A NEW GENUS AND SPECIES OF ULOPINAE FROM JUAN FERNANDEZ ISLANDS

(Homoptera Cicadellidae)

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Se describe una especie extraordinaria de Cicadellidae, recolectada por el Rev. Padre G. Kuschel en su tercer viaje a las Islas Juan Fernández, para la que se crea también un género nuevo. Al final se discute su posición sistemática dentro de los Ulopinae.

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The excellent collection of Cicadellidae made by Father G. Kuschel in 1951 and 1952 is being worked out by Dr. J. W. Evans. Recently I have received through Dr. F. van Emden a remarkable species taken by Fr. Kuschel during his third visit to the Island with Dr. C. Skottsberg. This I propose to describe myself so that I may dedicate a genus in this family to my friend Dr. J. W. Evans in recognition of his extensive work on the group.

Evansiella gen, nov.

Small brachypterous, non-punctate leafhoppers covered with short scale-like setae with a transverse parallel-sided pronotum and a large, very wide, laminate head with the eyes at the extreme lateral angles; ocelli absent; hind tibiae with relatively few and irregular spines.

Head laminate, scabrous more than twice as wide as the pronotum but in the middle equal in length to pronotum; anterior margin broadly arcuate, strongly indented in middle, suddenly narrowed at lateral angles, the compound eyes placed anteriorly on the narrowed projections so that their anterior margins are behind the level of the anterior margin of the pronotum; impressed along middle line; ocelli absent; face flattened, frons wide, lateral frontal sutures not extending beyond antennal pits, the post clypeus concave in middle, antennal ledges oblique, the antennal depressions deep, continuing laterally along anterior margin of head towards eyes; maxillary sutures absent; lorae distinct rather swollen; anteclypeus (clypellus) elongate more or less parallel sided; labium long with two visible segments; antennae with basal segments relatively long

and the flagellum distinctly segmented on basal thickening; frontal sutures apparently ventral, coronal suture dorsal.

Pronotum transverse, more or less parallel sided, rather wider anteriorly than posteriorly, the anterior margin broadly rounded, the posterior margin broadly concave, lateral margins rounded, not carinate: a broad median longitudinal carina present with some transverse wrinkling. Proepisterna concealed by lateral margins of genae. Scutellum transverse with a median keel, bulbously swollen, on apical half and with some transverse wrinkling. Tegmina, abbreviated not reaching the apex of the second abdominal segment, costal margins straight, apical margins lightly convex, venation obscure; wings absent.

Legs scabrous more or less four sided, three of the angles with a row of four or five large spines widely spaced and a number of small spines, the fourth angle with only one large spine towards the apex and numerous small spines; armature irregular, the pair of spines at apex of dorsal side of hind femur rather short.

Abdomen with a distinct dorsal ridge extending to the posterior margin of the seventh segment, the apex of the ridge on each segment extending beyond the posterior margin to form an acute process.

Pygophor greatly reduced to form a small ninth segment invaginated into apex of eighth segment and a small anal segment provided with two posteriorly directed apically slightly reflexed, spine-like processes. Subgenital plates short, straight and contiguous along the middle line, without spines; the aedeagus, connective and parameres completely exposed.

Type species Evansiella kuscheli sp. nov.

Evansiella kuscheli sp. nov. (figs. 1 & 2)

Colour & sordid brown, setae white; head especially posterior margin and median depression of dorsal surface, paler, eyes dark reddish brown; apical halves and inner surface of coxae, trochanters and a broad annulation in middle of femora, pallid; the bases and apices of the femora dark brown and a suffusion on the trochanters brown. Pronotal calli, scutellar swelling and apices of tegmina dark brown.

Structure.—Scabrous, that is surfaces covered with closely set minute papillae, also more or less regularly but not densely covered with short stout setae: legs also with more or less dense pubescence and 4 or 5 stout spines along the angular margins.

Head across eyes five times as wide as long in middle (120: 24) and more than twice as wide as pronotum (120: 54); along middle line with a distinct depression and with a distinct indentation in middle of anterior margin.

Pronotum less than half as long in middle as wide (22: 54), with a broad, median longitudinal keel; circular depressed areas of calli, smooth and shining; posterior region of pronotum transversely rugose; lateral margins rounded not carinate.

Scutellum transverse less than half as long in middle as wide at base (14: 34), medially broadly carinate, the carina forming a transversely rugose bulbous swelling on apical half.

Tegminal pads broad, widening to apical margin which is broadly convexly rounded; venation obscure. Wings absent. Legs relatively short and robust, the tibiae a little longer than the femora, armature as above (fig. 1 a).

Tarsi two segmented.

Abdomen tapering to apex. the dorsal median keel formed of a series of ridges with the apical Fig. 1.—Evansiella kuscheli gen. et sp. nov. o. end of each ridge prominent over the base of the next; eighth seginvaginated within apex of eighth.

Dorsal view with legs omitted. a. Hind tibia and tarsus.

ment (last visible) without this dorsal ridge. Ninth segment small

Subgenital plates short, parabolic inshape with the outer margins slightly reflexed without distinct spines and the inner margins straight and contiguous. Pygophor reduced to an anal block with a pair of spine like processes (fig. 2 d); anal tube short: paramere with apical style inserted half way down the broad basal region with its broad concave posterior margin lying in front of the long root-like proximal region; apex of style widened and extended to an acute process on outer side; aedeagus long, more or less cylindrical, bent at right angles, the apex bifid in dorsal view and broadly truncate in ventral view; connective intermediate between the quadrate and cruciform types.

Total length 2,05 mm.

Width of head across eyes 1,70 mm.

MASATIERRA, Camote, 450 m, December 28, 1954 1 of (type) collected, in soil, by Father G. Kuschel. Holotype male in Investigaciones Entomológicas, Universidad de Chile.

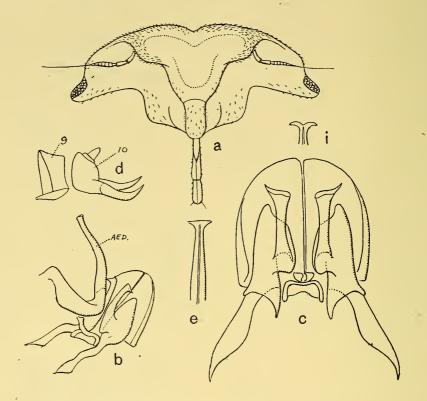


Fig. 2.—Evansiella kuscheli gen. et sp. nov. od. a. Underside of head; b. Dorso-lateral view of male genitalia;

- c. Dorsal view of parameres with connective and subgenital plates; d. Ninth and tenth segments with paired processes of the latter;
- e. Terminal view of apex of aedeagus;

i. Dorsal view of same.

Relationship.—This extraordinary genus runs down in Oman's 1949 key to the Megophthalminae and is very remotely related to Tiaja Oman 1941. I think that it would be correctly placed in this group of terrestrial forms, with the long labium, very short parabolical sub-genital plates, ocelli often absent and the sparsely spined hind tibiae. The curious scabrous structure of the integument is found also in the European genus Megophthalmus.

The two-segmented tarsi are abnormal for the group and indicate a certain degree of neoteiny in this species when associated with the brachypterous condition.

Evans regards the Megophthalminae Kirkaldy 1906 as a tribe of Ulopinae Dorhn 1859 which name has priority for subfamily rank.

REFERENCES

- Evans, J. W., 1947, A natural classification of leaf-hoppers 3, Trans. ent. Soc. Lond. 98: 122.
- OMAN, P. W., 1949, The Nearctic Leafhoppers, Mem. ent. Soc. Washington 3: 34.

