

Dans mon tableau dichotomique du genre *Exocentrus* Muls. (s.s.) (*Bull. Brit. Mus. Nat. Hist. Ent.*, VII, no. 5, 1958, p. 213) cette espèce s'intercale près du no. 8 en différant de *teselatus* Perr. par toute la surface couverte de pubescence brun jaunâtre, les articles antennaires cinq à onze entièrement couverts de pubescence brun foncé etc.

Phytoecia (Blepisanis) glabra Auriv. ssp. *rubrosternalis*, nov.

Comme la forme typique mais les sternas entièrement rouge clair.

TYPE 1 ♂ de l'Uganda: Thriara Forest, 7-X-1961, leg. K. W. Brown.

Dans mon tableau dichotomique du genre *Phytoecia* Muls. Sg. *Blepisanis* Pasc. (*Ent. Arb. Mus. Frey*, II, 1951, p. 29) cette espèce s'intercale près du no. 54 en différant de *glabra* Aur. par les caractères indiqués.

Fennah 1963.

Annals and Magazine of Natural
History 13 (5): 681-700

NEW DELPHACIDAE (HOMOPTERA: FULGOROIDEA) FROM SOUTH AMERICA AND WEST AFRICA.

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THE species of Delphacidae described as new below form part of collections received for study from the Staatliches Museum für Naturkunde, Stuttgart. The writer's warmest thanks are tendered to Dr. Fr. Heller for the privilege of examining this material, the South American members of which have added appreciably to our scant knowledge of the Tropidocephalini of the New World.

The types of all new species are in the Staatliches Museum für Naturkunde, Stuttgart. The bibliographic references are cited in accordance with the usage in "A Bibliography of the Homoptera (Auchenorrhyncha)" (Metcalf, Z.P. 1942. N.C. State College of Agriculture and Engineering, University of North Carolina, Raleigh, N.C.).

Family DELPHACIDAE Leach.

Tribe TROPIDOCEPHALINI.

Columbisoga Muir.

Muir 1921 b : 483. Orthotype, *Columbisoga campbelli* Muir 1921 b : 483.

Columbisoga (Columbisoga) tylotus sp. n. (Fig. 1, A-E.)

Vertex shorter medially than broad at base (1 : 1.5), obtusely rounding into frons, distinctly narrower at apex than at base, lateral margins concave, strongly divergent basad, apical margin carinate, shallowly angulately convex, with median carinae weakly prominent, base of frons prominently visible from above, frons in middle line longer than wide at widest part (1.9 : 1), widest at middle, lateral margins convex in basal half, parallel in distal half, median carina simple, clypeus at base markedly wider than frons at apex, postclypeal disc as long as broad at base, in profile rather strongly convex, anteclypeus in profile directed caudad; entire clypeus in profile rather strongly convex; rostrum slightly surpassing mesotrochanters; antennae moderately surpassing frontoclypeal suture, basal segment as long as broad, second segment longer than first (3 : 1); ocelli distinct. Pronotum with disc as long in middle line as broad at anterior margin, lateral carinae straight or weakly convex, attaining hind margin; total length of mesonotum greater than that of scutellum (2.7 : 1); post-tibial spur with a single tooth.

Tawny yellow; median carina of frons, and a line mid-dorsally from apex of vertex to apex of scutellum, white, narrowly edged with fuscous on pronotum and mesonotum. Abdomen dorsally reddish brown; tegulae in distal half and medioventral process of pygofer, dark fuscous. Tegmina and wings hyaline, with veins light yellowish brown. Anal

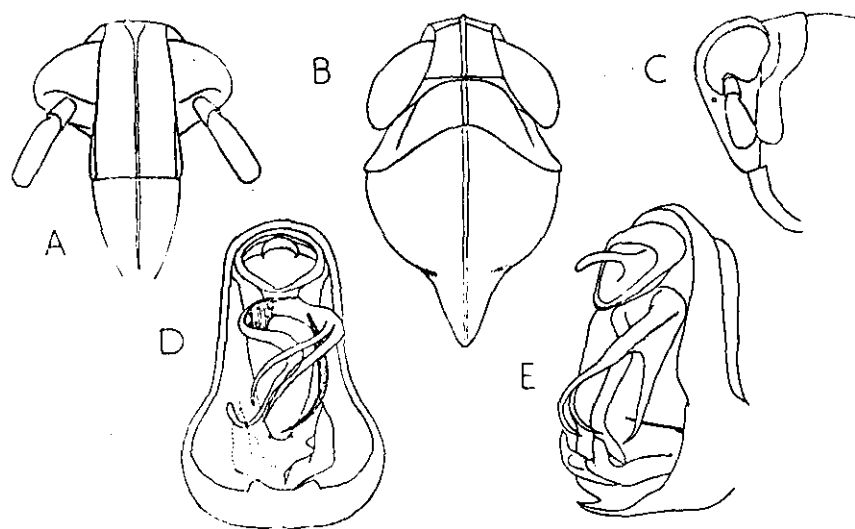
A.M.N.H. ser. 13, vol. vi.

segment of male short, ring-like, apical margin rather narrowly rounded, lateroapical angles not at all produced. Pygofer short, very deep dorsoventrally, posterior opening large and rather narrow, dorsolateral angles only feebly developed, shallowly rounded, diaphragm with dorsal margin very acutely excavate, dorsal margin not ornamented at middle, but ventral margin with an unequal pair of very slender spinose processes porrect dorsocaudad; medioventral process rather large, in form of a slightly hollowed quadrate plate. Edeagus unusually large and complex, divided at base into two stout rami which diverge strongly from base then recurve mesad to cross at about middle; ramus of left side simple, decurved in distal half then curved laterocephalad near apex, apically bluntly rounded; ramus of right side giving off a long stout spinose process directed ventrad, at one third from base, and a second spinose process, as long as, and parallel to, main limb, at middle. Genital styles relatively small, simple, each angulately bent dorsad at middle, and with inner margin produced mesad in a small lobe above point of flexure; each style tapering rapidly in distal quarter to acuminate apex.

Male: length, 1.8 mm., tegmen, 3.5 mm.

Holotype male, BRAZIL: Nova Teutonia, Nov. 1957 (F. Plaumann), in Staatliches Museum, Stuttgart. The marking of the head and thorax separate this species from all others except *C. campbelli* Muir, from South India, and *C. gynericola*, from Ecuador. From both of these it differs in having the vertex a little broader than long, and in the form of the male genitalia.

Fig. 1.



Columbisoga tylotus sp. n.

A, head, anterior view; B, head and thorax, dorsal view; C, head in profile; D, male genitalia, posterior view, with one genital style shown in broken line; E, male genitalia, postero-lateral view from right.

Columbisodes subg. nov.

Vertex shorter medially than broad at base (about 1 : 2), rounding into frons, narrower at apex than at base, lateral margins straight, divergent basad, apical margin more or less obtusely angulately convex, Y-shaped carina absent, or basally obsolete, and feebly present anteriorly, frons in middle line longer than wide at widest part (2 : 1 to 2.5 : 1), lateral margins more or less shallowly arcuate, median carina simple; rostrum slightly surpassing mesotrochanters; antennae reaching or a little surpassing frontoclypeal suture, basal segment a little longer than broad, second segment longer than first (1.8 : 1 to 3 : 1); ocelli present. Pronotum with lateral carinae straight or weakly convex, attaining hind margin. Post-tibial spur with a single tooth.

Ovipositor with third valvulae of normal delphacid pattern, in form of a pair of narrow processes, explanate and horizontal in basal third, narrow and vertical in distal two thirds, the outer surface in distal half smooth, weakly convex.

Type species of subgenus, *Columbisoga (Columbisodes) saracura* sp. n.

Member species of this subgenus are recognizable, in the female sex, by the shape of the third valvulae of the ovipositor. These are of normal Delphacid pattern, distally narrow, with a smooth and shallowly convex surface, devoid of wax pores. In females of the typical subgenus the third valvulae are distally flattened, slightly widened, and beset on the outer surface with a tract of ceriferous pores, and there is usually a rather deep sulcus between the third valvulae and the valvifers.

In *Columbisodes* the head is relatively broader than in *Columbisoga*, and the narrow white median stripe on head and thorax found in the typical subgenus is usually absent.

Columbisoga (Columbisodes) saracura sp. n. (Fig. 2, A-F.)

Vertex shorter medially than broad at base (1 : 2), subacutely rounding into frons, distinctly narrower at apex than at base, lateral margins straight, divergent caudad, apical margin obtusely convex with submedian carinae forming a single transverse carina, Y-shaped carina absent; frons in middle line longer than wide at widest part (1.8 : 1), widest at three-tenths from base, lateral margins convex in basal half, straight in distal half, median carina simple; clypeus at base not wider than frons at apex, postclypeal disc longer in middle than broad at base (1.3 : 1), in profile moderately convex, anteclypeus in profile strongly inclined caudad, so that entire clypeus in profile is moderately convex; rostrum slightly surpassing mesotrochanters; antennae just attaining frontoclypeal suture, basal segment longer than broad (1.5 : 1), second segment longer than first (1.8 : 1); ocelli distinct. Pronotum with disc shorter in middle line than broad at anterior margin (1 : 1.6), lateral carinae straight or weakly convex, attaining hind margin; total length of mesonotum longer than that of scutellum (2.8 : 1); post-tibial spur with a single apical tooth.

Ochraceous; four spots and four short transverse bars on frons, an area on gena round ocellus, carinae of pronotum and mesonotum, lateral pronotal lobes narrowly at margin, pleurites broadly at margins, femora distally, protibiae and mesotibiae except for diffuse longitudinal stripes, post-tibiae except for two diffuse bands, and post-tarsi, stramineous; a suffusion on each side of median carina of frons, first antennal segment apically, second segment basally, anteclypeus, coxae unevenly, pleurites in part, stripes or bands on legs, post-tibial spur dorsally, and abdomen, fuscous. Tegmina milky-hyaline, an irregular suffusion from middle of costa to clavus at its distal third, a suffusion overlying nodal line of transverse veins, a suffusion overlying apical veins M_1 and M_2 and apical margin from M_3 and M_4 to claval apex fuscous or smoky; veins concolorous, sparsely beset with fuscous granules. Wings hyaline, veins concolorous.

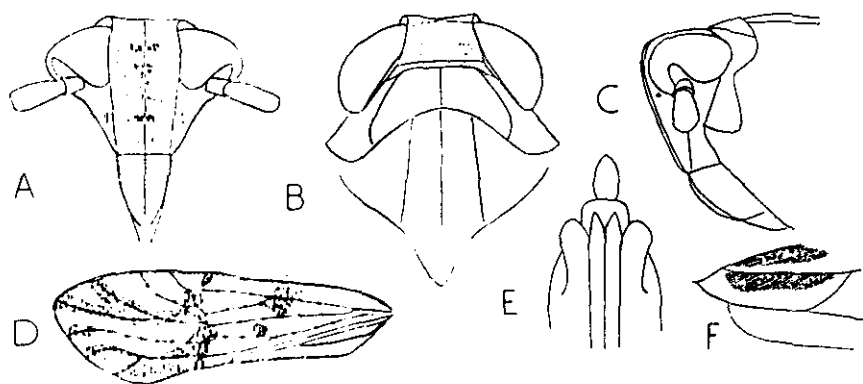
Female with first valvifers moderately short, not produced mesad at base, a little wider at middle than at base, mesal margin shallowly convex, second valvifers moderately long, each convex, impressed laterally in apical quarter. Third valvulae of ovipositor rather slender, moderately explanate in basal two fifths.

Female (macropterous) length, 3.2 mm., tegmen, 4.3 mm.

Holotype female, BRAZIL: Nova Teutonia, 27° 11' 8"–52° 23' 1", 300–500 m., xi. 1957 (Fritz Plaumann), in Staatliches Museum, Stuttgart.

This species appears to be nearest to *Columbisoga maculosa* Muir from Huigra, Ecuador. It differs in the relatively shorter vertex and in the less elongated tegminal membrane, and the different pattern of marking on the tegmina. In tegminal markings this species bears some resemblance to *C. chusqueae* Muir, but differs markedly in the relatively broader vertex.

Fig. 2.



Columbisoga (Columbisodes) saracura sp. n.

A, Head, anterior view; B, head and thorax, dorsal view; C, head in profile; D, tegmen; E, apex of abdomen of female, ventral view, showing ovipositor, valvifers, and anal segment; F, base of one valve of ovipositor, and first valvifer, ventro-lateral view from left.

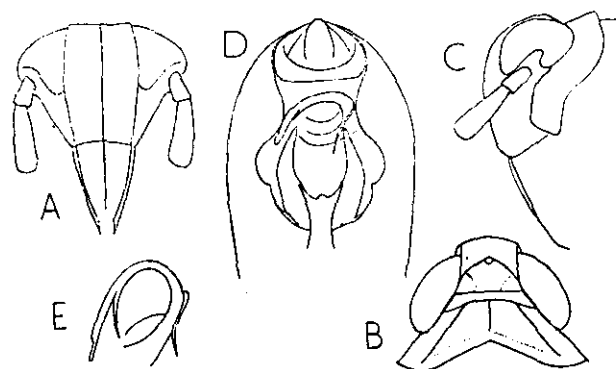
Columbiana Muir.

Muir 1919 b : 35. Haplotype, *Columbiana lloydi* Muir 1919 b : 35.

Columbiana carasi sp. n. (Fig. 3, A–E.)

Vertex shorter submedially than broad at base (1 : 2), evenly rounding into frons, rather narrower at apex than at base, lateral margins straight, apical margin obtusely angulate with submedian carinae fine, moderately prominent, Y-shaped carina distinct, submedian carinae uniting at apex of vertex, forming a lozenge-shaped fossette with arms of Y-shaped carina, basal compartment of vertex wider at hind margin than greatest length (about 2 : 1), frons abundantly visible from above, in middle line longer than wide at widest part (2.2 : 1), widest at apex, lateral margins straight, weakly divergent near apex, median carina simple; clypeus at base not wider than frons at apex, postclypeal disc as long as broad at base, in profile weakly convex; anteclypeus in profile weakly curved caudad; rostrum attaining mesotrochanters, subapical segment longer than apical, antennae reaching almost to level of middle of clypeus, basal segment longer than broad (nearly 2 : 1), second segment longer than first (2.5 : 1); ocelli prominent. Pronotum with disc longer in middle line than broad at anterior margin (1.2 : 1), lateral carinae straight, not attaining hind margin; total length of mesonotum longer than that of scutellum (3.8 : 1); post-tibial spur with a single tooth.

Fig. 3.



Columbiana carasi sp. n.

A, Head, anterior view; B, vertex and pronotum; C, head in profile; D, male genitalia, posterior view; E, apical portion of aedeagus, ventral view.

Castaneous; frons and genae except distally, vertex, except posterolaterally, pronotum, except broadly at hind margin, and mesonotum, polished black. Distal portion of frons and genae, and hind margin of pronotum, ivory-white; vertex posterolaterally, antennae, except at apex of basal segment, and abdominal ventrites posteriorly, tawny-brown; clypeus and trochanters sordid yellowish brown; femora sordid white, with fuscous suffusion distally; tibiae and tarsi fuscous. Tegmina hyaline;

brown. Wings hyaline, with fuscous veins. Anal segment of male longer than broad, dorsolateral angles obtuse, weakly inflected, diaphragm very broad, with dorsal margin concave; lateral margins each produced in lower half into an acute process directed caudad; medioventral process stout, longer than lateral processes and unevenly trifurcate distally. Aedeagus in form of a narrow tube, curved almost in a circle horizontally; two slender sinuate spinose processes emerging on right, one short, directed dorsad, the other directed ventrad, a second slender process arising on inner side near apex, only weakly diverging from main limb, and incurved mesad; a small and extremely fine spinose process at apex, directed weakly laterocaudad. Genital styles simple, directed dorsad and shallowly curved cephalad, strongly tapering from base to apex, distal portion laterally compressed.

Male: length, 2.5 mm., tegmen, 4.0 mm.

Holotype male, Nord PERU: Caras, 2200 m., 3. vi. 1957 (*Anden-Exped.*) in Staatliches Museum, Stuttgart. Paratypes, two males, same data.

This species differs from *C. lloydi* Muir, the only other species in the genus, in details of coloration and of genitalic structure. In *C. lloydi* the ivory-white markings on the frons, genae, and pronotum do not appear to be present, whereas in the tegmina, the infuscation of the clavus, and the presence of a darker mark at the apex of the common claval vein, find no counterpart in *C. carasi*. In the genitalia, the medioventral process of the pygofer in *C. lloydi* is bifurcate, and of a different shape from that of the present species, the aedeagus, as described, appears to have fewer processes, and the genital styles, in posterior view, are less strongly constricted distally than those of *C. carasi*.

Tribe DELPHACINI.

Toya Distant.

Distant 1906 i: 472. Orthotype, *Toya attenuata* Distant 1906 i: 427.

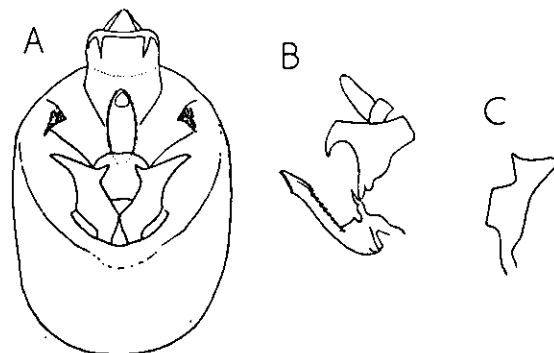
Toya demophoon sp. n. (Fig. 4, A-C.)

Vertex as long submedially as broad at base, obtusely rounding into frons, rather narrower at apex than at base, lateral margins straight or weakly concave, apical margin truncate with submedian carinae slightly prominent, Y-shaped carina obscure, submedian carinae uniting at apex of vertex or at extreme base of frons, basal compartment of vertex wider at hind margin than greatest length (2:1) and than median length (2:3:1); frons in middle line longer than wide at widest part (slightly more than 2:1), widest at middle, lateral margins arcuate, median carina simple; clypeus at base very slightly wider than frons at apex, postclypeal disc scarcely as long as broad at base, in profile shallowly convex, anteclypeus in profile rather strongly convex so that entire clypeus in profile is moderately convex; rostrum surpassing mesotrochanters but not

attaining post-trochanters; antennae reaching to level of middle of postclypeus, basal segment longer than broad (1.4:1), second segment longer than first (nearly 2.8:1); ocelli distinct. Pronotum with disc as long in middle line as broad at anterior margin, lateral carinae straight, not attaining hind margin. Total length of mesonotum greater than that of scutellum (2.8:1). Post-tibial spur with 25 minute teeth.

Tegmina much surpassing abdomen, moderately broadly rounded at apex, Sc+R forked slightly basad of level of Cu 1 fork, both distinctly distad of level of union of claval veins.

Fig. 4.



Toya demophoon sp. n.

A, Male genitalia, posterior view; B, anal segment of male, and aedeagus, right side; C, genital style.

Stramineous; intercarinal areas of frons and clypeus, genae, first antennal segment distally, second segment dilutely, anterior margin of mesonotum, all pleurites and coxae except at margins, longitudinal stripes on femora and tibiae, and abdomen, fuscous. Intercarinal areas of vertex and pronotum, and mesonotum, except for pale carinae, light orange-brown. Tegmina hyaline, veins concolorous in corium, pale yellowish brown in membrane. Wings hyaline, with veins dilute fuscous.

Anal segment of male short, collar-like, lateroapical angles well separated, each produced ventrad in a stout spinose process. Pygofer moderately long, posterior opening as long as broad, dorsolateral angles each distinctly produced in a triangular lamina, acuminate and strongly inflected mesad, diaphragm with dorsal margin moderately shallowly concave with median third produced dorsad in a shallowly rounded lobe, medioventral process absent. Aedeagus tubular, dorsoventrally compressed, moderately ascending distad, with a row of about ten fine teeth along each lateral margin for most of its length; orifice ventrally at apex. Genital styles rather short, broad, constricted at middle, with outer margin shallowly angulately concave, and inner margin subrectangulately excavate, apical margin narrowly produced mesad and more broadly produced laterad.

Male: length, 2.8 mm., tegmen, 3.1 mm.

(leg. H. Knorr) in Staatliches Museum, Stuttgart. This species is most readily distinguished by the inflected and acute dorsolateral angles of the pygofer, in conjunction with the shape of the genital styles. The affinities of this species are by no means clear; it is provisionally regarded as being nearest to the group of species represented by *Delphacodes hessei* Muir.

Asiracina Melichar.

Melichar 1912 c : 132. Orthotype, *Asiracina punctovenosa* Melichar 1912 c : 133.

Asiracina micraulax sp. n. (Fig. 5, A-H.)

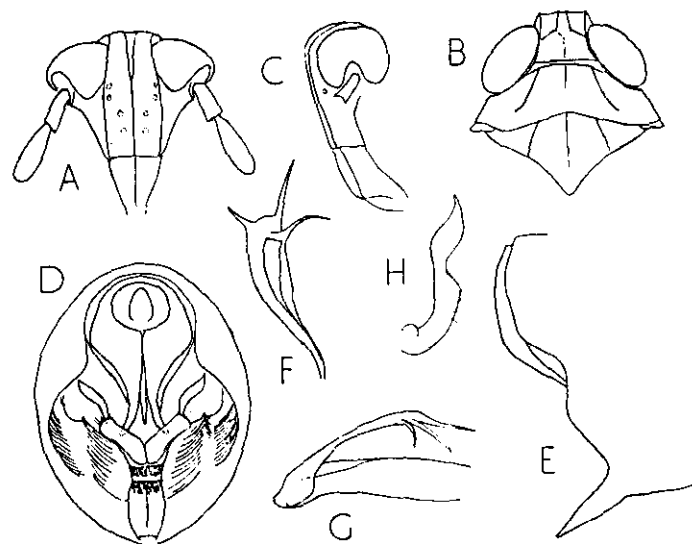
Vortex shorter submedially than broad at base (1 : 1.1), subrectangulately rounding into frons, a little narrower at apex than at base, lateral margins straight or very slightly concave, apical margin truncate, with submedian carinae moderately prominent, Y-shaped carina feeble, submedian carinae not uniting on vertex, basal compartment of vertex wider at hind margin than greatest length (nearly 2.2 : 1), and than median length (2.3 : 1), frons in middle line longer than wide at widest part (2 : 1), widest at two fifths from base, lateral margins concave between eyes, thence parallel, median carina forked at about two fifths from base, clypeus at base distinctly wider than frons at apex, postclypeal disc longer than broad at base (not quite 1.2 : 1), in profile moderately convex, anteclypeus in profile almost straight; entire clypeus in profile moderately convex; rostrum surpassing mesotrochanters, but barely reaching posttrochanters; antennae reaching to level of middle of postclypeus, basal segment longer than broad (3 : 1), second segment longer than first (1.5 : 1); ocelli small. Pronotum with disc longer in middle line than broad at anterior margin (nearly 1.2 : 1), lateral carinae weakly concave, not attaining hind margin. Femora and tibiae of fore and middle legs slightly compressed, but not at all foliately expanded; post-tibial spur with about 35 teeth.

Castaneous; twenty round spots on frons and four on each gena, apical margin of frons, carinae of vertex, second antennal segment, spots on pronotum and mesonotum, pleurites at margins, tibiae at base and apex, post-tarsi, in male a large spot dorsally overlying last three abdominal terga, seventh and eighth ventrites, impressed portion of lateral margin of pygofer, and genital styles in distal half, in female, middle line and six rows of linear marks on last three abdominal terga, and first valvifers, ochraceous.

Anal segment of male moderately short, collar-like, latero-apical angles almost contiguous, each broadly produced ventrad in a curved bluntly spinose process. Pygofer short, posterior opening longer than broad, dorsolateral angles obtusely rounded, scarcely produced, strongly inflected mesad, diaphragm with dorsal margin thickened, median portion short, produced dorsad in a small triangulate lobe; lateral margins of pygofer excavate in their lower half, mesal margin of excavation produced dorsad in a short acute lobe, medioventral process long, in profile wedge-shaped,

tapering distad, shortly bifid at apex. Aedeagus long, laterally compressed, acute distally, a flagellum arising at apex reflected cephalad above aedeagus, widening distally and produced into three subequal slender spinose processes, two at apical angle of right side and one at apical angle of left side. Genital styles stout, moderately long, in side view strongly sinuate, granulate in basal half, slightly constricted at middle, rather twisted distally and acuminate at apex.

Fig. 5.



Asiracina micraulax sp. n.

A, Head, anterior view; B, head and thorax, dorsal view; C, head in profile; D, male genitalia, posterior view; E, pygofer and anal segment of male, right side; F, aedeagal flagellum, dorsal view; G, aedeagus, right side; H, genital style.

First valvifers strongly tumid at base, produced mesad to meet in middle line. Third valvulae of ovipositor widely explanate in basal two fifths.

Male (brachypterous): length, 3.0 mm.

Female (brachypterous): length, 3.8 mm.

Holotype male, KAMERUN: Mueli, 1. ii. 1958, 560 m. (leg. H. Knorr), in Staatliches Museum, Stuttgart. Paratypes, 3 ♂, 1 ♀, same data; 5 km. südt Müeli, 3 ♀.

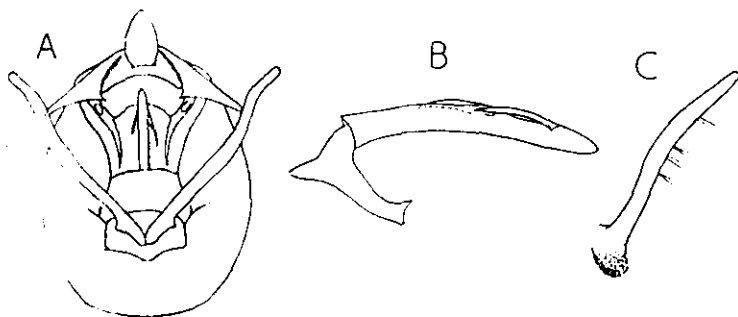
This species is close to *Dicranotropis turneri* Muir, from Pondoland, but differs in having a relatively longer vertex, and a more parallel-sided frons, with a more shortly furcate median carina. The genitalia are similar in pattern, but differ to some extent in almost every detail. It is possible that ultimately forms may be found in intervening areas that bridge the gap between these two species, but at present the differences appear to be too great to justify their being regarded as conspecific.

Dicranotropis sectator sp. n. (Fig. 6, A-C.)

Vertex shorter submedially than broad at base (about 1 : 1.2), evenly rounding into frons, narrower at apex than at base, lateral margins straight, apical margin truncate with submedian carinae moderately prominent, Y-shaped carina weakly present, submedian carinae passing separately on to frons, basal compartment of vertex wider at hind margin than greatest length (2.4 : 1) and than median length (about 2.6 : 1), frons in middle line longer than wide at widest part (2.2 : 1), widest about one third from base, lateral margins shallowly convex, median carina forked at two fifths from base; clypeus at base not wider than frons at apex, postclypeal disc a little longer in middle than broad at base (1.1 : 1), in profile very shallowly convex, anteclypeus in profile moderately convex, and entire clypeus in profile moderately convex; rostrum attaining post-trochanters; antennae distinctly surpassing level of fronto-clypeal suture, basal segment longer than broad (1.8 : 1), second segment longer than first (2.2 : 1); ocelli distinct. Pronotum with disc as long in middle line as broad at anterior margin, lateral carinae weakly concave, not attaining hind margin; total length of mesonotum greater than that of scutellum (2.5 : 1); post tibial spur with 26 teeth. Tegmina much surpassing abdomen, narrowly rounded apically, Sc + R fork slightly basad of Cu 1 fork, both distad of level of union of claval veins.

Testaceous or ochraceous; ten to twelve small round spots on frons, and two on each gena, carinae of frons and clypeus, and three or four pustules on each side of pronotum behind eye, stramineous; median carina of vertex, carinae of pronotal disc, and of mesonotum broadly, white, or nearly so, intercarinal areas of pronotum and mesonotum pale orange-brown; mesopleura and abdomen, fuscous. Tegmina hyaline, margin pale, veins narrowly fuscous in corium, more broadly so in membrane. Wings hyaline, with fuscous veins.

Fig. 6.



Dicranotropis sectator sp. n.

A, Male genitalia, posterior view; B, aedeagus, left side; C, genital style.

distally produced ventrolaterad, lateroapical angles widely separated, each produced mesoventrad in a curved spinose process. Pygofer moderately long, posterior opening longer than broad, dorso-lateral angles not at all produced, diaphragm rather narrow, with dorsal margin deeply concave, devoid of ornamentation at middle; medioventral process weakly present. Aedeagus long, tubular, slightly compressed laterally, a spinose process arising dorsally on right at middle, directed cephalad; a second spinose process arising dorsally on left at apical sixth, also directed cephalad, both processes lying close against aedeagus. Genital styles simple, exceptionally long and slender, almost equally wide throughout, weakly sinuate, parallel-sided, rounded-truncate at apex, distinctly produced caudad at base in a coarsely granulate knob.

Male: length, 3.4 mm., tegmen, 3.8 mm.

Holotype male, KAMERUN: Malende-Banca 125 m., 5-20. xii. 1957 (leg. H. Knorr), in Staatliches Museum, Stuttgart.

This species is readily recognizable by the flaring form of the anal segment and the exceptionally elongate, rod-like genital styles. In general bodily features it is most readily recognized by the comparatively narrow form of the vertex, in which it resembles *D. capensis* Muir, and by the tegminal coloration.

Nicetor gen. n.

Width of head, including eyes, much narrower than width of pronotum. Vertex about as long medially as broad at base, obtusely rounding into frons, as wide at apex as at base, lateral margins straight, apical margin transverse, with submedian carinae moderately prominent, Y-shaped carina distinct, submedian carinae not uniting on vertex, basal compartment of vertex wider at hind margin than greatest length (more than 2 : 1); frons in middle line longer than wide at widest part (about 2 : 1), widest at level of antennae, lateral margins concave between eyes, straight distally, median carina forked at level of base of antennae, clypeus at base not wider than frons at apex, postclypeal disc longer than broad at base, in profile almost straight, anteclypeus in profile strongly convex; rostrum long, attaining post-trochanters; antennae reaching about to level of middle of clypeus, basal segment longer than broad (2.5 : 1 or 3 : 1), second segment slightly longer than first; ocelli distinct, small. Pronotum with disc longer in middle line than broad at anterior margin, lateral carinae concave, diverging posteriorly, not attaining hind margin. Total length of mesonotum greater than that of scutellum (about 2 : 1). Fore-legs laterally compressed, but not foliately expanded; post-tibial spur with 35-40 teeth; basal metatarsal segment longer than second and third combined. Tegmina with Sc + R fork about level with union of claval veins, Cu 1 fork more distad; common claval veins only about half as long as the separate portion of the anterior vein. Anal segment of male narrowly ring-like, lateroapical angles not produced in a process. Pygofer

margin unarmed, lower margin produced caudad medially in a spinose process, medioventral process absent. Genital styles moderately long, each expanding distad.

Type species, *Dicranotropis brunnea* Muir 1926 b : 24.

This genus differs from *Dicranotropis* in the form of the spur, the long rostrum and antennae, the proportions of the post-tarsal segments, and in the position of the forks in the tegminal veins. From *Euidella*, to which it is perhaps nearest, it differs in the truncate anterior margin of the vertex, the compressed fore and middle legs, the tegminal venation, the pattern of the male genitalia, and in the relatively broader bodily form. A distinctive feature most readily to be seen is provided by the outline of the head and thorax in dorsal view: a line from each tegula to the middle of the apical margin of the head meets its fellow there at a right angle, or nearly so. By contrast, in those species of *Euidella* in which the head is appreciably narrower than the width of the pronotum the angle so made is acute.

The only other species that can at present be referred to this genus is *Dicranotropis pallidinervis* Muir (1962 b : 24).

THE SCORPAENID FISHES OF THE GENERA *RHINOPIAS* GILL AND *PELOROPSIS* GILBERT.

By G. PALMER,

Zoological Department, British Museum (Natural History).

[Plate XX.]

In 1891 Günther described a new species of *Scorpaena* under the name *S. frondosa* from a single example taken at Mauritius. Gill (1905) came to the conclusion that this fish did not belong to the genus *Scorpaena* and gave it the new generic name of *Rhinopias*, without specifying any close relationships other than the inferred one with *Scorpaena*. In the same year, Gilbert described a collection of fishes from the Hawaiian Islands and erected a new genus, *Peloropsis*, for a single example of a Scorpaenid fish. This he considered to be most closely related to *Scorpaenopsis*, a decision with which I agree.

Smith (1957), in dealing with the Scorpaenidae of the western Indian Ocean, refers to both these genera and suggests that *Peloropsis xenops* should be regarded as a synonym of *Rhinopias frondosa*, without having seen examples of either form.

As no direct comparison of these two nominal genera appears to have been made, I have obtained a radiograph and meristic counts of the type of *P. xenops* from the U.S. National Museum and have compared this information with the type and one other example of *Rhinopias* which are preserved in this museum.

So far as it is possible to ascertain from published records, *P. xenops* is known from four specimens taken in the Pacific, whilst *Rhinopias frondosa* is known from two specimens taken in the Indian Ocean. In their 'Handbook of Hawaiian fishes' Gosline and Brock (1960) included *P. xenops* on the basis of the type, stating that it has never been taken from Hawaii since. Fowler (1928; 1938) also quotes the single Hawaiian example. Kamohara (1942) described two specimens under this name from Tosa and Kishu Provinces, Japan and later (1959) described a third example from Susaki as *Peloropsis frondosus*, including with this the two specimens from Tosa originally listed as *P. xenops*. Deraniyagala (1952) lists *Peloropsis frondosus*, stating that it is a very rare species of which only two specimens are known. Incidentally, he wrongly attributes the name *Peloropsis* to Gill instead of to Gilbert. Munro (1955) also gives *P. frondosus*, placing it without explanation in the family Synancejidae. Neither Matsubara (1943), Beaufort (1962) nor Baissac (1962) make any mention of either of these genera when dealing with the family Scorpaenidae from the areas in which these specimens have been recorded.

As may be seen from the table below, there are certain differences apparent between *P. xenops* and *R. frondosa* which I consider warrant