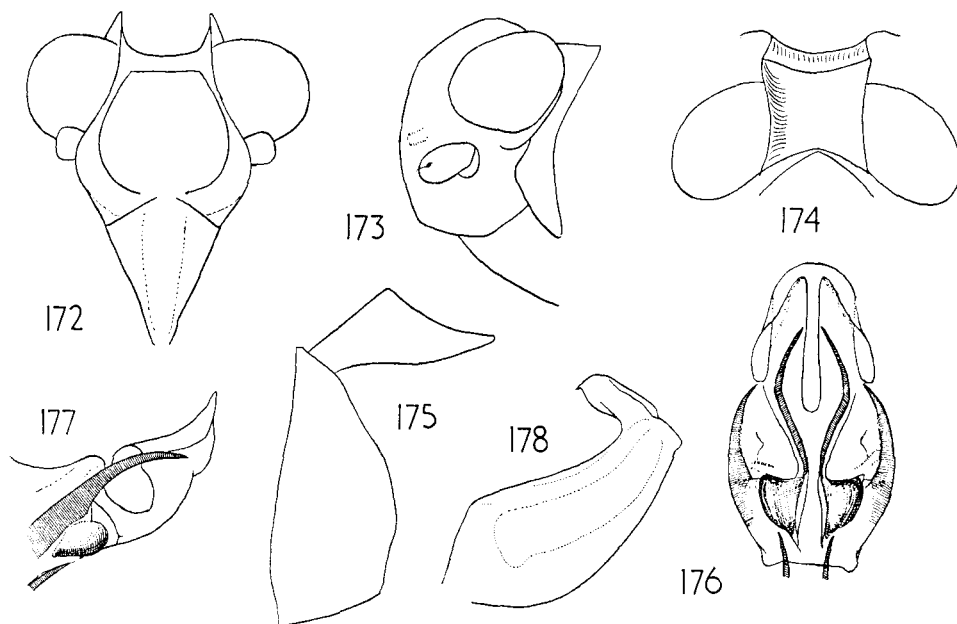
Genus *Neolollius* Muir

Neolollius M., 1921: 584 (haplotype: *N. viridis* Muir, 1921, *ibid.*).

50. *Neolollius samoensis* (Melichar), new combination Figs. 172-178.

Tylana samoensis Mel., 1906: 206.

Through the kindness of Dr H. Weidner, of the Godeffroy Museum, Hamburg, I have been able to examine the type specimen of *Tylana samoensis* Mel., from which the figures here given have been made. It is not known on which island this specimen was captured. *Neolollius viridis* Muir was described from Tutuila, and may possibly prove to be conspecific. An evaluation of this relationship, however, is likely to be conclusive only when more material becomes available, as it is entirely possible that a population belonging to this genus exists on each island, and that each differs from its neighbours only in the form of the aedeagal processes.



Figs. 172-178. *Neolollius samoensis* (Melichar): 172, frons and clypeus; 173, head and pronotum, lateral view; 174, vertex; 175, ♂ anal segment and pygofer, left side; 176, aedeagus, posteroventral view; 177, aedeagus, left side; 178, left genital style.

REFERENCES

- Distant, W. L. 1906 Rhynchota. Heteroptera-Homoptera. *The fauna of British India, including Ceylon and Burma* 3: i-xiv, 1-503.
- Esaki, T. & T. Ishihara 1947. Species nova vel minus cognita Araeopidarum Japonicarum (Hemiptera). *Mushi* 17: 39-42.
- Fennah, R. G. 1950a. A generic revision of the Achilidae (Homoptera: Fulgoroidea) with

- descriptions of new species. *Bull. Brit. Mus. (Nat. Hist.)* **1**: 1-170.
- 1950b. Fulgoroidea of Fiji. *Bishop Mus. Bull.* **202**: 1-122.
1956. Fulgoroidea from southern China. *Proc. Calif. Acad. Sci. Ser. 4*, **28**: 441-527.
1964. Delphacidae from Madagascar and the Mascarene Islands (Homoptera: Fulgoroidea). *Trans. R. Ent. Soc. Lond.* **116**: 131-150.
1965. Delphacidae from Australia and New Zealand (Homoptera: Fulgoroidea) *Bull. Br. Mus. nat. Hist.* **17**: 1-59.
- Germar, E. F. 1825. Augusti Ahrensii Fauna Insectorum Europae **11**: pls. 20-22.
- Guérin-Ménéville, F. E. 1834. Essai d'un nouvel arrangement des Hémiptères de la section des Homoptères, et revision de la tribu des Fulgorelles. *In Voyage aux Indes-Orientales* *Zoologie Insectes.* **1834**: 445-480.
- Kirkaldy, G. W. 1906. Leafhoppers and their natural enemies. Pt. IX Leafhoppers. Hemiptera. *Bull. Hawaii. Sug. Pl. Ass. Ent. Ser.* **1**: 271-419.
1907. Leafhoppers Supplement. (Hemiptera). *Bull. Hawaii. Sug. Pl. Ass. Ent. Ser.* **3**: 1-186.
1910. Hemiptera. Supplement to Fauna Hawaiiensis, or the Zoology of the Sandwich (Hawaiian) Isles. 1910: 531-599.
- Melichar, L. 1903. Homopteren-Fauna von Ceylon. 1903: i-iv, 1-248.
1906. Monographie der Issiden (Homoptera). *Abh. Zool. bot. Ges. Wien* **3**: 1-327.
- Metcalf, Z. P. 1950. Homoptera from the Caroline Islands *B. P. Bishop Mus. Occ. Papers* **20** (5): 59-76.
- Muir, F. 1917. Homopterous Notes. *Proc. Hawaiian Ent. Soc.* **3**: 311-338.
1921. On some Samoan Fulgorids (Homoptera). *Proc. Hawaiian Ent. Soc.* **4**: 564-584.
- 1927a. Hemiptera: Fulgoroidea. *Insects of Samoa and other Samoan terrestrial Arthropoda* **1** (2): 1-27.
- 1927b. On some Fulgorids from the South Pacific. *Ann. Mag. Nat. Hist. ser. 9*, **20**: 86-91.
- Stål, C. 1854. Nya Hemiptera. *Ofv. Svenska Vet. Akad. Förh.* **11**: 231-255.
1859. Hemiptera. *In Eugénies Resa* **4**: 219-298. Stockholm.
1862. Novae vel minus cognitae Homopterorum formae et species. *Berl. Ent. Zeit.* **6**: 303-315.
- Walker, F. 1857. Catalogue of the Homopterous insects collected at Sarawak, Borneo by Mr. A. R. Wallace with descriptions of new species. *J. Proc. Linn. Soc.* **1**: 141-175.
1858. Addenda. List of the specimens of Homopterous insects in the collection of the British Museum. 1858: 308-369.