

LOS INSECTOS DE LAS ISLAS JUAN FERNANDEZ

3. M I R I D A E (Hemiptera) (1)

(Neotropical Miridae, LIV)

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Los Míridos cuentan con dos representantes en las Islas Juan Fernández, ambos nuevos para las ciencias. Para uno de ellos se hace necesario crear un nuevo género, denominado *Kuscheliana*, que es muy notable por tratarse de una especie braquíptera con patas posteriores muy largas y muy peludas. Las especies son *Kuscheliana masatierrensis* n. sp. y *Derophthalma fernandeziana* n. sp., ambas de Masatierra.

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Through the courtesy of P. G. Kuschel I was able to study a few specimens of Miridae from the Island of Juan Fernández on the Pacific coast of Chile. All specimens were found to belong to a new genus and a new species of *Derophthalma* Berg. They were collected on the Island of Masatierra and on the following localities within the island: El Yunque, Miradero, El Camote, Cerro Alto and B. Cumberland.

The new genus is remarkable for its brachypterous condition as well as the very long and hairy posterior legs.

In spite of the fact that the Island of Juan Fernández is not yet well defined regarding its zoogeographical situation it is being included in the present work as neotropical.

Kuscheliana n. gen.

Mirinae, Stenodemini, characterized by the irregular puncturation of pronotum and hemielytra; posterior legs very long with the tibiae beset with long, fine and erect setae; hemielytra without divisions, the membrane absent, veins strongly marked, brachypterous and first antennal segment with very short pubescence.

Body glabrous with a waxy aspect. Head sulcate in the vertex, horizontal, eyes slightly removed from pronotum, frons prominent between bases of antennae, blunt, clypeus seen from above, about as wide as first antennal segment, vertical, rounded anteriorly. Rostrum reaching the posterior coxae, first segment extending to base of head.

(1) This work was undertaken with the help of the Conselho Nacional de Pesquisas, Brasil.

Antennae long and slender, first segment shorter than the length of head and pronotum together, slightly bent outwards, strongly narrowed at extreme base and tapering gradually towards the apex, very fine and shortly pubescent, the hairs about four to five times shorter than the diameter of the segment; second segment much slender than first, very slightly incrassate towards the apex; third and fourth segment tapering gradually, both very shortly pubescent.

Pronotum a little wider than long, almost flat, the calli fused and slightly raised, lateral margins carinate, portion of pronotum corresponding to collar and between the posterior angles and the calli, punctate, posterior margin slightly sinuate. Mesoscutum and scutellum without line of separation.

Hemelytra short (brachypterous), without divisions between clavus and corium, cuneus and membrane not visible, embolium laminate, a little reflexed, wider at the basal third, veins strongly marked with more or less visible punctation on their margins. The hemelytra is irregularly punctate, reaching the 6th abdominal segment.

Legs with thickened tibiae, the posterior pair much longer than the others, posterior tibiae with very dense, long and erect setae about twice or more as long as width of tibia and numerous very minute dark teeth or points, posterior tarsus with first segment as long as second and third together, with a tuft of hairs below and fine, erect setae lateral and dorsally.

Type of genus: *Kuscheliana masatierrensis* n. sp.

This genus differs from *Schoutedenomiris* Carvalho due to its brachypterism, the vertical and blunt clypeus, much longer first antennal segment, rostrum reaching the posterior coxae and lack of membrane. From *Ophthalmomiris* and *Porpomiris* Berg by the long pubescence of posterior tibiae. It differs from all other genera by the visible punctation of pronotum and hemelytra. The genus *Stenodema* Laporte also with a punctate pronotum is macropterous and do not possess the characteristic pubescence of *Kuscheliana*.

I dedicate this interesting genus to my colleague, Guillermo Kuschel, a man of great merit in Chilean entomology.

***Kuscheliana masatierrensis* n. sp.** (Fig. 1).

Characterized by its colour and male genitalia.

Male: length 6,0 mm., width 1,8 mm. Head: length 0,8 mm., width 1,1 mm., vertex 0,70 mm. Antennae: segment I, length 1,5 mm.; II, 3,6 mm.; III, 1,8 mm.; IV, 1,7 mm. Pronotum: length 0,9 mm., width at base 1,2 mm. Rostrum: length 3,0 mm.

Colour: yellowish green to greenish straw with reddish or fuscous markings; head yellowish with reddish striolae on each side of frons, these sometimes fused or absent, margin of eyes reddish, eyes chestnut, rostrum hyaline with apex fuscous; antennae with the first segment either fuscous or reddish, its internal margin lighter, second segment reddish brown with fuscous apex, third and fourth segments fuscous, the third slightly lighter at base; pronotum with reddish markings on its middle and near the lateral margins, the lateral margins (carina) and a slender median longitudinal fascia, yellowish, a darker area is visible between the carina and disc of pronotum; scutellum with two dark fasciae,

the median line, basal angles and extreme apex, yellowish; mesoscutum with two reddish fasciae separated by a lighter longitudinal median line; hemielytra irregularly marked with reddish, fuscous and yellow, embolium

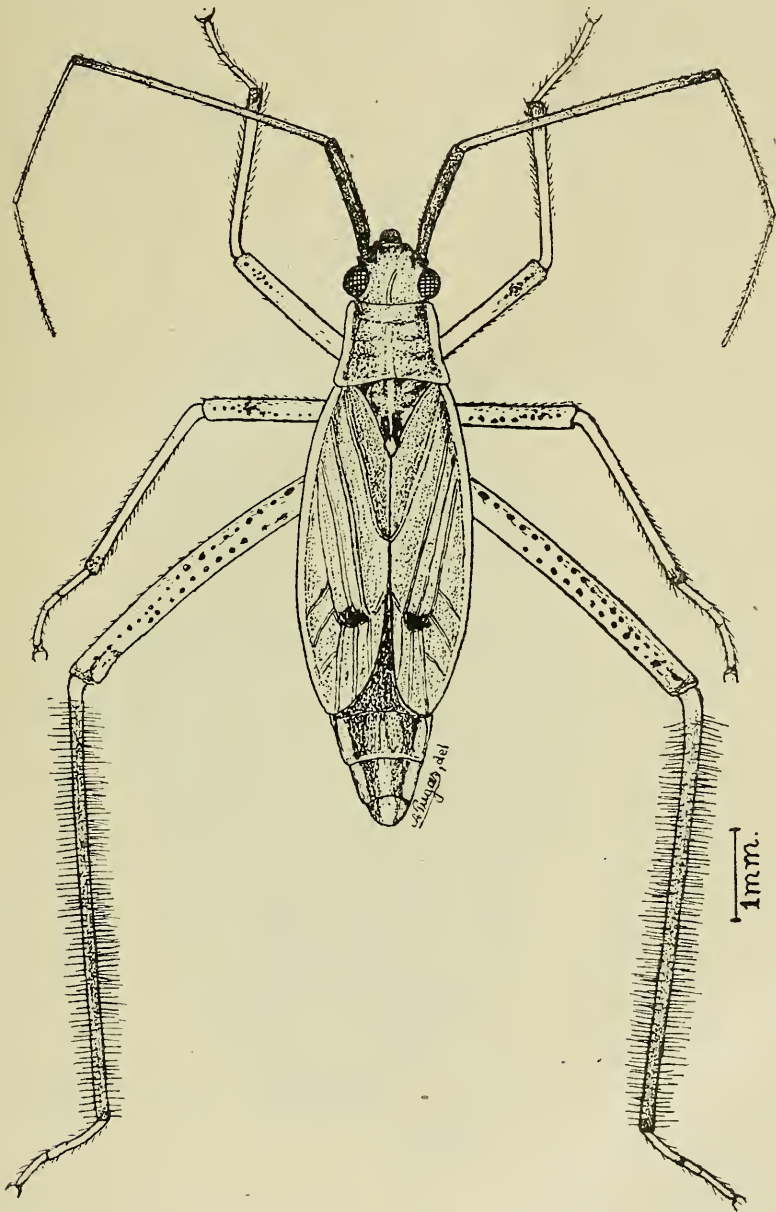


Fig. 1. *Kuscheliana masatierrensis* n. gen., n. sp.

and veins distinctly yellow, corium with two roundish fuscous spots near the apex of the area surrounded by the brachial and radial veins and two much fainter ones along the brachial vein near the middle of the corium; legs yellowish tending to fuscous in the males, femora with lines of black roundish spots more visible on the posterior pair, posterior tibiae with a dark fascia internally, densely beset with dark, long and erect setae and with minute black points, anterior and median tibiae and tarsi yellow with fuscous apex.

Genitalia: aedeagus (fig. 3) of the *Stenodemini* type, with four spiny lobes, two of them much more strongly covered with spines. Left clasper (fig. 5) curved, somewhat falciform, with many and long setae on the basal portion. Right clasper (fig. 6) small, with a distinct apical tooth. Pygophore seen from left side as in figure 4.

Female: identical to male in colour and general aspect but much more robust. Length 8,5 mm., width 2,5 mm.

Holotype: male, El Yunque, MASATIERRA, 300 m., 9.1.1952, P. G. Kuschel, in the Collection of Investigaciones Entomológicas, Universidad de Chile. Allotype: female, same data as type and in the same collection. Paratypes: 4 females, El Camote, Bahía Cumberland, Miradero de Silkirk, MASATIERRA, P. G. Kuschel, in the collections of Investigaciones Entomológicas, Universidad de Chile, and of the author.

The species lives among ferns in the dark and damp recesses of the forest.

***Derophthalma fernandeziana* n. sp. (Fig. 2)**

Characterized by its colour, size and male genitalia.

Male: length 4,1 mm., width 1,7 mm. Head: length 0,3 mm.; width 0,9 mm., vertex 0,40 mm. Antennae: segment I, length 0,3 mm.; II, 1,0 mm.; III, 0,4 mm.; IV, 0,3 mm. Pronotum: length 0,8 mm., width at base 1,6 mm.

Colour: dark brownish to dark testaceous, beset with silky or woolly silvery pubescence; antennae yellow with segment I, extreme base and apex of second segment, the third and fourth segments, black; head with yellow fascia medianly on the frons and vertex, jugum, clypeus and lorum also yellow; rostrum hyaline; pronotum dark, with slender posterior margin yellow (some specimens with a short median longitudinal fascia on the disc and lateral margins of pronotum, yellow); scutellum with yellow apex (some specimens with the median line also yellowish); hemielytra with lighter areas in the basal portion of corium, between the brachial vein and claval commissure and also apically contiguous with cuneal fracture, darker areas may also be seen, over which the woolly silvery pubescence is distinctly visible, cuneus yellow apically; membrane enfumate with a light area near apex of cuneus and another not well marked a little beyond, veins yellow apically; underside brownish, ostiolar peritreme and rima just behind it, white; legs yellow, the femora with two dark transversal fascia near apex, tibiae dark at apex and base, tarsi with third segment black.

Pronotum and scutellum strongly punctate, head striolate, hemielytra shagrine, scutellum strongly convex. Others characters as mentioned for the original description of the genus.

Genitalia: aedeagus (fig. 9) of the Mirini type, with a median spiculum and a central more chitinized portion ending a little above the external gonopore. Left clasper (fig. 7) curved, with a spine near the apex on the dorsal side. Right clasper (fig. 8) simple ending by a point.

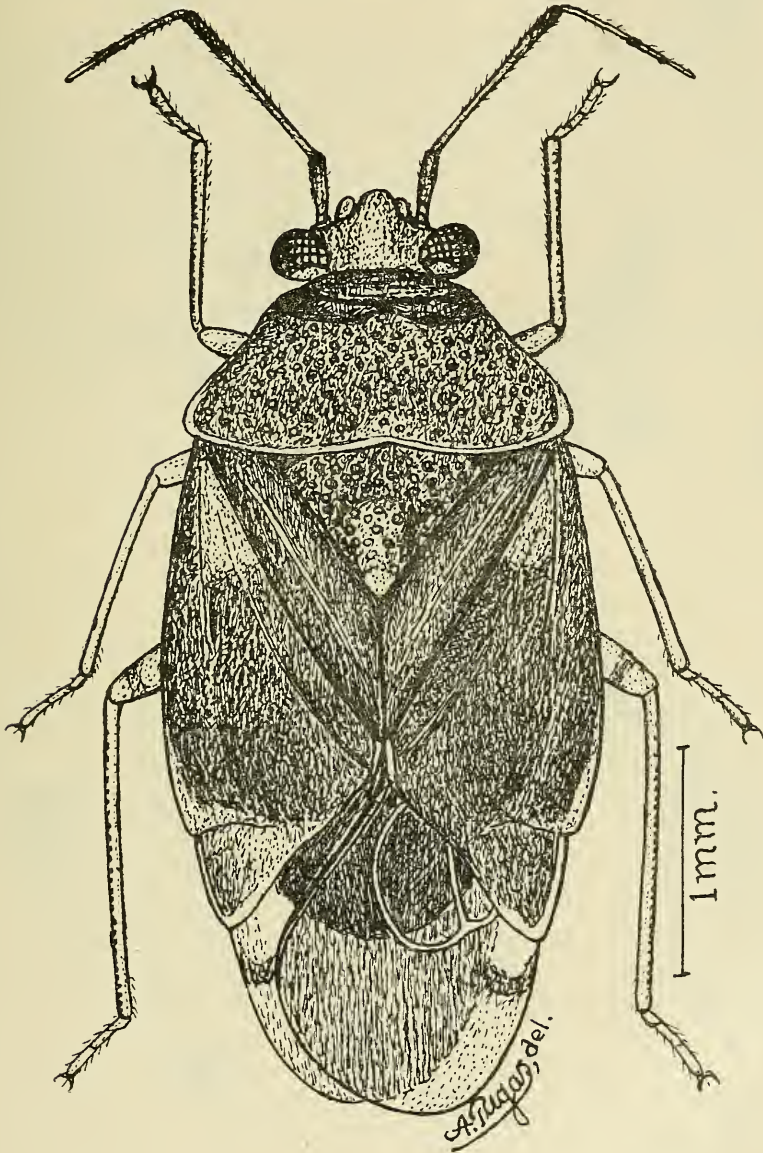
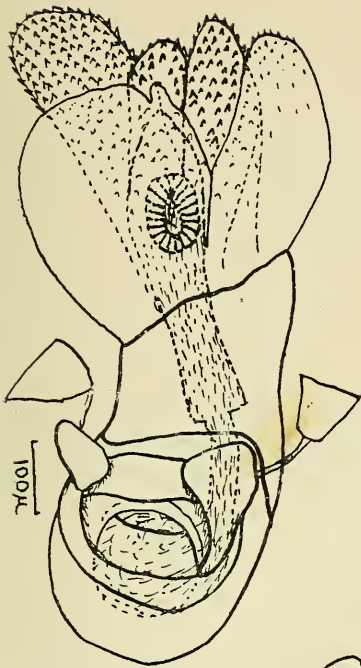


Fig. 2. *Derophthalma fernandeziana* n. sp.

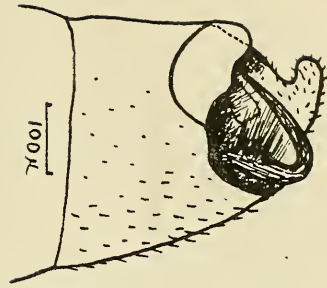
Female: identical to male in colour and size, showing a wider vertex and a shorter and slender second antennal segment (length 0,9 mm.). Some specimens show the head, pronotum and scutellum testaceous to yellowish. Two females are totally testaceous to yellowish, except for the apical spot near apex of corium, membrane and apex of second antennal segment.

Holotype: male, Plazoleta del Yunque, MASATIERRA, 200 m., 9.1.1952, on *Boehmeria excelsa* (Urticaceae), P. G. Kuschel, in the Collection of Investigaciones Entomológicas, Universidad de Chile. Allotype: female, same data as holotype and in the same collection. Paratypes: 6 males and 10 females, same data as above and Cerro Alto, MASATIERRA, 600 m., 1.2.1952, on *Rhaphithamnus venustus* (Verbenaceae) and especially on *Ugni Selkirkii* (Myrtaceae), in the collections of Investigaciones Entomológicas, Universidad de Chile, of Museu Nacional, Rio de Janeiro, and of the author.

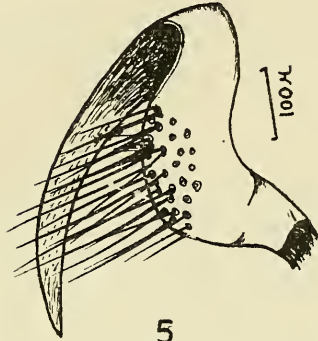
This species differs from *Derophthalma reuteri* Berg and *Derophthalma coriaria* Knight and Carvalho by its colour, larger size and male genitalia.



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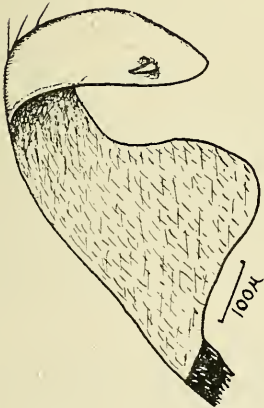
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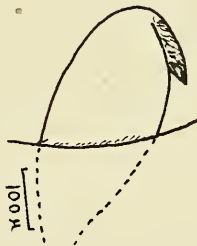
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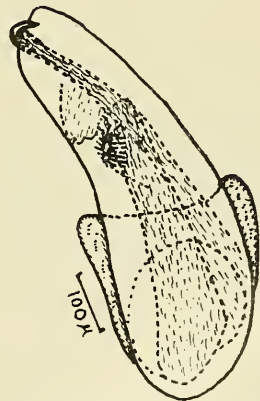
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Fig. 3. *Kuscheliana masatierrensis* n. sp., aedeagus. Fig. 4. Idem, pygophore seen from left side. Fig. 5. Idem, left clasper. Fig. 6. Idem, right clasper. Fig. 7. *Derophthalma fernandeziana* n. sp., left clasper. Fig. 8. Idem, right clasper. Fig. 9. Idem, aedeagus.