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NEW GENUS AND FIVE NEW SPECIES OF MILEEWINE LEAFHOPPERS FROM NEW GUINEA (HOMOPTERA: CICADELLIDAE)

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Abstract.—A new genus, ***Archeguina*** (type species: ***Archeguina disparata***, n. sp.), and five new species are described with a key to species and illustrations. The species, all from New Guinea, include ***A. alternata***, ***A. spatulata***, ***A. melanota***, ***A. interstincta***, and ***A. disparata***. *Archeguina* is placed in the tribe Mileewini [subfamily Cicadellinae].[2]

Key Words: Homoptera, Cicadellidae, leafhoppers, new species, New Guinea

INTRODUCTION[3]

Young's (1986) treatment of the Old World Cicadellini includes notes on morphology, techniques, illustrations, and locality data that are relevant to the present paper. *Mileewa* Distant, 1908, and related genera, including the new genus described below, were omitted from the 1986 work because they were considered to constitute a separate category based on the presence of only two distinct anteapical cells in the forewings (crossvein r and vein M_{1+2} are absent; see Evans' 1947 description and figures of Mileewanini [sic!]). The spelling of Mileewanini Evans, 1947 (type genus: *Mileewa*), is here corrected to Mileewini Evans, 1947 (Article 32(c)(iii) and (d) of the International Code of Zoological Nomenclature, 3rd edition).

The following workers were helpful in making specimens available or verifying label information. The symbols are those used later in this work to refer to their institutions.

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BPBM	J. L. Gressitt and K. Arakaki, Department of Entomology, Bernice P. Bishop Museum, P.O. Box 19000-A, Honolulu, HI 96819.
MCZ	S. P. Cover and P. J. Darlington, Museum of Comparative Zoology, Harvard University, Cambridge, MA 02138.
RMS	L. Brundin and P. Lindskog, Naturhistoriska Riksmuseet, Entomologiska avdelningen, S104 05, Stockholm 50, Sweden.
SAM	G. F. Gross and E. Matthews, South Australian Museum, North Terrace, Adelaide, South Australia 5000.
ZSM	M. Baehr and H. Freude, Zoologische Sammlung des Bayer-

[1] Published posthumously in memory of Dr. D. A. Young who was unable to see the manuscript through publication (see Acknowledgments). Address correspondence to: Lewis L. Deitz, Department of Entomology, Box 7613, North Carolina State University, Raleigh, NC 27695-7613.

[2] On the manuscript Dr. Young noted, "I think this should be placed in the Mileewani [sic!] or very near—not in Cicadellini. There are only 2 anteapical cells." Although the tribe Mileewini (as Mileewanini, the incorrect original spelling) is currently placed in the subfamily Cicadellinae, Young (1986, p. 1) alluded to the possibility that *Mileewa* Distant and related genera may belong to another, but unnamed, category of rank equal to Cicadellinae.

[3] Authorship of the Introduction and the Acknowledgments: L. L. Deitz *in* D. A. Young. The remainder of the text is as written by Young with only minor editorial changes.

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Archeguina Young, New Genus
Figs. 1–5

Type species.—*Archeguina disparata,* n. sp.

Length of male 9.7–13.4 mm; of female 10.7–14.3 mm.

Head not strongly produced, median length of crown varying from approximately 0.4 to 0.6× interocular width and from approximately 0.25 to 0.4× transocular width, anterior margin broadly rounded in dorsal view, without a carina at transition from crown to face, ocelli located behind a line between anterior eye angles, each almost always closer to median line than to adjacent anterior eye angle, crown concave medially, the concavity forming part of a longitudinal fovea in some specimens and of a transverse concavity (seen in profile) in others (variable intraspecifically), surface without sculpturing or setae; lateral clypeal sutures extending onto crown and usually attaining ocelli (variable intraspecifically); antennal ledges not protuberant, in lateral view with anterior margins oblique and slightly convex, ledges not carinate dorsally; clypeus flattened medially, muscle impressions distinct; face strongly pubescent beneath; transclypeal suture obscure medially; clypellus not produced, its profile at a slight angle to contour of clypeus which is almost vertical.

Thorax with pronotal width much greater than transocular width of head, lateral margins convergent anteriorly, dorsopleural carinae absent, posterior margin almost always convex, disc usually without punctures or rugosity, not pubescent; scutellum not striate behind transverse sulcus. Forewing without a membrane, veins not distinct, with more than four apical cells, with an anteapical plexus of veins, texture coriaceous and without sculpturing; forewings of female in rest position exceeding apex of ovipositor. Hind leg with femoral setal formula 2:0:0, tibia with setae of row I close-set throughout, variable in size, setae of row II close-set in basal half, more widely spaced in apical half and with intercalary much smaller setae; length of first tarsomere equal to or greater than combined length of two more distal tarsomeres and with two parallel rows of small setae on plantar surface.

Male genitalia: Pygofer moderately produced, with a conspicuous apicoventral process directed posteroventrally, with numerous minute microsetae occurring on most of surface of disc. Plates elongate, fused in basal two-thirds, the free apical portions laterally compressed, extending posteriorly farther than pygofer apex, without macrosetae but with localized microsetae. Style extending posteriorly to a variable extent in comparison with connective, shank tapered and acute. Connective trilobate basally, stem short. Aedeagus symmetrical, without dorsal apodemes, shaft slender, curved gradually posterodorsally, with one or two pairs of anteapical processes near apex; gonopore anteapical and ventral. Paraphyses absent.

Female abdominal sternum VII moderately to strongly produced, its form variable interspecifically. Dorsal membrane of genital chamber without sclerites. Ovipositor with second valvulae slender, curving gradually posterodorsally, without teeth. Tergum IX without macrosetae.

Species of *Archeguina* are usually black and orange to yellow, with the markings occurring as transverse bands (exception: *A. alternata,* n. sp.). The range of the genus is northeast and southeast New Guinea. Although the species of *Archeguina* are large and showy and their occurrence widespread, I have been unable to associate either the genus or any of the species with names employed previously.

The relationship of *Archeguina* to other genera is unknown. It is so peculiar in many respects—the form of the second valvulae of the ovipositor, the posterior femoral setal formula, the unusual setal arrangement of

row II of the posterior tibiae, and the irregular venation of the forewings—that it stands well apart from all other genera of Cicadellinae, and perhaps should be removed from the subfamily.

A few specimens of *Archeguina* bear host plant labels indicating they were collected on tea or quinine.

Key to Species of *Archeguina*

1. Forewing black with at least one yellow band, or yellow with at least one black band in addition to black apex; aedeagus with only one pair of anteapical processes 2
– Forewing gray or orange, without a complete black band except at or near apex; aedeagus with two pairs of anteapical processes (Fig. 1b, c) ..... *alternata*, n. sp.
2. Male with aedeagus conspicuously and usually abruptly narrowed anteapically in lateral view (Figs. 4d, e, g, 5e, g); female abdominal sternum VII neither produced and spatulate nor strongly bilobed; pronotum usually mostly yellow 4
– Male with aedeagus not, or much less, conspicuously narrowed anteapically (Figs. 2e, 3b); female abdominal sternum VII either produced and spatulate (Fig. 2h), or strongly bilobed (Fig. 3d); pronotum black 3
3. Male with aedaegus expanded anteapically in caudoventral view (Fig. 2d, f); female with abdominal sternum VII produced and spatulate (Fig. 2h, i) ..... *spatulata*, n. sp.
– Male with aedeagus gradually tapered throughout length of shaft in caudoventral view (Fig. 3c); female with abdominal sternum VII excised medioapically and bilobed (Fig. 3d) ..... *melanota*, n. sp.
4. Male with aedeagal shaft abruptly narrowed anteapically in caudoventral view (Fig. 4c, f); female abdominal sternum VII weakly produced with posterior margin oblique on each side of median apical notch (Fig. 4j) ..... *interstincta*, n. sp.
– Male with aedeagal shaft not abruptly narrowed anteapically in caudoventral view (Fig. 5f, h); female abdominal sternum VII strongly produced, its posterior margin transverse and undulate, with or without a median apical notch (Fig. 5i, j) ..... *disparata*, n. sp.

Archeguina alternata Young, New Species

Fig. 1

Length of male 9.7–10.9 mm; of female 10.7–11.4 mm. Head with median length of crown varying from slightly more than 0.4 (usually from 0.5) to 0.7× interocular width, and from 0.25 to 0.4× transocular width. Male with aedeagus not strongly narrowed anteapically in lateral view, in ventral view with a pair of longer processes extending basally then curved slightly laterally and a pair of short acute processes arising more distally and directed apically and laterally. Female abdominal sternum VII not strongly produced, posterior margin almost rectilinear, with a narrow median notch. Color of typical variety: crown black except apex and in some specimens (including the holotype) a narrow transverse line slightly more posteriorly, which are yellow; pronotum black except a broad border parallel to posterior margin extending anteriorly on each side along lateral margins, pale yellow (holotype) to gray; scutellum black except portion behind transverse sulcus, which is gray; forewings gray, with a transverse incomplete stripe opposite apical half of scutellum, a transverse complete anteapical stripe which is arcuate and parallel to, but not touching, apical margin on each wing and a number of spots variable in size and location between the transverse stripes, black; face and propleura yellow to orange, face with a Y-shaped marking and median line between arms of "Y," black; remaining thoracic pleura black, marked with yellow; legs black. Color, atypical variety: crown black except a narrow transverse stripe before ocelli, often with a short median angular posterior projection, orange; pronotum black with posterior margin broadly bordered with orange which does not extend forward to border completely the lateral margins; scutellum as in typical variety but the apical pale marking less extensive; forewings orange with transverse stripes as in typical variety except that posterior stripe is often broader and extends to posterior wing margin and with its anterior margin irregularly rectilinear instead of concave (the transverse stripe then not appearing arcuate on each wing), with black spots between the two transverse stripes irregular in number,

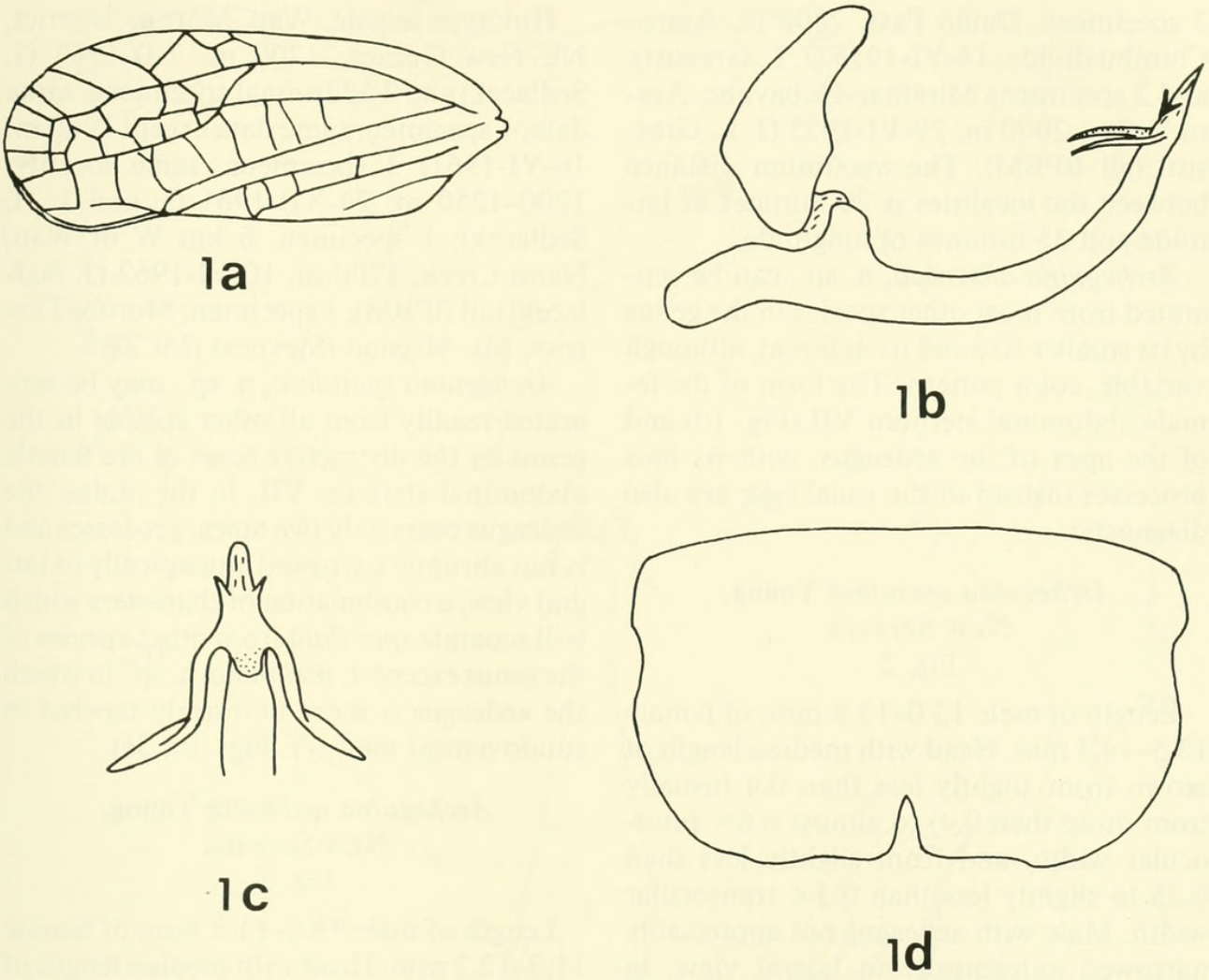

Fig. 1. *Archeguina alternata,* n. sp. (all from Mt. Wilhelm, New Guinea): **a,** forewing; **b,** aedeagus and sclerite at base of anal tube, lateral view (holotype); **c,** apex of aedeagus, caudal view (holotype); **d,** female sternum VII, ventral view.

shape, and arrangement, but with many occurring in the cells of the anteapical plexus and angular as a result; face with clypeus and clypellus shining black (one specimen with a pair of circular yellow spots on clypeus at transition to crown), genae varying from completely black to mostly yellow; thoracic pleura varying from yellow to black, marked with yellow; legs black.

Holotype male, Mt. Wilhelm, NE New Guinea, 3000 m, 4-VII-1955 (J. L. Gressitt) (BPBM). Additional specimens of typical variety, all from NE New Guinea: 21 specimens, same data as holotype; 15 specimens, same data as holotype but with additional label "above Keglsugl"; 4 specimens, same data as holotype except date which is 30-VI-1955; 9 specimens, above Kerowagi, 2300 m, 6-VII-1955 (J. L. Gressitt); 1 specimen, Upper Chimbu-Kerowagi divide, 2800 m, 6-VII-1955 (J. L. Gressitt) (all BPBM); 1 specimen, Mt. Wilhelm, Bismarck Range, forest, 2134–3048 m (as 7–10,000 ft.), X-1944 (Darlington) (MCZ). Additional specimens of atypical variety, all from NE New Guinea: 1 specimen, Daulo Pass, 2500 m, Asaro-Chimbu divide, 12-VI-1955 (J. L. Gressitt); 5 specimens, same data except 3000 m and 13-VI-1955; 3 specimens, same data except 2400 m and 15-VI-1955; a series of specimens (in capsule), Daulo Pass, 2500 m, 2-V-1959 (C. D. Michener); 2 specimens, Mt. Otto, 2200 m, 24-VI-1955 (J. L. Gressitt);

2 specimens, Daulo Pass, 2800 m, Asaro-Chimbu divide, 14-VI-1955 (J. L. Gressitt); and 2 specimens Miramar-Gobavabe, Asaro Valley, 2000 m, 29-VI-1955 (J. L. Gressitt) (all BPBM). The maximum distance between the localities is 20 minutes of latitude and 35 minutes of longitude.

Archeguina alternata, n. sp., can be separated from most other species in the genus by its smaller size and its different, although variable, color pattern. The form of the female abdominal sternum VII (Fig. 1d) and of the apex of the aedeagus, with its four processes instead of the usual two, are also diagnostic.

Archeguina spatulata Young, New Species
Fig. 2

Length of male 13.0–13.9 mm; of female 13.5–14.3 mm. Head with median length of crown from slightly less than 0.4 (usually from more than 0.4) to almost 0.6× interocular width, and from slightly less than 0.25 to slightly less than 0.3× transocular width. Male with aedeagus not appreciably narrowed anteapically in lateral view, in ventral view with a single pair of anteapical processes arising almost at apex and extending basally and laterally. Female abdominal sternum VII abruptly narrowed near midlength, then produced posteriorly in a broad truncate spatulate lobe (asymmetrical and slightly bilobed in one specimen) (Fig. 2h, i). Color black except two large orange markings on each forewing: the more anterior marking quadrate, beginning slightly behind scutellar apex, occupying entire breadth of wing except a very narrow black border on costal and commissural margins, extending posteriorly to apical one-fourth of clavus; the more posterior marking much shorter, oval to quadrate, confined to corium, beginning near apex of clavus, more widely bordered with black on costal and commissural margins, the more apical black area more than half length of orange marking.

Holotype female, Wau, Morobe District, NE New Guinea, 1700 m, 7-II-1963 (J. Sedlacek) and 3 additional specimens, same data; 1 specimen, same data except 1200 m, 16-VI-1961; 3 specimens, same locality, 1200–1250 m, 24-XII-1961 (J. and J. H. Sedlacek); 1 specimen, 6 km W of Wau, Nami Creek, 1700 m, 10-VI-1962 (J. Sedlacek) (all BPBM); 1 specimen, Morobe District, Mt. Mission (Stevens) (MCZ).

Archeguina spatulata, n. sp., may be separated readily from all other species in the genus by the distinctive form of the female abdominal sternum VII. In the males, the aedeagus bears only two apical processes and is not abruptly narrowed anteapically in lateral view, a combination of characters which will separate *spatulata* from other species of the genus except *A. melanota,* n. sp., in which the aedeagus is more uniformly tapered in caudoventral view (cf. Figs. 2f, 3c).

Archeguina melanota Young, New Species
Fig. 3

Length of male 10.9–11.2 mm; of female 11.3–12.2 mm. Head with median length of crown from less than 0.5 to more than 0.6× interocular width and from slightly less than 0.3 to almost 0.4× transocular width. Male with aedeagus slightly narrowed anteapically in lateral view, with or without one or two dorsal processes near base of shaft, in ventral view with pair of anteapical processes extending basally and laterally, without additional processes near apex, shaft regularly tapered from base to apex. Female abdominal sternum VII with median posterior deep excision extending almost half distance to base of sternum and dividing its posterior portion into two distinct lobes which are convex apically. Color of crown, pronotum and scutellum black, some specimens (not the holotype) with arcuate, narrow band, which may be interrupted, on disc of crown before ocelli, some specimens (including the holotype) with posterior margin narrowly bordered with orange or yellow

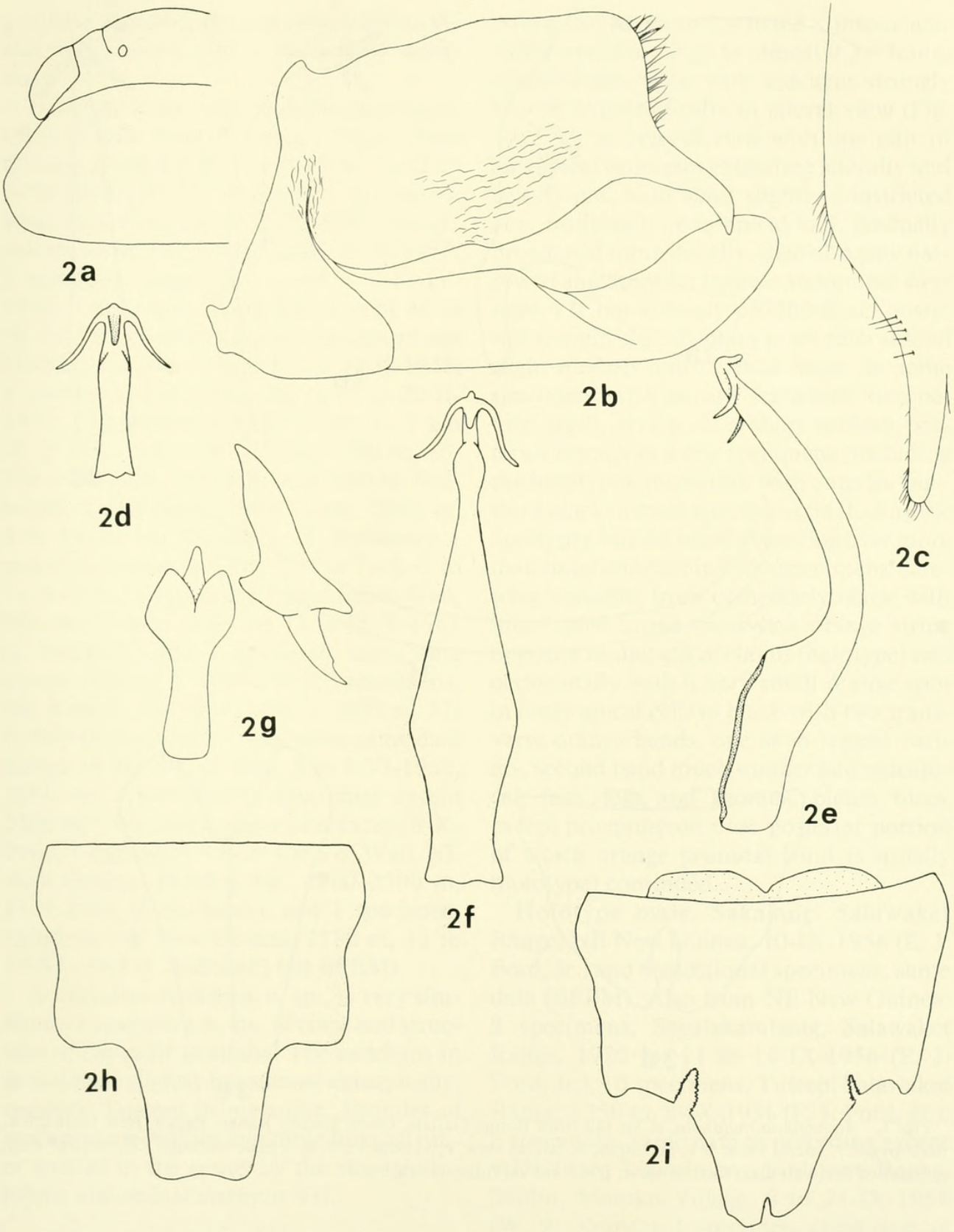

Fig. 2. *Archeguina spatulata,* n. sp.: **a,** head and pronotum, dorsal view; **b,** male pygofer, valve and plate, lateral view; **c,** right plate, ventral view; **d,** apex of aedeagus, ventral view; **e–f,** aedeagus; e, lateral view, f, ventral view; **g,** connective and right style, dorsal view; **h–i,** female sternum VII, ventral view (h, Wau, Morobe District, New Guinea; i, Nami Creek, 6 km W of Wau, New Guinea).

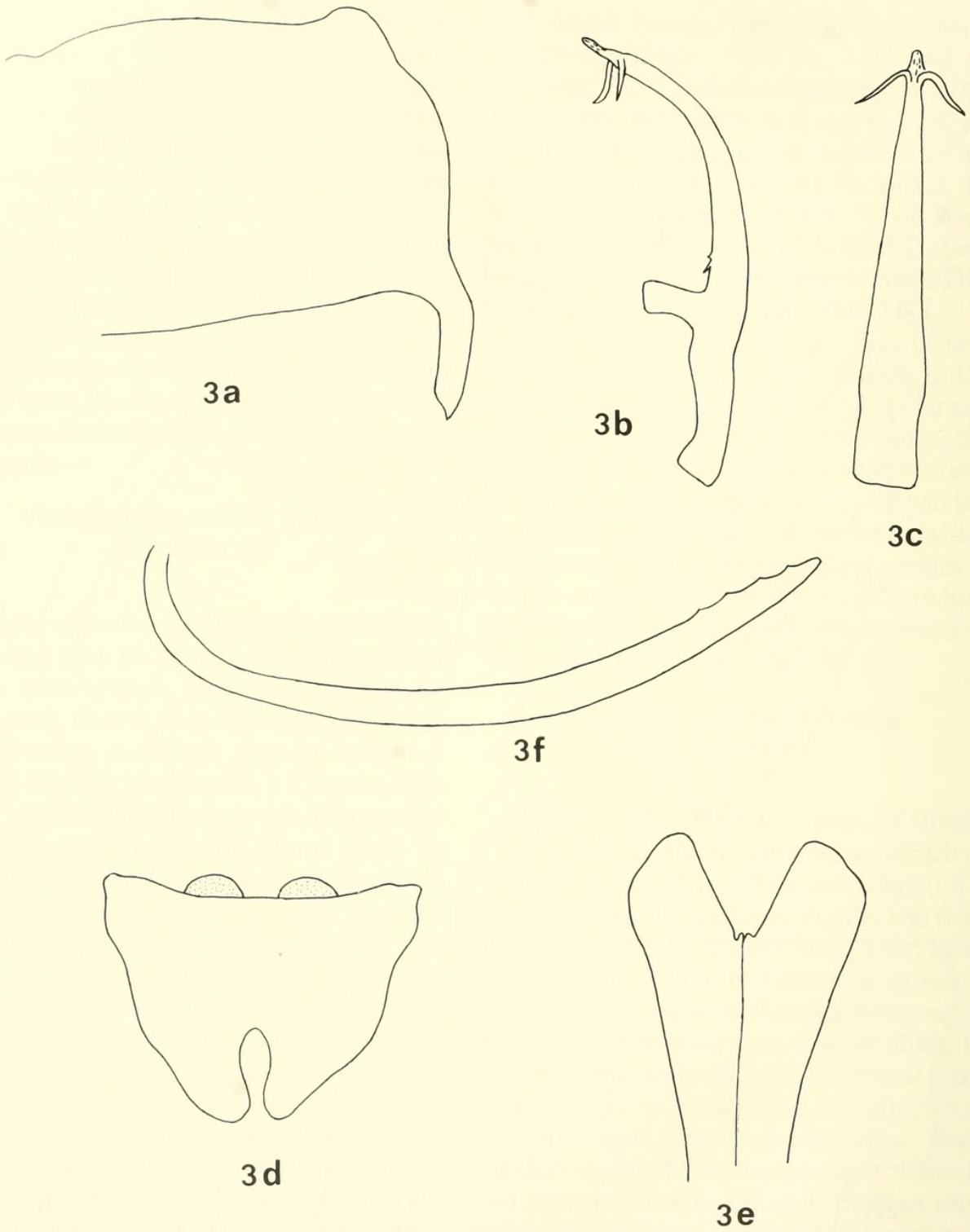

Fig. 3. *Archeguina melanota,* n. sp. (all from Bome, Gailala, Owen Stanley Range, Papua, New Guinea): **a,** male pygofer, lateral view; **b–c,** aedeagus: b, lateral view, c, ventral view; **d,** female sternum VII, ventral view; **e,** bases of first valvulae, ventral view; **f,** second valvulae, lateral view.

(holotype) line which is interrupted (holotype) or not; forewing black with inconspicuous narrow yellow marking extending across claval suture near base, large conspicuous yellow quadrate spot extending across wing at midclavus except for narrow black costal and commissural margins, and smaller oval yellow transverse spot on corium opposite claval apex which is more broadly bordered with black on costal mar-

gin; face, legs and thoracic pleura black, the last with one or more small yellow markings.

Holotype male, and 11 additional specimens, Owen Stanley Range, Papua, New Guinea, Goilala: Bome, 1950 m, 24-II to 7-III-1958 (W. W. Brandt); 3 specimens, same data except 8 to 15-III-1958; 4 specimens, same data except 16 to 31-III-1958; 1 specimen, same data except 1 to 15-IV-1958; 1 specimen, same data except 16 to 30-IV-1958; 5 specimens, same data except Goilala: Tororo, 1560 m, 21 to 24-II-1958; 1 specimen, same data except 15 to 20-II-1958; 14 specimens, Edie Creek, 11.2 km W of Wau, NE New Guinea, 1700 m, 16-VII-1961 (J. H. Sedlacek and J. and M. Sedlacek); 2 specimens, Edie Creek, 2000 m, 4 to 10-X-1961 (J. and J. H. Sedlacek); 1 specimen, same locality, 200 m [sic], 5 to 11-X-1961 (J. Sedlacek); 3 specimens, Wau, Morobe District, 1200 m, 11 to 15-X-1961 (J. Sedlacek); and 1 specimen, same data except 1400 m, 27-VIII-1961; 3 specimens, Mt. Kaindi, NE New Guinea, 2400 m, 27-I-1963 (J. Sedlacek); 1 specimen, same data except 16 km SW of Wau, 8 to 9-VI-1962, 2200 m; 3 specimens, same data except 2300 m; 1 specimen, same data except 6-X-1962; 1 specimen, 19–29 km S of Wau, NE New Guinea, Bulldog Rd., 2200–2500 m, 31-V-1962 (J. Sedlacek); and 1 specimen, Laiagam, NE New Guinea, 2180 m, 18 to 19-VI-1963 (J. Sedlacek) (all BPBM).

Archeguina melanota, n. sp., is very similar to *A. spatulata,* n. sp., in color and structure of the male genitalia. The aedeagus in *spatulata* is slightly broadened anteapically, regularly tapered in *melanota.* Females of *melanota* are readily separable from all other species in the genus by the strongly bilobate abdominal sternum VII.

Archeguina interstincta Young, New Species

Fig. 4

Length of male 13.0–13.4 mm; of female 12.4–13.7 mm. Head with median length of crown varying from 0.4 to 0.5× interocular width, and from 0.25 to almost 0.3× transocular width. Male with aedeagus strongly narrowed anteapically in lateral view (Fig. 4d, f, g), in ventral view with one pair of anteapical processes extending laterally and basally and with shaft slightly constricted near midlength or in apical half, gradually broadened more distally, then abruptly narrowed anteapically. Female abdominal sternum VII not strongly produced, its posterior margin slightly oblique on each side of slight median notch. Head black, in some specimens with narrow transverse line before ocelli, giving off a short median posterior branch in some specimens (including the holotype); pronotum with anterior one-third black in most specimens (including the holotype), but the black extending over more than basal one-half in a few specimens, forewing variable, from completely black with interrupted broad transverse orange stripe opposite midlength of clavus (holotype) and occasionally with a very small orange spot in inner apical cell, to black with two transverse orange bands, one as in typical variety, second band much smaller and anteapical; face, legs and thoracic pleura black except proepimeron over posterior portion of which orange pronotal band is usually (holotype) continued.

Holotype male, Sakalang, Salawaket Range, NE New Guinea, 10-IX-1956 (E. J. Ford, Jr.) and 6 additional specimens, same data (BPBM). Also from NE New Guinea: 8 specimens, Sepalakambang, Salawaket Range, 1920 m, 11 to 14-IX-1956 (E. J. Ford, Jr.); 10 specimens, Tuwep, Salawaket Range, 1350 m, 8-IX-1956 (E. J. Ford, Jr.); 6 specimens, same data as preceding except 9-IX-1956; 3 specimens, Finisterre Range, Saidor, Matoko Village, 6 to 24-IX-1958 (W. W. Brandt); 1 specimen, same data as preceding except 38-VIII to 5-IX-1958; 2 specimens, Finisterre Range, Saidor, Funyende, 1200 m, 24-IX-1958 (W. W. Brandt); 1 specimen, same data as preceding except 24 to 30-IX-1958; 4 specimens, Main Fin-

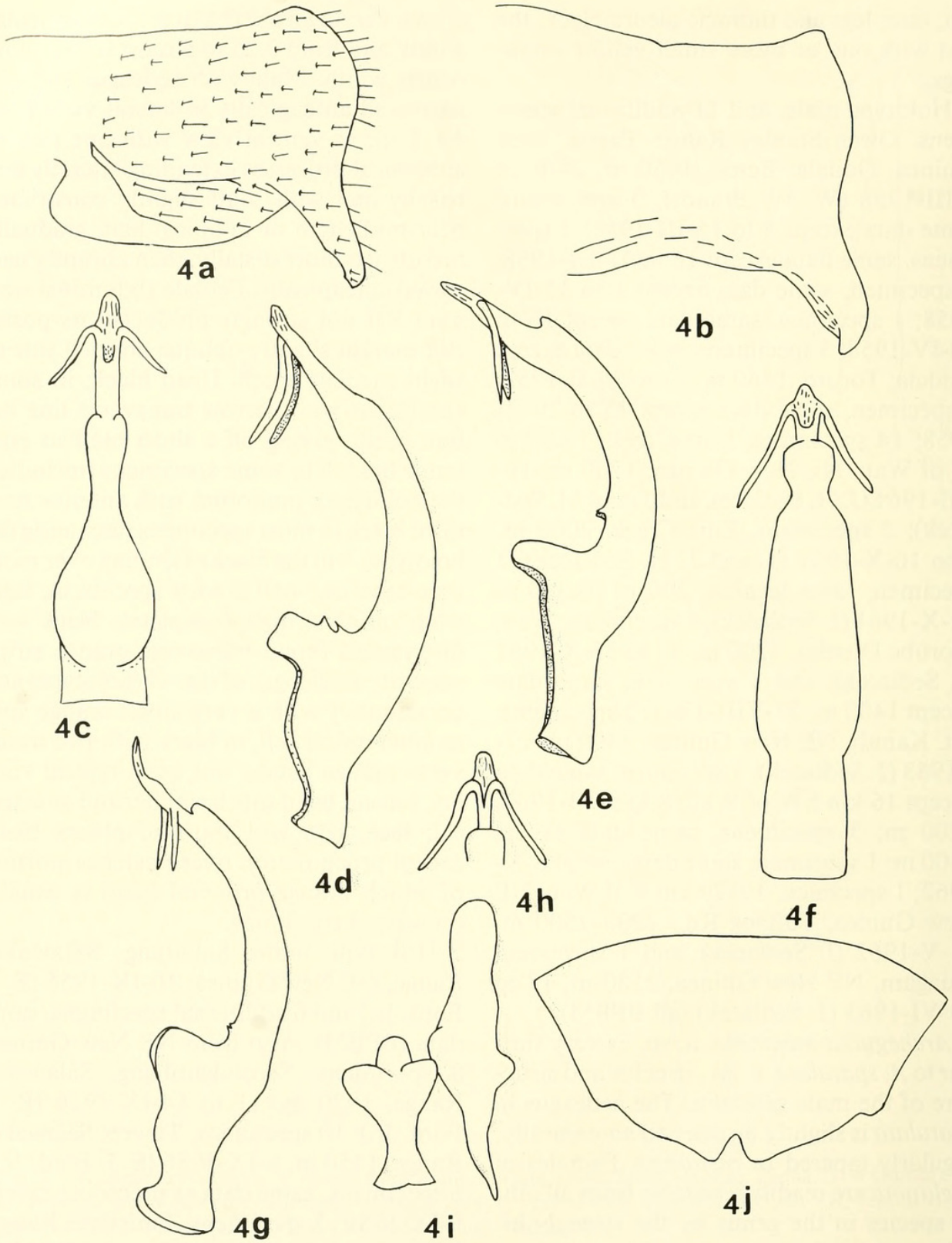

Fig. 4. *Archeguina interstincta*, n. sp.: **a-b,** male pygofer, lateral view; **c-g,** aedeagus: c, ventral view, d, lateral view (Finisterre Range, Saidor, New Guinea), e, lateral view, f, ventral view (Sakalong, Salawaket Range, New Guinea), g, lateral view (specimen erroneously labeled Caracas, Venezuela); **h,** apex of aedeagus, ventral view; **i,** connective and right style, dorsal view; **j,** female sternum VII, ventral view.

isterre Range near Freyberg Pass (N), 2550 m, 1 to 21-X-1958 (W. W. Brandt) (all BPBM). Also, 34 specimens, Komba, (Northeast?), New Guinea; 6 specimens, Finschafen, NE New Guinea; and 3 specimens, "Hudewa," New Guinea (all Rev. L. Wagner) (all SAM); 1 specimen, Ogelbeng [near Mt. Hagen, Central Highlands] (ZSM). There is also one specimen mislabeled "Caracas, Venezuela" in ZSM.

Archeguina interstincta, n. sp., is similar externally to *A. spatulata,* n. sp., and to some specimens of *A. disparata,* n. sp., in neither of which is the aedeagus abruptly narrowed anteapically in ventral view as it is in *interstincta* (Fig. 4g). The abdominal sternum VII of the female is not produced in *interstincta* nearly as much as in *spatulata* (Fig. 2h) or *disparata* (Fig. 5h).

Archeguina disparata Young, New Species
Fig. 5

Length of male 12.6–13.1 mm; of female 12.6–14.1 mm. Head with median length of crown varying from slightly more than 0.3 to 0.5× interocular width and from 0.25 to 0.3× transocular width. Male with aedeagus strongly narrowed anteapically in lateral view, in ventral view with one pair of processes extending laterally and basally, with shaft not constricted, lateral margins almost parallel or very slightly convergent, anteapical processes in ventral view variable in length (Fig. 5e, f). Female abdominal sternum VII strongly produced, posterior margin concave on each side of a broad median convexity which is notched (Fig. 5h) or not (Fig. 5i) medially. Head black with narrow transverse ivory to orange stripe before ocelli; pronotum varying from completely black, or black with small pale spot on posterior margin on each side, to chiefly yellow with anterior transverse black band which may be (holotype) margined anteriorly by very narrow transverse band of ivory, yellow, or orange; scutellum black with pale (ivory to orange) anteapical spot; forewing black with large quadrate more anterior orange spot involving most of clavus except basally and apically, and a similarly colored smaller spot or corium behind claval apex, both spots narrowly bordered mesally and laterally by the narrow, black commissural and costal margins, respectively, in some specimens (including the holotype) also with small orange marking at base of both clavus and corium; face, thoracic pleura and legs black except small yellow to orange genal spot on each side bordering lateral clypeal suture between lorum and antennal base in some specimens (including the holotype), and orange posterior portion of proepimeron in some specimens (including the holotype).

Holotype male, Daulo Pass, Asaro-Chimbu divide, NE New Guinea, 3000 m, 13-VI-1955 (J. L. Gressitt) (BPBM); 3 additional specimens, same data; 2 specimens, same data except 2800 m, 14-VI-1955; 3 specimens, same data as holotype except 2400 m, 15-VI-1955; a series of specimens in capsule, Daulo Pass, 2500 m, 2-V-1959 (C. D. Michener) (all BPBM). Additional specimens from NE New Guinea; 1 specimen, Eliptamin Valley, 1200–1350 m, 16 to 30-VIII-1959 (W. W. Brandt); 1 specimen, Kepilam, 2420–2540 m, 21-VI-1963 (J. Sedlacek); 1 specimen, 6–12 km W of Wabag, 2020–2400 m, 13-VI-1963 (J. Sedlacek); 1 specimen, Yaibos, 2030–2180 m, 11-VI-1963 (J. Sedlacek); 2 specimens, Tomba, slopes of Mt. Hagen, 2450 m, 23-V-1963 (J. Sedlacek); 1 specimen, same data except 2500–2650 m, 24-V-1963; 4 specimens, Tomba, 38 km W of Mt. Hagen, 2450 m, 21 to 24-V-1963 (J. Sedlacek); 1 specimen, Western Highlands, Hagen, SE of Kornfarm, 15-X-1958 (J. L. Gressitt); 1 specimen, same data except 16-X-1958; 1 specimen, Mt. Hagen, 1600 m, 23-V-1961 (J. L. and M. Gressitt); 1 specimen, 11 km south of Mt. Hagen, 2000–2300 m, 20-V-1963 (J. Sedlacek); 2 specimens, Lake Sirunki, 2550 m, 17-VI-1963 (J. Sedlacek); 1 specimen, Tsenga, Upper Jimmi Valley,

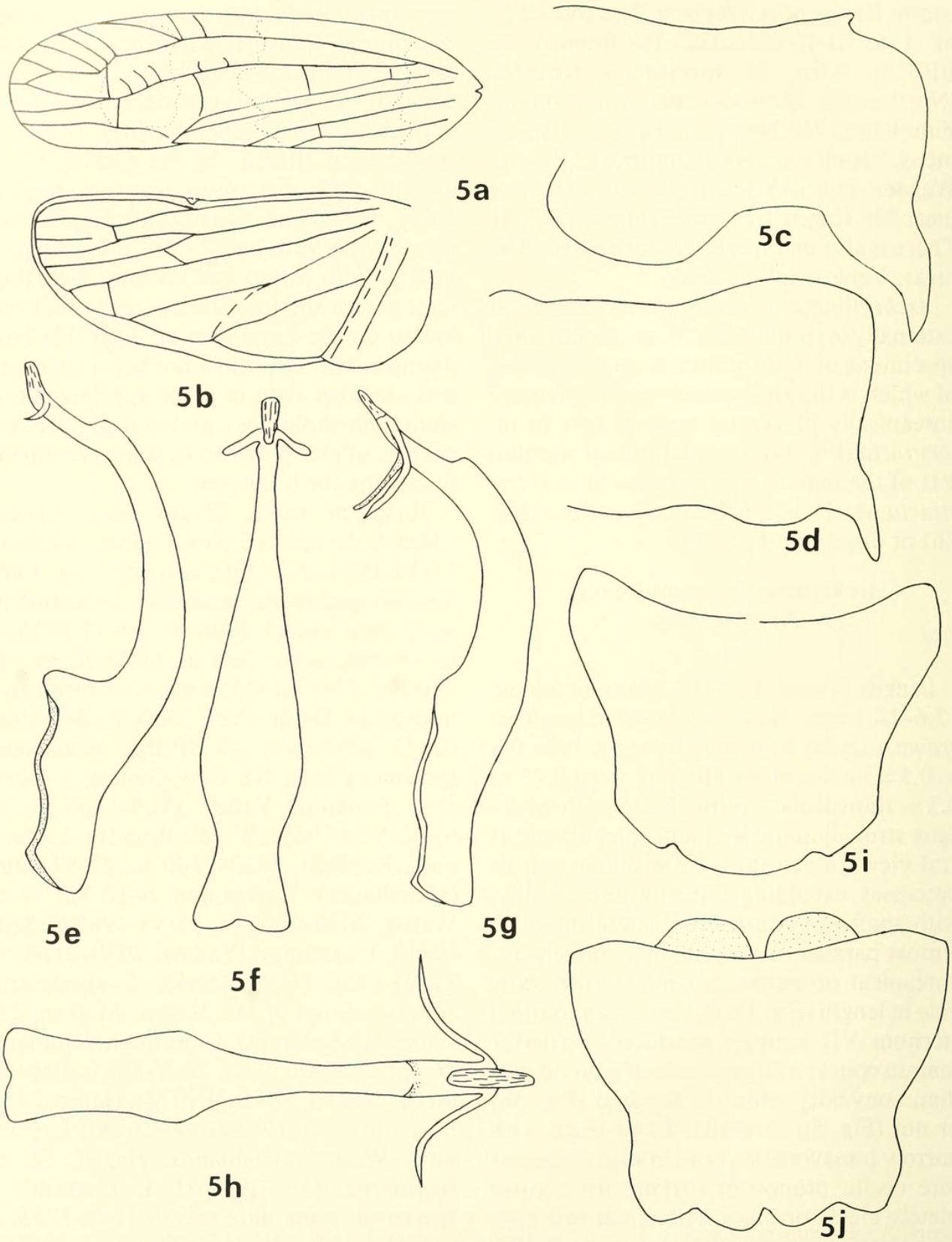

Fig. 5. *Archeguina disparata,* n. sp.: **a,** forewing; **b,** hind wing (a–b, Aiyura, New Guinea); **c-d,** male pygofer, lateral view (c, Kassam, 48 km E of Kainantu, New Guinea; d, Mt. Otto, New Guinea); **e-h,** aedeagus: e–g, lateral view, f–h, ventral view (e–f, Mt. Otto, New Guinea; g–h, Aiyura, New Guinea); **i-j,** female sternum VII, ventral view (i, Mt. Otto, New Guinea; j, Aiyura, New Guinea).

1200 m, 14-VII-1955 (J. L. Gressitt); 1 specimen, Wana, Upper Jimmi Valley, 1500 m, 11-VII-1955 (J. L. Gressitt); 2 specimens, Ahl Valley, Nondugl, 1750 m, 8-VII-1955 (J. L. Gressitt); more than 22 specimens, Nondugl, 2200–2700 m, 28-V-1959 (C. D. Michener) (all BPBM); 4 specimens, Nondugl, 1600 m, IX to XI-1951 (G. Gyldenstolpe) (RMS); 2 specimens, Chimbu Valley, Bismarck Range, 1524–2286 m (as 5000–7500 ft), X-1944 (Darlington) (MCZ); 1 specimen, Numbu, Upper Chimbu Valley, 2400 m, 5-VII-1955 (J. L. Gressitt); 1 specimen, Toromomburo, Mt. Wilhelm, 2200 m, 29-VI-1955 (J. L. Gressitt); 2 specimens, above Kabebe, Mt. Otto, 2200 m, 23-VI-1955 (J. L. Gressitt); 17 specimens, Mt. Otto, 2200 m, 22-VI-1955 (J. L. Gressitt); 2 specimens, same data, except 24-VI-1955; 6 specimens, above Kerowagi, 2300 m, 6-VII-1955 (J. L. Gressitt); 1 specimen, Kassam, 48 km E of Kainantu, 1350 m, 30-X-1959 (T. C. Maa); 1 specimen, same data except 7-XI-1959; 12 specimens, Miramar, Asaro Valley, 1800 m, 27-VI-1955 (J. L. Gressitt); 6 specimens, Nenguag, Asaro-Chimbu divide, 2500 m, 29-VI-1955 (J. L. Gressitt) (all BPBM); 11 specimens, Aiyura, VII-1954 (H. Womersley) (SAM); 5 specimens, Aiyura, XII-1939 (A. S. Cantor) on tea and quinine; 8 specimens, Aiyura, 25-IX-1957 (J. Smart); 2 specimens, Aiyura, III-1945 (B. O'Connor); 2 specimens, Moke, 3-X-1957 (J. Smart) (all BMNH); 1 specimen, Moife, 2100 m, 11 to 13-X-1959 (T. C. Maa); 21 specimens, same data except 7 to 14-X-1959; 1 specimen, Edie Creek, 11.2 km W of Wau, 1700 m, 16-VII-1961 (J. and M. Sedlacek); 1 specimen, Wau, Morobe District, 1650 m, 5-XII-1961 (J. Sedlacek); 1 specimen, same locality, 1200–1250 m, 24-XII-1961 (J. and J. H. Sedlacek); 1 specimen, same locality, 1200 m, 17-VI-1961 (J. L. Gressitt); 1 specimen, Tuwep, Salawaket Range, 1350 m, 8-IX-1956 (E. J. Ford, Jr.); 2 specimens, Sakalang, Salawaket, 10-IX-1956 (E. J. Ford, Jr.) (all BPBM). Additional specimens from SE New Guinea: 10 specimens, Kiunga, Fly River, 26 to 30-VII-1957 (W. W. Brandt); 9 specimens, Anga Gorge, E of Mendi, 14-X-1958 (J. L. Gressitt); 7 specimens, South Highlands, N of Mendi, 1800 m, 8-X-1958 (J. L. Gressitt); 1 specimen, South Highlands, Aiyurop, near Mendi, 1530 m, 7-X-1958 (J. L. Gressitt); 10 specimens, Mt. Giluwe, 2500 m, 25-V-1961 (J. L. and M. Gressitt); 10 specimens, same locality, 2500–2650 m, 28-V-1963 (J. Sedlacek); 3 specimens, same locality, 2550 m, 27-V-1963 (J. Sedlacek); 1 specimen, same locality, 2400–3000 m, 30-V-1961 (J. L. and M. Gressitt); 1 specimen, same locality, 2550 m, 27-V to 6-VI-1963 (J. Sedlacek); 1 specimen, Malgi, Mt. Giluwe, 2500 m, 25-V-1961 (J. L. and M. Gressitt); 5 specimens, South Highlands, SE of Mt. Giluwe, Dimifa, 2200 m, 9-X-1958 (J. L. Gressitt); 10 specimens, same data except 10-X-1958; 1 specimen, same data except 12-X-1958 (all BPBM). Also 4 specimens, Ogelbeng [near Mt. Hagen, Central Highlands] (H. Schein) (ZSM). In addition to the above, the following were examined from a locality that I was unable to locate on maps or otherwise: 13 specimens, Weiga, 2600 m, IX to XI-1951 (G. Gyldenstolpe) (RMS).

Archeguina disparata, n. sp., is somewhat similar in appearance to *A. spatulata* and *A. interstincta,* n. spp. The males of *disparata* can be separated from those of other species in the genus by the aedeagus which is narrowed anteapically in lateral view but not in caudal view. Females of *disparata* can be separated from other species in the genus by the strongly produced abdominal sternum VII which has a concavity on each side of the central lobe which is with or without a median concavity. Only *interstincta* approaches the latter condition, but in that species the sternum VII is much shorter.

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