

in metazona, impressed in the lower third of the prozona, with some short and low longitudinal carinulæ between the transverse sulci which are scarcely developed but still perceptible. Elytra extending a little beyond the middle of the metanotum, four or five times as long as at the base, broad, narrowed towards the rounded apex. Abdomen with a low, linear, median keel. Hind femora probably olivaceous in life; hind tibiæ pale brown (reddish in life?).

Length of body 14 mm.; pronotum 3 mm.; elytra 1.5 mm.; hind femur 8.5 mm.

The type is labelled "Mt. Everest Exped. Up to 18,500 ft., July, 1921." It is in the British Museum collection.

The exact systematic position of this curious insect is not yet clear. It evidently has nothing to do with *Conophyma*, which it resembles so closely at first sight, because it has no outer apical spine of the hind tibiæ, and belongs therefore to another division. The absence of the prosternal spine seems even to indicate that it is a member of either Acridinæ (=Truxalinæ) or Locustinæ (=Edipodinæ), but I am more inclined to include it in Catantopinæ judging by all other characters, though a definite solution may be arrived at only after the male sex is described.

It is a great pity that only one specimen has been brought by the Expedition, though the insects are undoubtedly not uncommon on the Alpine pastures. It is worth drawing the attention of all future collectors on high altitudes in Central Asia that their Orthopterous fauna is wholly unexplored, and collecting of small, wingless, larvæ-like grasshoppers is especially desirable, as they are usually strictly localized, and their extensive study may throw some light on the origin and history of the Palæarctic fauna.

LXIV.—On some Fijian Psyllidæ (*Homoptera*).

By F. LAING, M.A., B.Sc.

(Published by permission of the Trustees of the British Museum.)

THROUGH the kindness of Dr. G. A. K. Marshall, Director of the Imperial Bureau of Entomology, I have been able to examine a collection of Psyllidæ from Fiji. Three undescribed species appear to be present, and descriptions of them are given herewith.

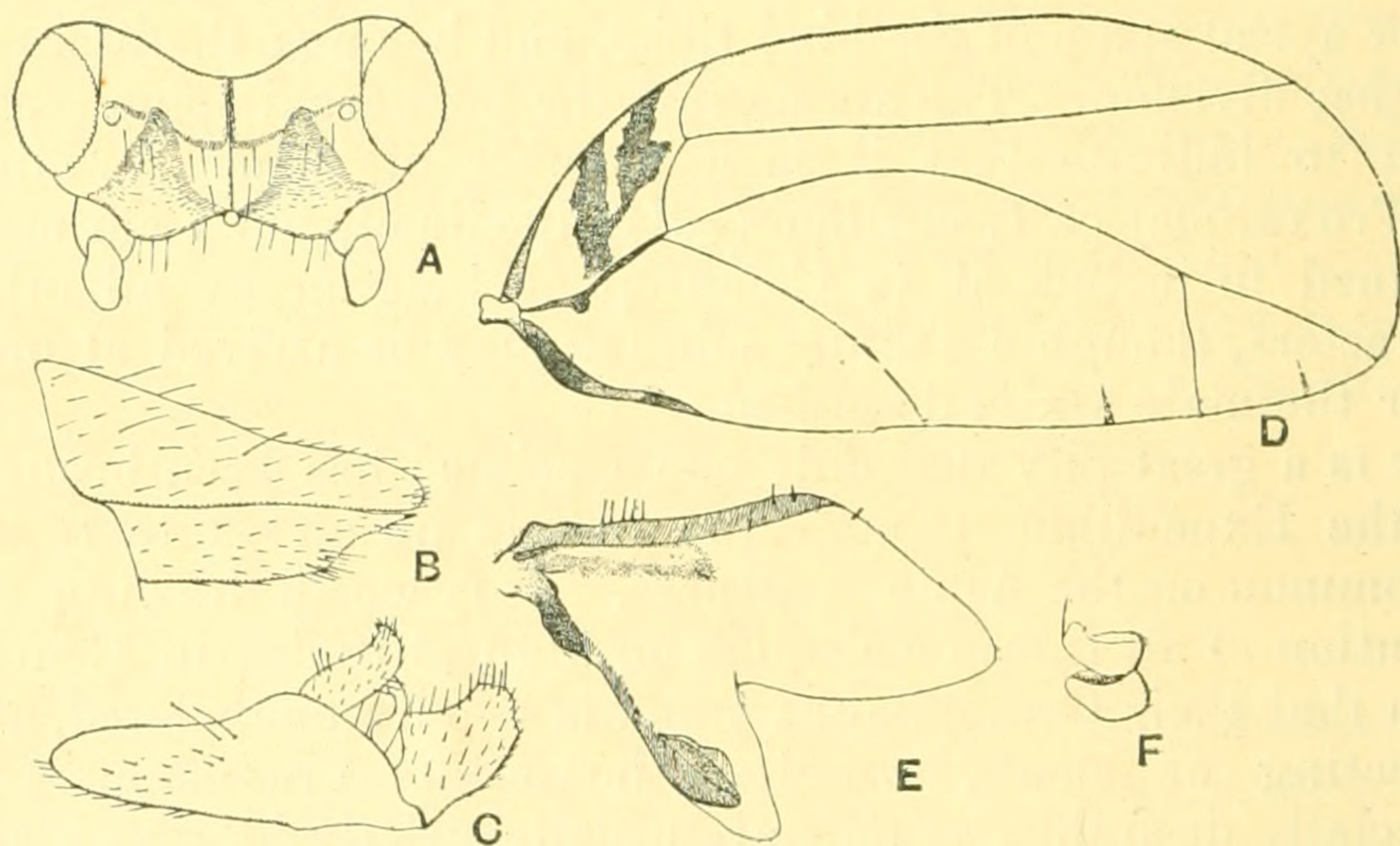
Paurocephala psylloptera, Crawf.

This widely distributed species has not hitherto been recorded from Fiji, though its variety *setifera* has. Greenwood has recently taken the type-species plentifully on *Ficus* in the mountains of Lautoka.

Leptynoptera didactyla, sp. n. (Fig. 1.)

General colour canary-yellow; black fascia at the tips of segment 4 and tip of the antennæ and midway between, remainder of the antennæ pale; narrow, sordid white bands forming a **U** on either side of the median suture of the vertex and another on the lateral margin; two white lateral

Fig. 1.

*Leptynoptera didactyla*.

A, head; B, ♀ genitalia; C, ♂ genitalia; D, E, front and hind wings; F, first two segments of antenna.

spots on the pronotum, two white, narrow, parallel-curved bands on either side of the dorsum, ending before they reach the middle; mesonotum with three parallel, straight, narrow, median streaks, a curved one medio-laterally, and another marginally, all vague or obsolete anteriorly; wings hyaline with two dark brown fascia confluent posteriorly in the anterior basal cell; abdomen with most of the segments bordered with dark brown.

Head not quite so broad as the thorax, vertex with a fovea on either side of the median suture, broad anteriorly, narrowing backwards to end level with the lateral ocelli,

elevated over the base of the antennæ, a few longish pale hairs. Antennæ short, about twice the breadth of the vertex, basal two segments cup-shaped, slightly porrected on one side. Dorsulum with a faint median carina. Tegmina about twice as long as broad; hind wings very small, about one-fifth the length of the tegmina, partially bilobed, the costal and anal margins chitinized. Genitalia, female with anal segment about two-thirds the length of the abdomen, dorsal valve scarcely longer than the ventral, bluntly rounded, ventral valve black-pointed, angled ventrad, with a bunch of strong spines in the angle; male with the forceps about two-thirds the length of the anal valve, the last tergite produced backwards into a strong subconical process.

Length 2·3 mm.; length of tegmen 3 mm.

Fiji, Cuvu, on *Calophyllum inophyllum*, L. (*W. Greenwood*).

The narrow white bands should distinguish this species from *L. sulphurea*, Crawf., the only other member of the genus.

Nesiope ornata, Kirk.

Fiji, Cuvu, feeding on the underside of the leaves of *Heritiera littoralis*, Dry. (*W. Greenwood*).

I have a considerable series of this species, and the variation in the colour on the notum is greater than that indicated in the original description, which was drawn up from one specimen. The white median line is by no means distinctly marked and in many specimens is completely obliterated.

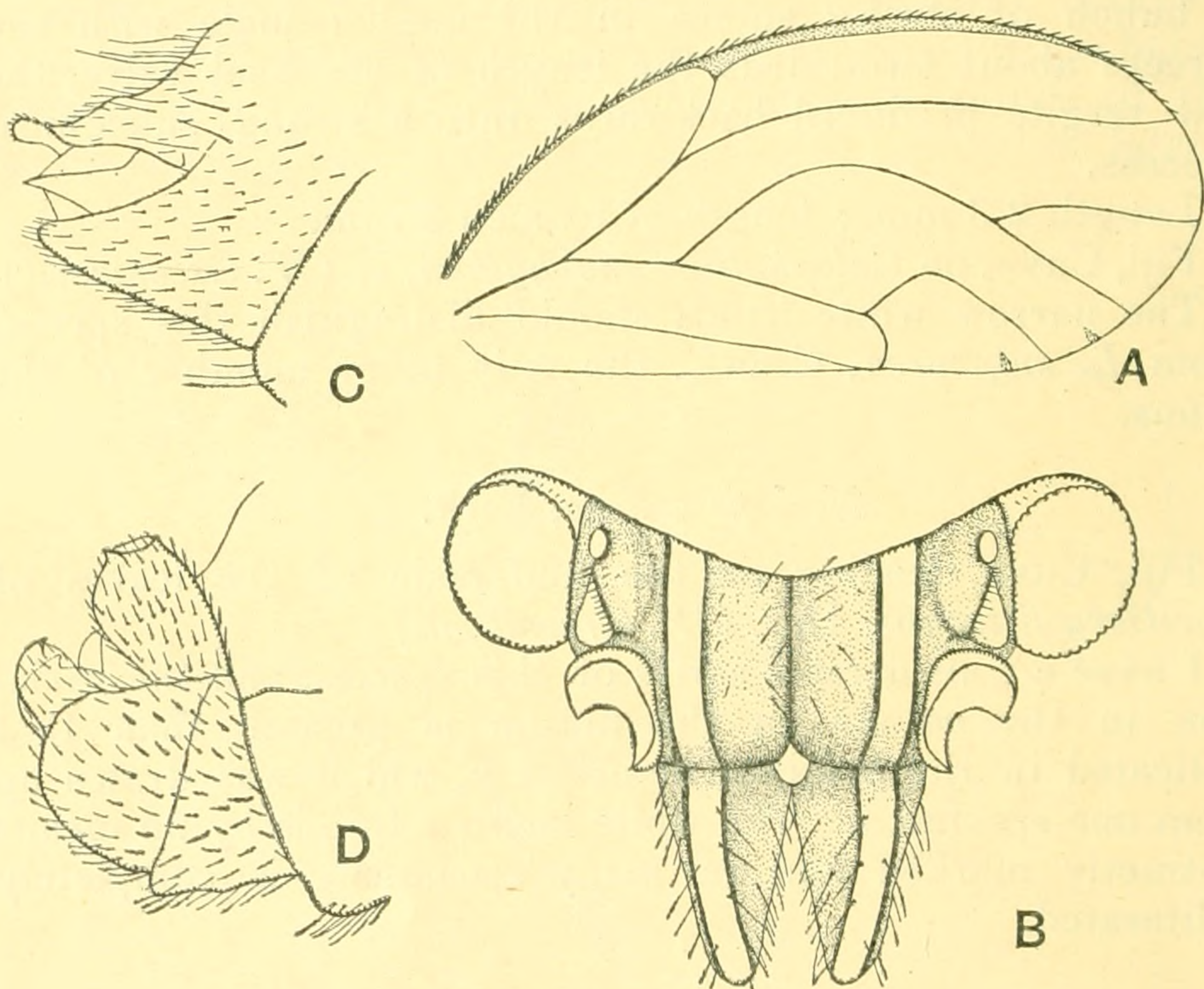
Epipsylla bilineata, sp. n. (Fig. 2.)

Apple-green, with two broad, parallel, silvery bands narrowly bordered with very dark brown to purple, running from the tips of the genal cones through the vertex and thorax and converging in an oval spot on the postscutellum; a semicircular patch between the posterior ocelli and the base of the antennæ. Between the silvery bands on the dorsulum is a brownish patch, and on either side on the mesonotum are vague brownish areas. Antennæ with the first two segments brown, III. brown with black tip, IV., V., VI. black with brown bases, remaining segments black.

Head as broad as the thorax; vertex rather flat in the middle, strongly elevated in the postocellar areas, with a few black hairs; a row of very short black hairs on the

margin of the semicircular silvery patch and ventrally to the ocelli. Antennæ long and slender, longer than the whole insect. Thorax arched. Tegmina hyaline, a little more than twice as long as broad. Genitalia, male with anal valve obovate, forceps about two-thirds the length of the anal valve, black at the tip, pubescent, an inner, shorter, accessory pair present; female with dorsal valve if anything slightly longer than the ventral, the whole very short.

Fig. 2.

*Epipsylla bilineata.*

A, tegmen; B, head; C, ♀ genitalia; D, ♂ genitalia.

Length 3 mm.; length to the tip of the closed tegmina 5 mm.

Fiji, Cuvu (*W. Greenwood and R. Veitch*).

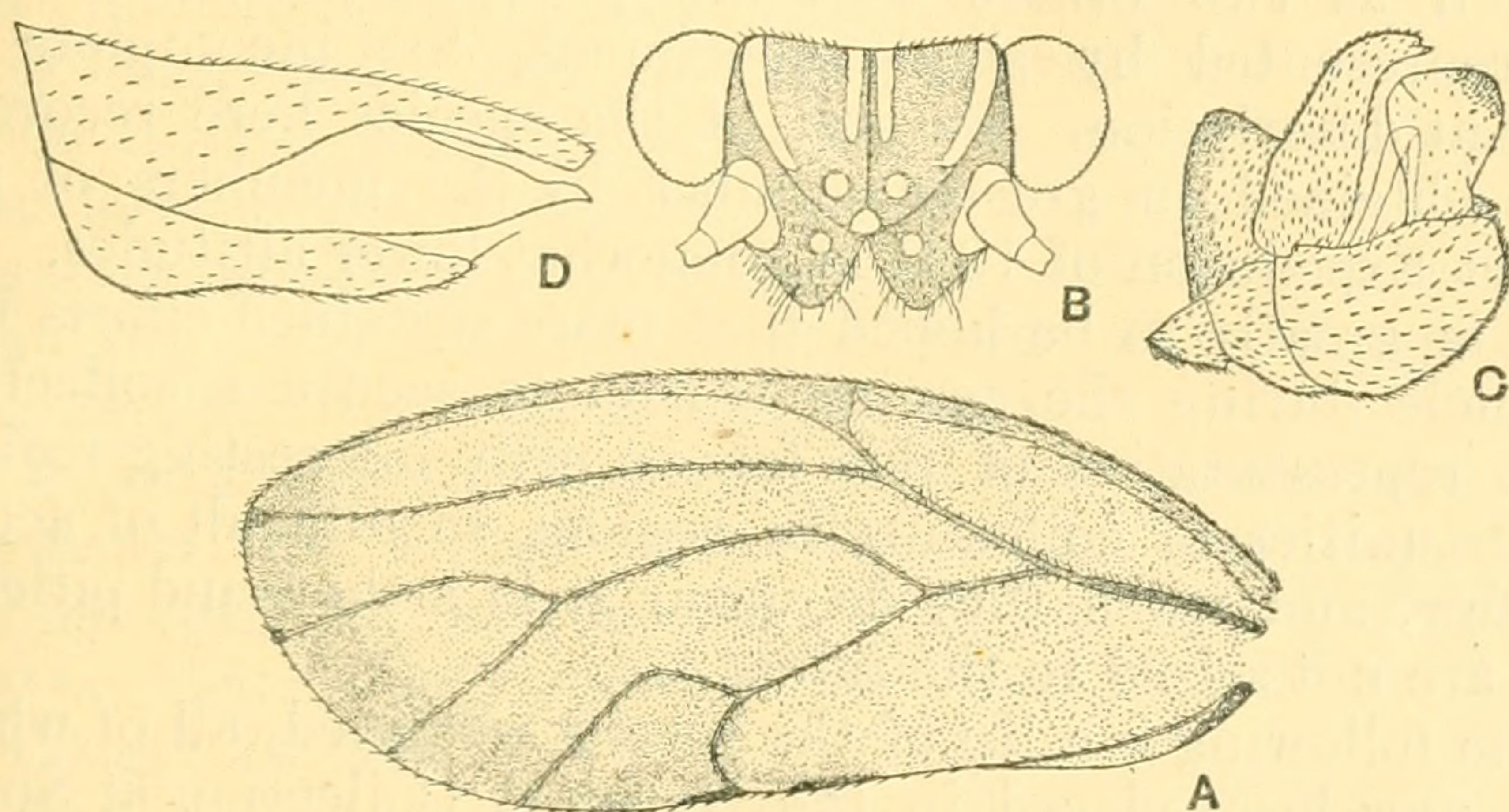
This species may be distinguished from *E. pulchra*, Crawf., its nearest ally, by the green coloration and the absence of the white line on the genal cones below the antennæ.

Arytaina quadrioculata, sp. n. (Fig. 3.)

Dark brown, in the inner angles of the genal cones and in the apical angles of the vertex, above the median ocellus, circular pale spots; vertex with on either side of the median suture, a sordid white band reaching from the posterior

margin halfway forward, another curved one running from the lateral ocellus around the margin; on the posterior border midway between these two bands a white spot. Postero-lateral ocelli black. Pronotum on posterior margin with short white perpendicular bands, the median pair confluent anteriorly; mesonotum with a median whitish band not quite reaching the front border and marginally vaguely white; dorsulum obscurely testaceous; scutellum with white spots, one anterior, median, two posteriorly, and a lateral band. Tegmina infuscated, more deeply in a wide marginal band running from the apex to beyond the second discoidal; nervures pilose.

Fig. 3.

*Arytaina quadrioculata*.

A, tegmen; B, head; C, ♂ genitalia; D, ♀ genitalia.

Head not so wide as the thorax, hind margin of vertex slightly concave, with numerous hairs. Genal cones short, broad, rounded at apex, pilose. Antennæ very long, longer than the body. Mesonotum and dorsulum pubescent. Tegmina slightly more than twice as long as broad. Genitalia, male with anal valve broad at base, tapering towards the tip, emarginate; forceps obovate-truncate, on the outer upper angle numerous short, strong, black spines; female with the genital segment fully as long as the rest of the abdomen, dorsal valve longer than ventral, truncate at tip, ventral valve with a strong spine at tip.

Total length 3.1 mm.; length to tip of folded tegmina 4 mm.

Fiji, Labasa (*R. Veitch*).

The markings are not always conspicuous; the circular pale spots on the head may be partially obscured, and one male has the white bands almost obliterated.

36502
Smith

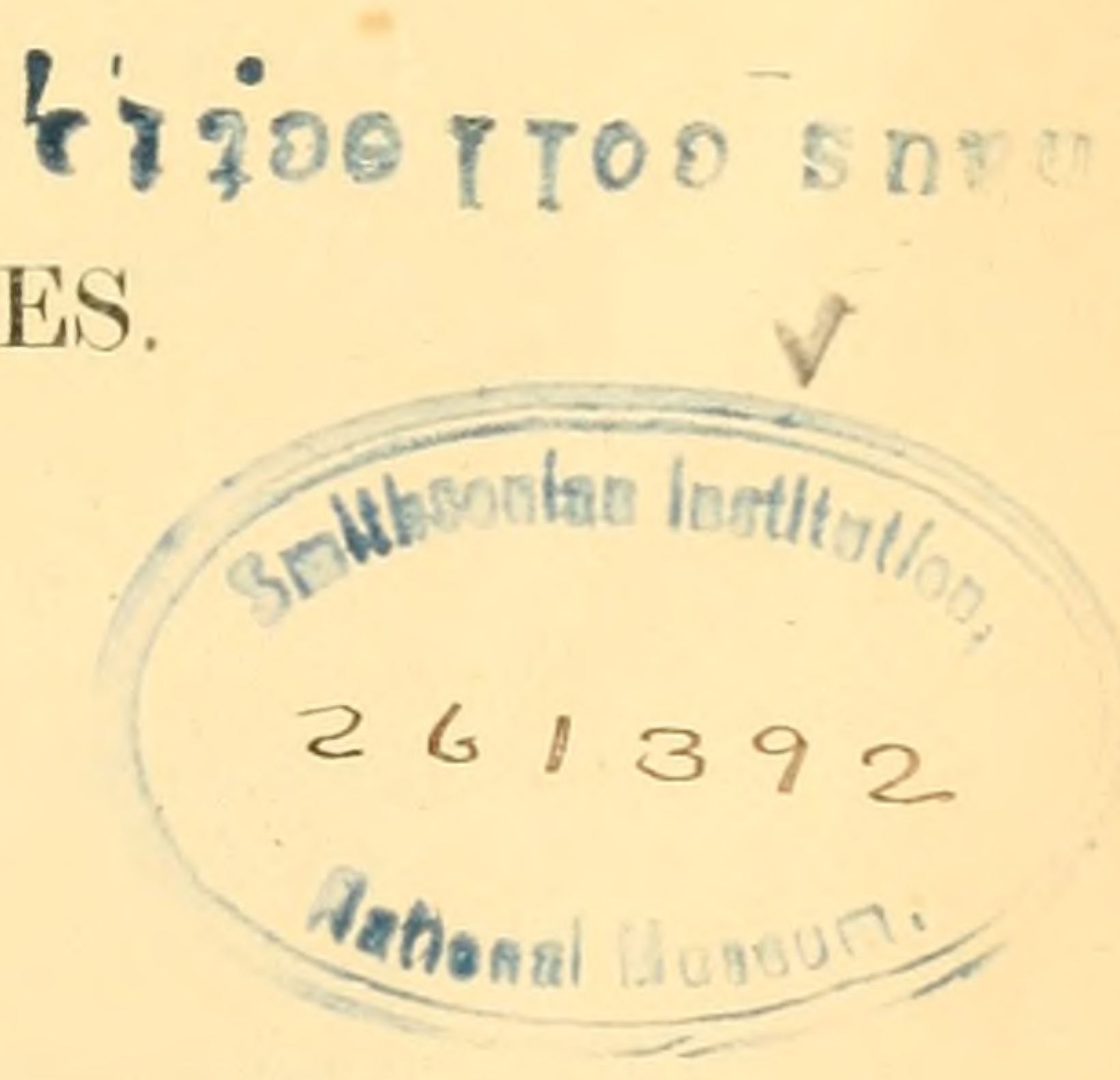
THE ANNALS
AND
MAGAZINE OF NATURAL HISTORY.

INCLUDING
ZOOLOGY, BOTANY, AND GEOLOGY.

(BEING A CONTINUATION OF THE 'ANNALS' COMBINED WITH LOUDON AND
CHARLESWORTH'S 'MAGAZINE OF NATURAL HISTORY.')

CONDUCTED BY
WILLIAM CARRUTHERS, Ph.D., F.R.S., F.L.S., F.G.S.,
MR ARTHUR E. SHIPLEY, G.B.E., M.A., Sc.D., F.R.S.,
AND
RICHARD T. FRANCIS, F.Z.S., M.B.O.U.

VOL. IX.—NINTH SERIES.



LONDON:
PRINTED AND PUBLISHED BY TAYLOR AND FRANCIS.
SOLD BY BAILLIÈRE, PARIS: AND HODGES, FIGGIS, AND CO., DUBLIN.
1922.