

## ELEVEN NEW SCENOPINIDAE (DIPTERA) FROM THE AMERICAS<sup>1</sup>

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*Quaestiones entomologicae*

10: 131 - 147 1974

The new species are as follows: *Scenopinus*, *Velutinus* group (*S. majalcai*, *Majalca Road*, 5000', 30 mi. N. W., *Chiapa, Chia., Mexico*; *S. masoni*, 5000', *Boulder, Colorado, U. S. A.*; *S. monterreyi*, 5 mi. S. *Monterrey, N. L., Mexico*; *S. obregoni*, 16 mi. N. E. Cd. *Obregon, Sonora, Mexico*; *S. stegmaieri*, *Venezuela* ?); and *Fenestralis* group (*S. linsleyanus*, 4 mi. S. 2800', *Railway Flats, Calaveras Co., California, U. S. A.*); *Pseudatrachia* (*P. granti*, *Livingston, British Columbia, Canada*; *P. macalpeni*, 5 mi. W. *Durango, Durango, Mexico, 6500'*; *P. tomichi*, *Folsom, Sacramento Co., California, U. S. A.*; *Brevitrichia* (*B. powelli*, *Los Prietos, Santa Barbara Co., California, U. S. A.*; *B. salvadorensis*, *Quezaltepeque, El Salvador*).

Thus the total of American *Scenopinids* is 158 species in 7 genera.

Modification of existing keys has been made to include all the new species. Illustrations show pertinent characters.

Voici les nouvelles espèces suivantes. *Scenopinus*, *Velutinus* group (*S. majalcai*, *Majalca Road*, 5000', 30 mi. N. W., *Chiapa, Chia., Mexico*; *S. masoni*, 5000', *Boulder, Colorado, U. S. A.*; *S. monterreyi*, 5 mi. S. *Monterrey, N. L., Mexico*; *S. obregoni*, 16 mi. N. E. Cd. *Obregon, Sonora, Mexico*; *S. stegmaieri*, *Venezuela* ?); et *Fenestralis* group (*S. linsleyanus*, 4 mi. S. 2800', *Railway Flats, Calaveras Co., California, U. S. A.*); *Pseudatrachia* (*P. granti*, *Livingston, British Columbia, Canada*; *P. macalpeni*, 5 mi. W. *Durango, Durango, Mexico, 6500'*; *P. tomichi*, *Folsom, Sacramento Co., California, U. S. A.*; *Brevitrichia* (*B. powelli*, *Los Prietos, Santa Barbara Co., California, U. S. A.*; *B. salvadorensis*, *Quezaltepeque, El Salvador*).

Ainsi toutes les espèces américaines sont 158 divisées en 7 genres. On a modifié les clés existantes pour y inclure toutes les nouvelles espèces.

Les illustrations démontrent les caractéristiques pertinentes.

The 11 new species included in this paper represent five new members of the *Velutinus* group, and one from the *Fenestralis* group of the genus *Scenopinus*, three new *Pseudatrachia* and two *Brevitrichia*. They are distributed from British Columbia on the North to Venezuela on the South. Their addition raises the total of known *Scenopinids* in the Americas to 158 species in seven genera.

The keys use superficial characters that are readily visible, some of which are difficult to interpret. However, I believe the keys provide a guide and that their use will reduce the time necessary to make proper identifications. Final determination requires careful comparison of structures of the specimens with illustrations and descriptions. As most species appear to have very limited geographical ranges, locality data should also be considered when making determinations.

All material is drawn to the same scale and all scale marks are equal to one half millimeter — the shorter applies to the head and wing the longer to the terminalia.

<sup>1</sup> Published as Miscellaneous Paper No. 665 with the approval of the Director of the Delaware Agricultural Experiment Station. Publication No. 421 of the Department of Entomology and Applied Ecology.



Genus *Scenopinus* Latreille

## Fenestralis group

*Scenopinus linsleyanus* new species

(Figure 1)

This new *Scenopinus* from California would key to *S. breviterninus* Kelsey in the revised keys presented in Kelsey (1971) and may be separated by the following modification:

- |    |     |   |                                   |
|----|-----|---|-----------------------------------|
| 5  | (4) | Vein R <sub>4</sub> branching from near middle of cell R <sub>5</sub> .....   | 6                                 |
| —  |     | Vein R <sub>4</sub> branching well before middle of cell R <sub>5</sub> ..... | 5a                                |
| 5a | (5) | Vein R <sub>4</sub> branching from basal fourth of cell R <sub>5</sub> .....  | <i>S. breviterninus</i> Kelsey    |
| —  |     | Vein R <sub>4</sub> branching from basal third of cell R <sub>5</sub> .....   | <i>S. linsleyanus</i> new species |

In addition to the above the sculpturing of the frons, the shape of the 8th sternum and bursa also serve to separate the two.

**FEMALE.** Head black; eyes black-brown with red glints, postocular rim moderately broad; frons, broad, nearly parallel sided, half again as wide as ocellar tubercle, divided on the mid-line by a shallow groove bordered by transverse striations; ocellar tubercle black-brown, not cut off from frons; ocelli brown; back of head concave; mouthparts brown, filling oral cavity; palpi black-brown, flat, paddle-like, two-thirds as long as mouthparts; margins of oral cavity covered with silvery pubescence; antennae with first segment black-brown, short; second segment red-brown; third segment red-brown, oval, with pointed distal tip, less than twice as long as broad, tip darker and with a shallow pit on disto-lateral portion.

Thorax black, covered with sparse short hairs, humeral callus tipped with light orange-brown, supra-alar callus orange-brown; pleural areas black except below wings red-brown, some short hairs; wings smoky brown, veins brown, vein R<sub>4</sub> arising proximal to the line of r-m extended at a point one third the length of cell R<sub>5</sub>; halter stem dark red-brown, knob red-brown, cut off from base by a creamy crescent that extends as a groove along the dorsal margin of the proximal surface; legs dark red-brown with tan knees and orange tarsi.

Abdomen dark red-brown, a thin scattering of posteriorly directed hairs; see figures for conformation of 8th sternum and bursa.

**MALE.** Unknown.

Length ♀ body — 4.5 mm, wing 3 mm.

Type locality — Railway Flats, Calaveras Co., Calif. 4 mi. S., 2800' April 1969 (E. G. Linsley).

Type deposited in California Academy of Sciences Type No. 11728 (ex. University of California, Berkeley).

## Velutinus group

Of the five new members of the Velutinus group, three come from Mexico, one from Colorado and the last presumably from Venezuela as it was collected by quarantine inspectors in Miami in an airplane arriving from that country.

The following modifications of the keys to the Velutinus group presented in Kelsey 1971, p. 5 will accommodate the four Nearctic species.



**Key to the Nearctic species of *Scenopinus* Velutinus Group (Males)**

- 26 (25) Halter knob red-brown to black-brown, marked or lighter below . . . . . 26a  
 — Halter knob all brown, hind margin of 9th tergum produced at the midpoint . . . .  
 . . . . . *S. cooki* Kelsey  
 26a Halter knob red-brown, proximal surface lighter . . . . . *S. majalcai* new species  
 — Halter knob brown to black-brown above, a white lateral band and ventral tip separating it from a lighter brown ventral surface . . . . . *S. johnsoni* Kelsey

**Key to the Nearctic species of *Scenopinus* Velutinus Group (Females)**

- 5 (2) Halter knob brown or red-brown . . . . . 5a  
 — Halter knob tan or yellow . . . . . 9  
 5a Halter knob uniform color or light below . . . . . 6  
 — Halter knob red-brown dorsally with a tan ventral tip portion . . . . .  
 . . . . . *S. monterreyi* new species  
 17 (16) Halter knob red-brown, marked or lighter below . . . . . 17a  
 — Halter knob brown or black-brown . . . . . 18  
 17a Halter knob white below . . . . . *S. hagai* Kelsey  
 — Halter knob with ventral tip tan . . . . . *S. masoni* new species  
 30 Halter knob red-brown above, lighter (not white) below . . . . . 31  
 — Halter knob brown, white below . . . . . *S. pecki* Kelsey  
 31 Halter knob cream below or cream diffused with brown . . . . . 32  
 — Halter knob lighter below, frons with raised portion like a broad based "H" . . . .  
 . . . . . *S. majalcai* new species  
 32 Halter knob cream below, frons with two oval swellings lateral of median triangular depression above antennal bases . . . . . *S. obregoni* new species  
 — Halter knob cream diffused with brown, frons only slightly swollen and with radiating striae on lower third . . . . . *S. reciprocatus* Kelsey (in part)

The Neotropical species from Venezuela may be separated by the following modification of the key to the Neotropical species Kelsey 1969, p. 112.

- 2 Wings hyaline . . . . . 3  
 — Wings white . . . . . 2a  
 2a Abdomen with 2 white bands . . . . . *S. pygmaeus* Loew.  
 — Abdomen with 3 white bands . . . . . *S. stegmaieri* new species

*Scenopinus majalcai* new species

(Figure 2)

MALE. Head black; eyes black-brown above, meeting on upper portion, black below; frons triangular, half as long as distance from antennal base to median ocellus, lateral margins of lower third bordered by silvery pile which extends dorsad from margin of oral cavity, shining between, middle third rugose, upper third slightly depressed, rugose; ocellar tubercle black, shining; ocelli red-brown; back of head concave; mouthparts brown, filling three-fourths of oral cavity; palpi brown, laterally compressed, paddle-shaped; antennae black-brown, third segment oval, twice as long as broad.

Thorax black, dull, transversely striated, a patch of silvery pile above the humeral callus; humeral and supra-alar calli tipped with red-brown; pleural areas dark black-brown; wings milky white, veins brown; halter stem black-brown, knob red-brown, proximal surface lighter;



legs with coxae through tibiae black-brown, tarsi orange-brown.

Abdomen black, subshining, only one distinct white band between segments 3 and 4, next two segments may show narrow white bands; terminalia black-brown, penis stout, aedeagal parameres short, thin; see figures.

**FEMALE.** Head black, eyes black-brown with reddish glints, postocular rim narrow; frons broad, wider than ocellar tubercle, rugose with an H-shaped elevated area extending from antennal bases to median ocellus, lower ends of H. swollen, joining dorsal extension of silvery pubescence laterad of oral opening; ocellar tubercle black, wider than long; ocelli orange-brown; back of head concave; mouthparts and antennae as male; see figures.

Thorax, as male.

Abdomen dark red-brown; see figures for conformation of 8th sternum and bursa.

Length ♂ body — 2.7 mm, wing 2.0 mm; ♀ body 3.1 mm, wing 2.3 mm.

Type locality — Majalca Road, 5000', 30 mi. N. W. Chiapa, Chia., Mexico, Apr. 17, 1961 (Howden and Martin).

Holotype ♂ deposited in Canadian National Insect Collection No. 12958.

Allotype ♀ same data.

Paratypes 1 ♂ 1 ♀ same data in C.N.I.C.

*Scenopinus masoni* new species

(Figure 3)

**FEMALE.** Head black-brown to red-brown; eyes red-brown, with a narrow postocular rim; frons broad, red-brown below, darker above, swollen above antennal bases and with a large shallow depression on lower half, elevated above eye margins anterior to ocellar tubercle, subshining; ocellar tubercle red-brown, sunken; median ocellus sunken, ocelli red-brown; back of head concave; mouthparts brown, nearly as long as oral cavity; palpi black-brown, slender, half as long as oral cavity; a noticeable shining genal area below eye; oral opening bordered by silvery pile that extends laterad of antennal bases below swollen portion of frons; antennae with first segment black-brown, second segment red-brown, third segment black-brown, oval, not twice as long as wide; see figures for details.

Thorax black-brown, rugose; humeral and supra-alar calli orange; pleural areas red-brown; wings brown, veins brown; halter stem brown, knob red-brown with ventral tip tan; legs red-brown with orange-brown tarsi.

Abdomen red-brown; see figures for conformation of 8th sternum and bursa.

**MALE.** Unknown.

Length ♀ body — 3.0-3.3 mm, wing 2.4 mm.

Type locality — Boulder Colorado 5500', June 19, 1961 (W. R. M. Mason).

Holotype deposited in Canadian National Insect Collection No. 12959.

Paratype 1 ♀ same data in C.N.I.C.

*Scenopinus monterreyi* new species

(Figure 4)

**FEMALE.** Head black; eyes red-brown; postocular ridge narrow; frons broad, nearly twice as wide as ocellar tubercle, smaller above antennal bases, a shallow median groove between swellings on lower frons and extending as a trace across the transversely striated upper frons to median ocellus; frons extending laterad of ocellar tubercle, by more than half the latter's width, to the back of the head; ocellar tubercle shorter than wide, sunken anteriorly and elevated posteriorly; ocelli red-brown; back of head concave, covered with silvery pile; mouth-



parts red-brown, filling oral cavity; palpi black-brown, half as long as oral opening; oral cavity bordered by silvery pile which extends above the antennal bases; antennae black-brown, third segment oval, a little over twice as long as broad, widest near base; see figures for details.

Thorax black, transversely striated, a patch of silvery pile above and in front of humeral callus; humeral callus tipped with red-brown, supra-alar callus orange-brown; pleural areas dark red-brown; wings hyaline with brown microtrichia, veins brown; halter stem black-brown, knob red-brown dorsally with a tan ventral tip; legs with coxae through femora dark red-brown; tarsi of forelegs light red-brown, of middle legs orange-brown, and hind legs yellow-brown.

Abdomen black-brown, subshining, 8th segment with heavy hair on both tergum and sternum; see figures for details of 8th sternum and bursa.

MALE. Unknown.

Length ♀ body — 3.9 mm, wing 2.7 mm.

Type locality — 5 mi. S. Monterrey, N. L. Mexico, July 21, 1963 (H. F. Howden).

Holotype deposited in Canadian National Insect Collection No. 12960.

*Scenopinus obregoni* new species

(Figure 5)

FEMALE. Head black-brown; eyes black-brown, postocular ridge narrow, fringed with hairs along posterior margin; frons broad, rugose, twice as wide as ocellar tubercle, slightly elevated above the eyes, two oval swellings on lower frons laterad of a median triangular depression above the antennal bases; ocellar tubercle black-brown, distinct but not set off from frons; ocelli orange-brown; mouthparts brown, two-thirds as long as oral cavity; palpi brown, slender, half as long as oral cavity which is bordered by gray pubescence; antennae black-brown, dusted with gray pollen, third segment elongate oval, more than twice as long as wide; see figures for details.

Thorax black-brown, rugose; humeral and supra-alar calli orange; pleural areas dark red-brown, lighter below wings; wings milky white with brown veins; halter stem brown, knob light red-brown above, cream below; legs dark red-brown, tarsi lighter.

Abdomen dark red-brown, subshining; 8th sternum heavily notched on posterior border; see figures for details of 8th sternum and bursa.

MALE. Unknown.

Length ♀ body — 3.3 mm, wings 1.7-2.3 mm.

Type locality — 16 mi. N. E. Cd. Obregon, Sonora, Mexico, May 15, 1961 (Howden and Martin).

Holotype ♀ deposited in Canadian National Insect Collection No. 12961.

Paratype ♀, same data in C.N.I.C.

*Scenopinus stegmaieri* new species

(Figure 6)

This species believed to have originated in Venezuela was taken by quarantine inspectors from an aircraft whose flight originated in that country. It is closely related to *S. kuiterti* differing primarily in wing and halter color, the terminalia are distinguished by the long wiry aedeagal parameres and appear quite similar to those of *S. kuiterti*.

MALE. Head black; eyes light brown above, black-brown below, extending to back of the head so no postocular rim is in evidence; frons narrow, triangular, shining, lower half bordered by rows of short hairs; ocellar tubercle black-brown, shining; ocelli orange-brown; mouthparts dark brown, well developed, over half as long as oral cavity; palpi black-brown, broad, only a



little shorter than mouthparts; antennae black-brown, second segment with orange distal margin, third oval, over twice as long as wide, covered with short hairs; see figures.

Thorax black, granular, a small patch of gray pollen over humeral callus; humeral callus red-brown, pleural areas black-brown; wings milky, veins tan; halter stem red-brown, knob white; legs black-brown with knees and tarsi orange-brown.

Abdomen black, subshining, three moderately broad white bands; terminalia with wiry aedeagal parameres extending beyond 9th tergum like those of *S. kuiterti*; see figures for details.

FEMALE. Unknown.

Length ♂ body — 2.7 mm, wing 2 mm.

Type locality — Venezuela? Taken at Miami in airplane from Venezuela July 2, 1964 (C. Stegmaier).

Holotype deposited in U. S. National Museum No. 70815.

### Genus *Pseudatrichia* Osten Sacken

The three new species listed below increase the known species to 39.

The following modifications to the keys to the *Pseudatrichia* presented in Kelsey 1969, p. 223 will accommodate the new species included here.

#### Key to the species of *Pseudatrichia* (Males)

- 10 (8) Antennae orange-brown ..... 10a
- Antennae black-brown ..... 10b
- 10a Seventh abdominal segment elongate, red-brown; 9th segment black-brown ....  
..... *P. rufitruncula* Kelsey
- Seventh abdominal segment short, shining, black; 9th segment black .....  
..... *P. gracilipennis* Kelsey
- 10b Vein R<sub>4</sub> arising from the middle of cell R<sub>5</sub> ..... *P. unicolor* Coquillett
- Vein R<sub>4</sub> arising from distal third of cell R<sub>5</sub> ..... *P. macalpeni* new species

The above supersedes the key found on page 30 of Kelsey 1971.

#### Key to the species of *Pseudatrichia* (Females)

- 3 Halter knob with base red-brown remainder white ..... 3a
- Halter knob with base and dorsal rib red-brown, bleeding into white .....  
..... *P. cloudcrofti* Kelsey
- 3a (3) Eighth sternum with lateral posterior lobes subequal in length and shape to median lobe ..... *P. jamesi* Kelsey
- Eighth sternum with lateral lobes longer and much narrower than median lobe ..  
..... *P. tomichi* new species
- 17 Add (or black-brown, remainder white) ..... 18
- 18 (17) Red-brown or black-brown, not bleeding into white ..... 18a
- Red-brown bleeding into white ..... 24
- 18a(18) Base red-brown ..... 19
- Base black-brown ..... *P. granti* new species



*Pseudatrichia granti* new species

(Figure 7)

**FEMALE.** Head black; eyes black-brown; postocular ridges broad, swollen, all but the surface next to eye covered with short bristles, the two sides separated from each other and the ocellar tubercle by sulci from upper corners of the eyes to back of head where they are separated by half the width of the ocellar tubercle; frons as broad as ocellar tubercle, longitudinally striated, with a shallow median groove from median ocellus to lower third of the frons; ocellar tubercle black, shining except area behind lateral ocelli dusted with gray pollen; back of head dusted with gray pollen; mouthparts black-brown, a little over half as long as oral cavity; palpi black-brown, subequal to mouthparts; antennae with first two segments red-brown, third segment brown, velvety, oval, truncated at tip; see figures for details.

Thorax black, rugose, area behind head dusted with gray pollen; humeral and supra-alar calli red-brown; pleural areas dark red-brown, subshining; wing hyaline, veins brown; halter stem black-brown, knob with base and dorsal rib black-brown, outer two-thirds of dorsal surface and third of ventral surface white, remainder black-brown; legs orange-brown.

Abdomen black, basal four segments glint violet, remainder shining black; 8th sternum trilobed along posterior margin, lobes subequal, lateral lobes more acute than median, see figures for details.

**MALE.** Unknown.

Length ♀ body — 6.8 mm, wing 4.1 mm.

Type locality — Livingston, B. C., July 19, 1965 (J. Grant) in flight.

Holotype deposited in Canadian National Insect Collection No. 12962.

*Pseudatrichia macalpeni* new species

(Figure 8)

**MALE.** Head black; eyes red-brown above, black-brown below, separated from back of head by a narrow postocular rim; frons narrow, triangular, slightly swollen above antennae, transversely striated; ocellar tubercle black; ocelli black-brown; mouthparts red-brown, filling oral cavity; palpi black-brown two-thirds as long as mouthparts; oral cavity and antennal bases bordered by silvery pile; antennae black-brown, third segment less than twice as long as broad, cupped at tip, with a median peg; see figures for details.

Thorax black, covered with very short hairs; humeral and supra-alar calli marked with orange-brown; pleural areas black-brown; wings hyaline, veins brown, vein  $R_4$  branching from near distal end of cell  $R_5$  and ending in wing margin beyond the junction of  $M_{1+2}$  and  $R_5$ ; halter stem black-brown, knob white with base marked with black-brown; coxae through tibiae of forelegs orange-brown and tarsi red-brown, middle legs red-brown, hind legs red-brown except distal half of femora and proximal half of tibiae black-brown.

Abdomen black, first three segments rugose with purplish sheen, remainder shining; see figures for conformation of terminalia.

**FEMALE.** Unknown.

Length ♂ body — 5.1 mm, wing 3.5 mm.

Type locality — 5 mi. W. Durango, Durango, Mexico 6500', April 11, 1964 (J. F. McAlpine).

Holotype ♂ deposited in the Canadian National Insect Collection No. 12963.



*Pseudatrichia tomichi* new species

(Figure 9)

**FEMALE.** Head red-brown; eyes red-brown, higher than long, postocular ridges moderately broad, the two sides separated by ocellar tubercle; frons narrow, subshining, only as wide as ocellar tubercle above the antennae, narrowing before tubercle, a shallow groove on midline darker than remainder of frons; ocellar tubercle red-brown, ocelli red-brown; mouthparts orange-brown, nearly filling oral cavity; palpi orange-brown, slender, pointed, only half as long as mouthparts; antennae with two basal segments orange-brown, short, third segment orange, tips blunt and marked with red-brown; see figures.

Thorax black-brown, transversely striated; humeral and supra-alar calli red-brown; meso-scutellum red-brown; pleural areas red-brown; wings brown hyaline, veins brown, space between Sc and R<sub>2</sub> appears filled; halter stem red-brown, knob white with red-brown base; front legs yellow, middle and hind legs yellow-brown, hind legs darker.

Abdomen dark red-brown becoming lighter distally; 8th sternum with two elongate lateral lobes on posterior margin which are twice as long as the median lobe; see figure for details.

**MALE.** Unknown.

Length ♀ body — 5.3 mm, wing 3.7 mm.

Type locality — Folsom, Sacramento Co., Calif., June 2, 1938 (Q. Tomich).

Holotype ♀ deposited in California Academy of Sciences Type No. 11727 (Ex. Univ. Calif. Berkeley).

Genus *Brevitrichia*, D. E. Hardy

The addition of the two new species described below increases the number of known species to 44 and extends the southward distribution to El Salvador.

The following alterations of the keys found in Kelsey (1971) pages 12-17 have been made to accommodate the new species.

**Key to the species of *Brevitrichia* (Males)**

- 17 (12) Halter knob tan or yellow ..... 18
- 18 (17) Abdomen predominantly white or marked with pigmented "T"s ..... 19
- Abdominal segments red-brown with white posterior margins ..... 18a
- 18a(18) Halter knob tan, cream below ..... *B. yucatani* Kelsey
- Halter knob yellow darkening to tan distally ..... *B. salvadorensis* new species
- 21 (20) Abdomen marked with black-brown "T" on second segment, remainder essentially white ..... 22
- Abdomen marked with red-brown "T"s, with creamy lateral areas on most abdominal segments ..... 22a
- 22a Thoracic dorsum marked with yellow spots anteriorly and crescents posteriorly ..  
..... *B. griseola* Coquillett
- Thoracic dorsum black with anterolateral corners creamy, dusted with gray and olive pollen ..... *B. powelli* new species

**Key to the species of *Brevitrichia* (Females)**

- 16 (13) Halter knob cream or white below ..... 17
- Halter knob entirely tan ..... 16a
- 16a(16) Abdomen dark red-brown; 9th tergum with 1 dorsal spine and 7 pits .....  
..... *B. hodgdeni* Kelsey



Abdomen red-brown with posterior margins of segments grading from orange to white; 9th tergum with 7 spines . . . . . *B. salvadorensis* new species

*Brevitrichia powelli* new species

(Figure 10)

MALE. Head cream; eyes red-brown, divided below the level of the antennae into coarse upper and finer lower facets which appear darker; frons narrow, triangular, divided on the mid-line by a distinct groove, separated from the ocellar tubercle by twice its length; ocellar tubercle black-brown, covered with gray pollen; ocelli red; back of head black-brown, concave; mouthparts a light tannish-brown, two-thirds as long as oral cavity; palpi tannish-brown, only a little more than half as long as mouthparts, laterally compressed; antennae with first two segments brown, third segment orange-brown, pear shaped, cleft at tip; see figures for details.

Thoracic dorsum black, covered with gray and olive pollen anterolateral corners creamy; humeral and supra-alar calli creamy; mesoscutellum creamy with an elongated oval median black mark, dusted with gray pollen; propleurum cream with dark patches dorsally; mesoanepisternum black-brown with cream dorsal margin, mesokatepisternum black-brown ventrally and creamy on upper half below wings, all covered with gray pollen; wings milky, veins tan; halter stem black-brown, knob light tan; coxae black-brown proximally and cream distally, femora black-brown, dusted with gray pollen, lighter anteriorly, tibia and tarsi light brown-yellow.

Abdomen creamy white with large red-brown "T"s with thick stem and distinct lateral base, second segment similar to first, third and succeeding segments with anterior margins dark and less "T"-like, all dusted with gray pollen; 9th tergum creamy white with large red-brown basal spot, dusted with gray pollen; see figures for details.

FEMALE. Unknown.

Length ♂ body — 3.4 mm, wing 2.2 mm.

Type locality — Los Prietos, Santa Barbara Co., Calif., June 23, 1965 (J. Powell).

Holotype ♂ deposited in California Academy of Sciences Type No. 11725 (Ex. Univ. Calif. Berkeley).

*Brevitrichia salvadorensis* new species

(Figure 11)

MALE. Head tan; eyes black-brown with a green metallic sheen, divided below the center into coarse upper and fine lower facets, extending around to back of head; frons narrow, triangular, darker just above the antennal bases; ocellar tubercle black-brown, dusted with tan pollen; ocelli orange-brown; back of head concave; mouthparts brown, filling two-thirds of oral cavity; palpi tan, only half as long as mouthparts; antennae with first two segments brown, third segment red-brown, pear shaped ending in two darker points; see figure.

Thoracic dorsum black, dusted with tan and olive pollen, lateral margins orange-yellow except a ventral extension of darker color immediately above wing base; humeral and supra-alar calli yellow; mesoscutellum with a large central band of black, lateral corners orange-yellow, all dusted with pollen; propleuron orange-yellow with a dark spot above coxae; mesoanepisternum red-brown with a dorsal band of yellow; mesokatepisternum orange-yellow with a dark red-brown ventral spot; all dusted with gray pollen; wing milky white, veins tan; halter stem red-brown, knob yellow, darkening to tan distally; legs orange-brown with lighter knees, hind legs a little darker.

Abdomen red-brown with posterior margins of segments grading from orange to white, white



bands narrowing posteriorly; 9th tergum with base red-brown, distal margins orange to white, dusted with pollen, bristles short and stout; see figures for details.

**FEMALE.** Head tan, a darker area over upper corner of eyes; eyes black-brown, broadly separated and not attaining the back of the head, postocular ridge moderately broad, continuing uninterruptedly behind the ocellar tubercle; frons broad, nearly twice as wide as ocellar tubercle and deeply cleft on midline, central three-fifths of frons a red-brown color, dusted with pollen and bearing four rows of anteriorly directed hairs; ocellar tubercle black-brown, dusted with brown pollen; ocelli red-brown; back of head concave, the central portion black-brown, mouthparts and palpi as in male; genal areas extensive; antennae with two basal segments black-brown, third segment red-brown, darker than male but same shape; see figures for details.

Thorax as male; wings brown-fumose, veins brown; halter stem red-brown, knob tan; legs as in male.

Abdomen, generally as male, white banding diminishes posteriorly, dusted with pollen; 8th segment red-brown, shining; 9th tergum with 7 spines; see figures for details.

Length ♂ body — 3.0-3.3 mm, wing 1.8-2.1 mm, ♀ body 3.8-4.0 mm, wing 2.0 mm.

Type locality — Quezaltepeque, El Salvador, Feb. 12, 1970, 600 m. (M. E. Irwin).

Allotype ♀ same data.

Holotype ♂ and Allotype ♀ deposited in California Academy of Sciences Type No. 11726 (Ex. Univ. Calif. Berkeley).

Paratypes 1 ♂, 1 ♀ same data deposited in Univ. Calif. Berkeley.

#### REFERENCES CITED

- Kelsey, L. P., 1969. A Revision of the Scenopinidae (Diptera) of the World. Bull. U. S. Nat. Mus. 277: 336 pp. 210 figs.  
 Kelsey, L. P., 1971. New Scenopinidae from North America. Calif. Acad. Sci. Occ. Papers No. 88, 65 pp. 30 figs.



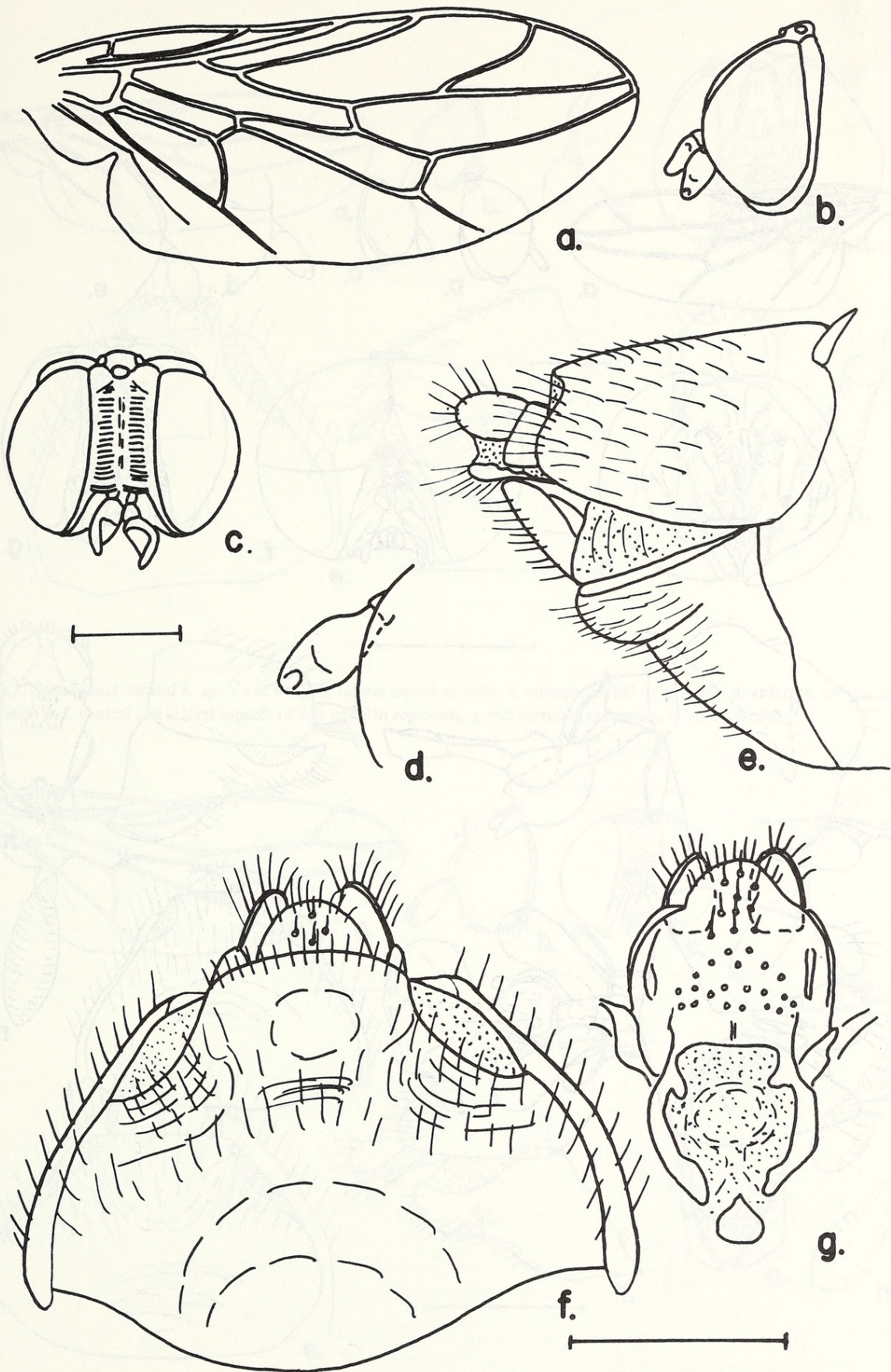


Fig. 1. *Scenopinus linsleyanus* n. sp. ♀: a. wing, b. c. lateral and frontal aspects of head, d. enlarged detail of antenna, e. f. lateral and ventral aspects of 8th and 9th segments, g. 9th sternum and bursa.



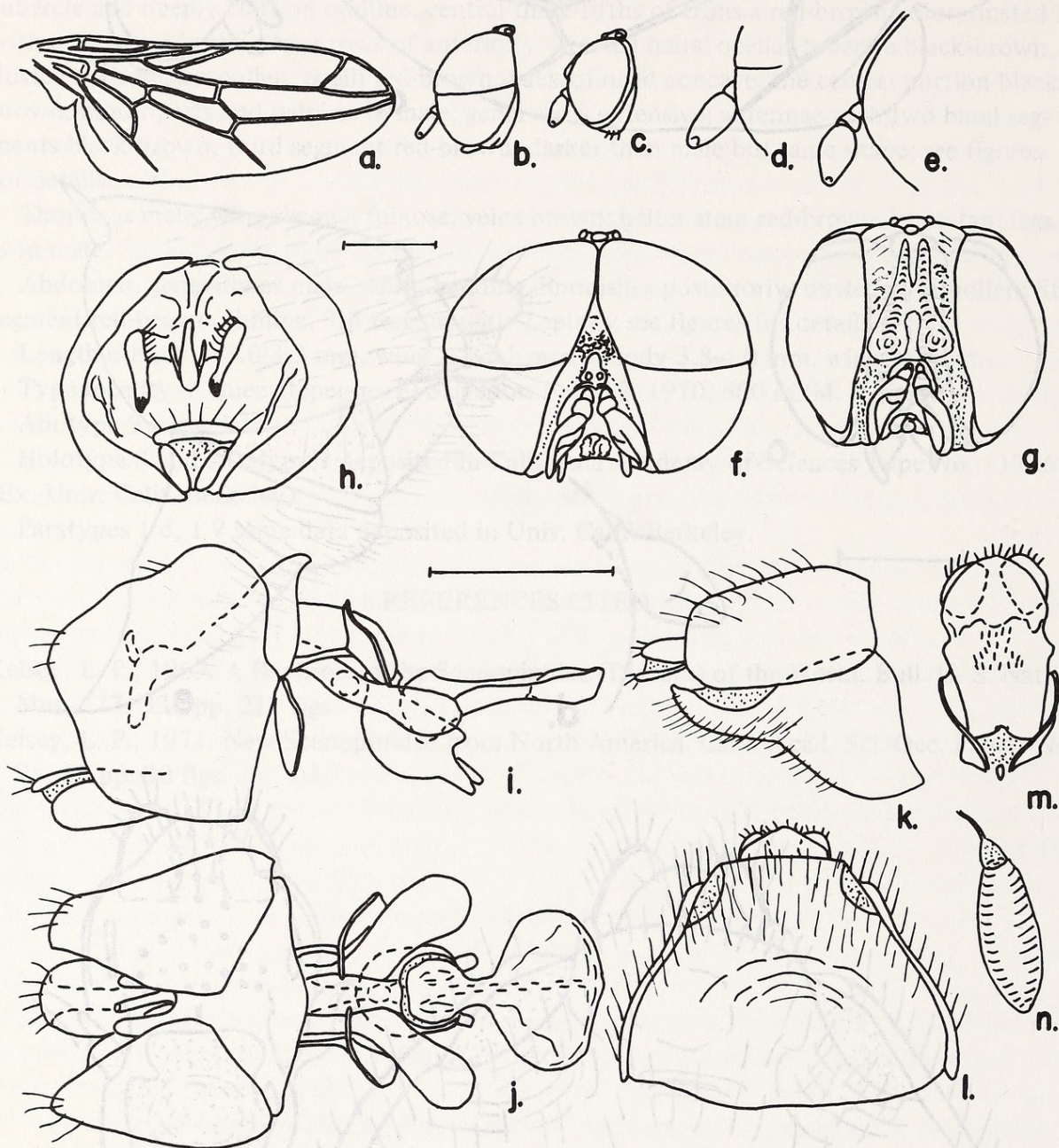


Fig. 2. *Scenopinus majalcai* n. sp. ♂ & ♀: a. wing, b. c. lateral aspects of male and female head, d. e. enlarged detail of male and female antennae, f. g. enlarged frontal aspect of male and female heads, h. i. j. posterior, lateral and ventral (dorsal on specimen) aspects of male terminalia, k. l. lateral and ventral aspects of female 8th and 9th segments, m. 9th sternum and bursa of female, n. spermatheca.



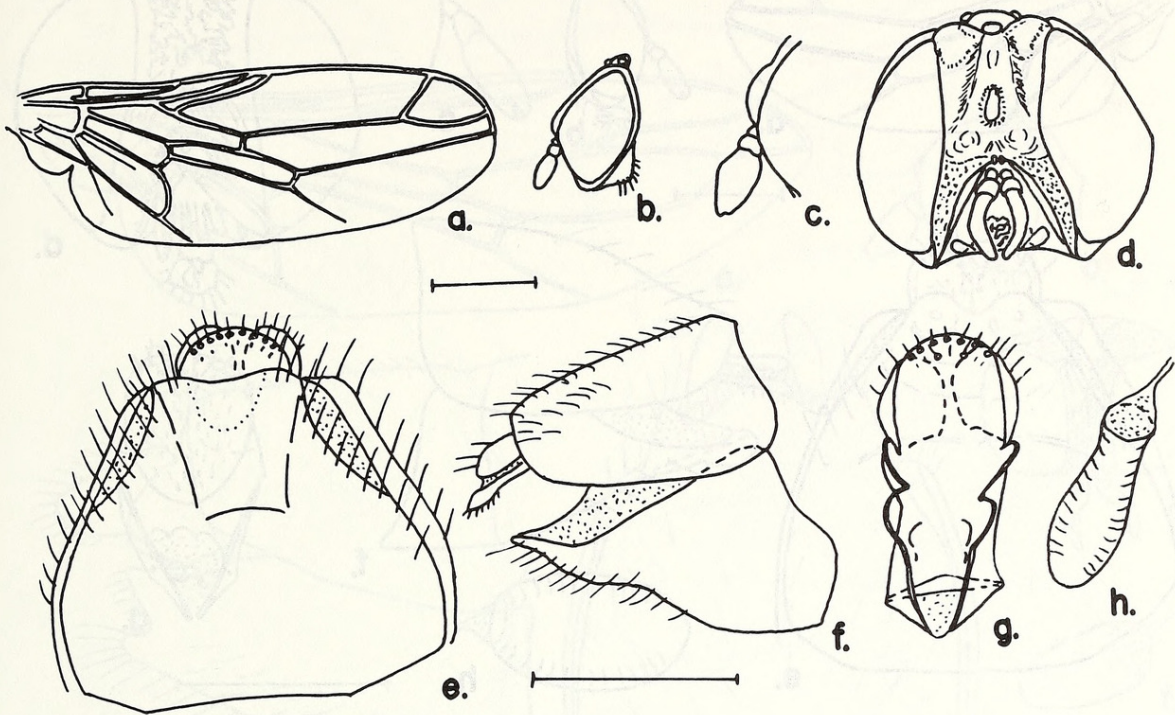


Fig. 3. *Scenopinus masoni* n. sp. ♀: a. wing, b. lateral aspect of head, c. enlarged detail of antenna, d. enlarged frontal aspect of head, e. f. ventral and lateral aspects of 8th and 9th segments, g. 9th sternum and bursa, h. spermatheca.

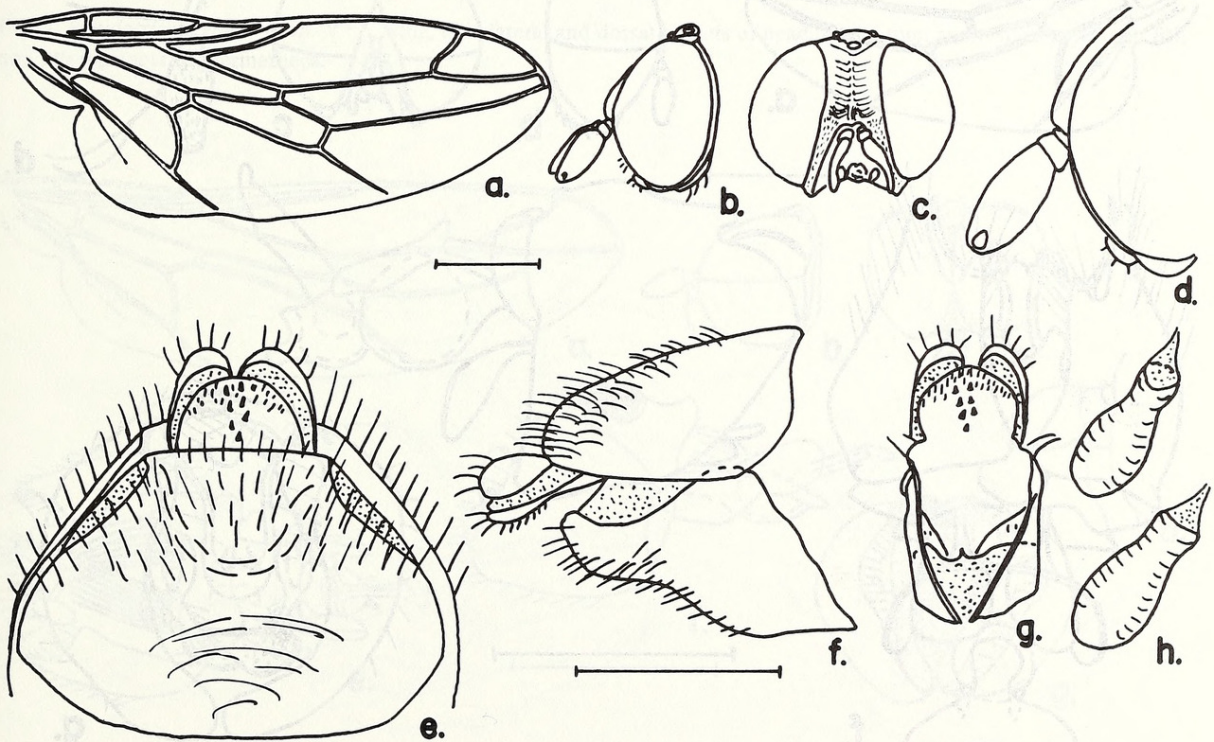


Fig. 4. *Scenopinus monterreyi* n. sp. ♀: a. wing, b. c. lateral and frontal aspects of head, d. enlarged detail of antenna, e. f. ventral and lateral aspects of 8th and 9th segments, g. 9th sternum and bursa, h. spermathecae.



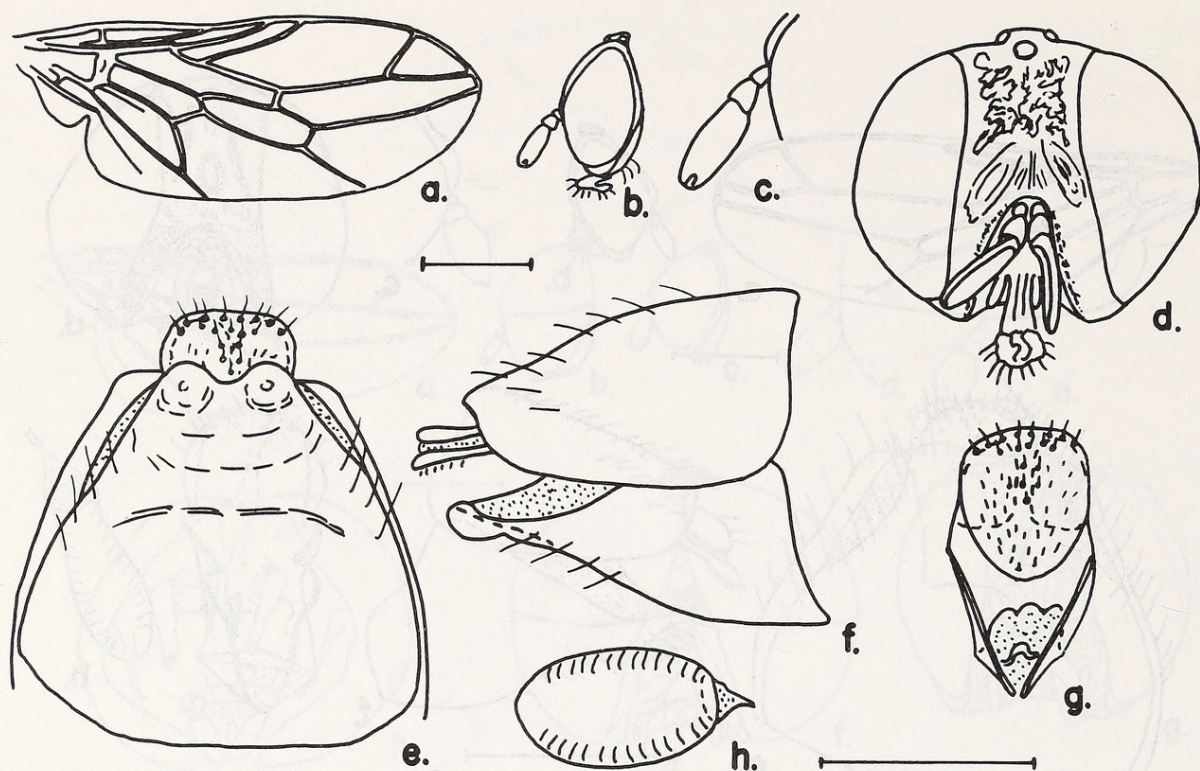


Fig. 5. *Scenopinus obregoni* n. sp. ♀: a. wing, b. lateral aspect of head, c. enlarged detail of antenna, d. enlarged frontal aspect of head, e. f. ventral and lateral aspects of 8th and 9th segments, g. 9th sternum and bursa, h. spermatheca.

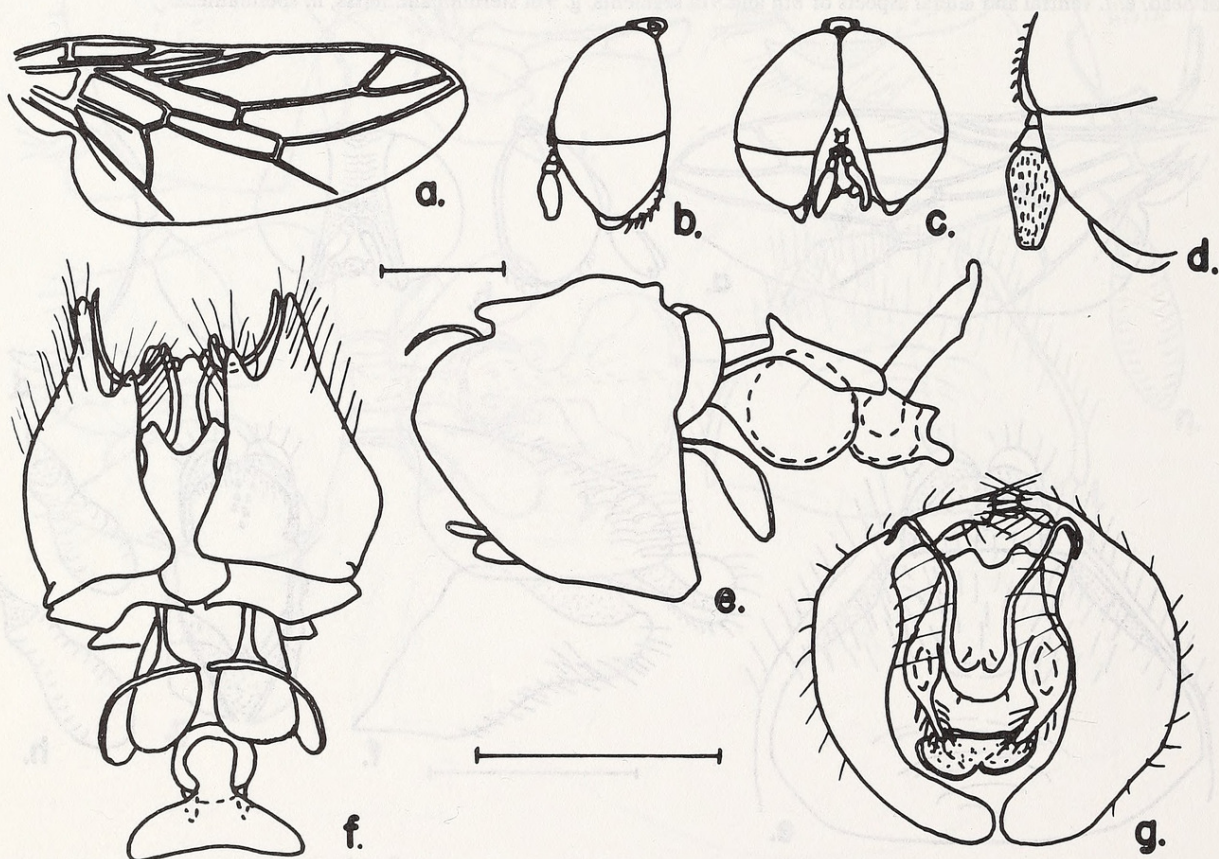


Fig. 6. *Scenopinus stegmaieri* n. sp. ♂: a. wing, b. c. lateral and frontal aspects of head, d. enlarged detail of antennae, e. f. g. lateral, ventral (dorsal on specimen) and posterior aspects of terminalia.



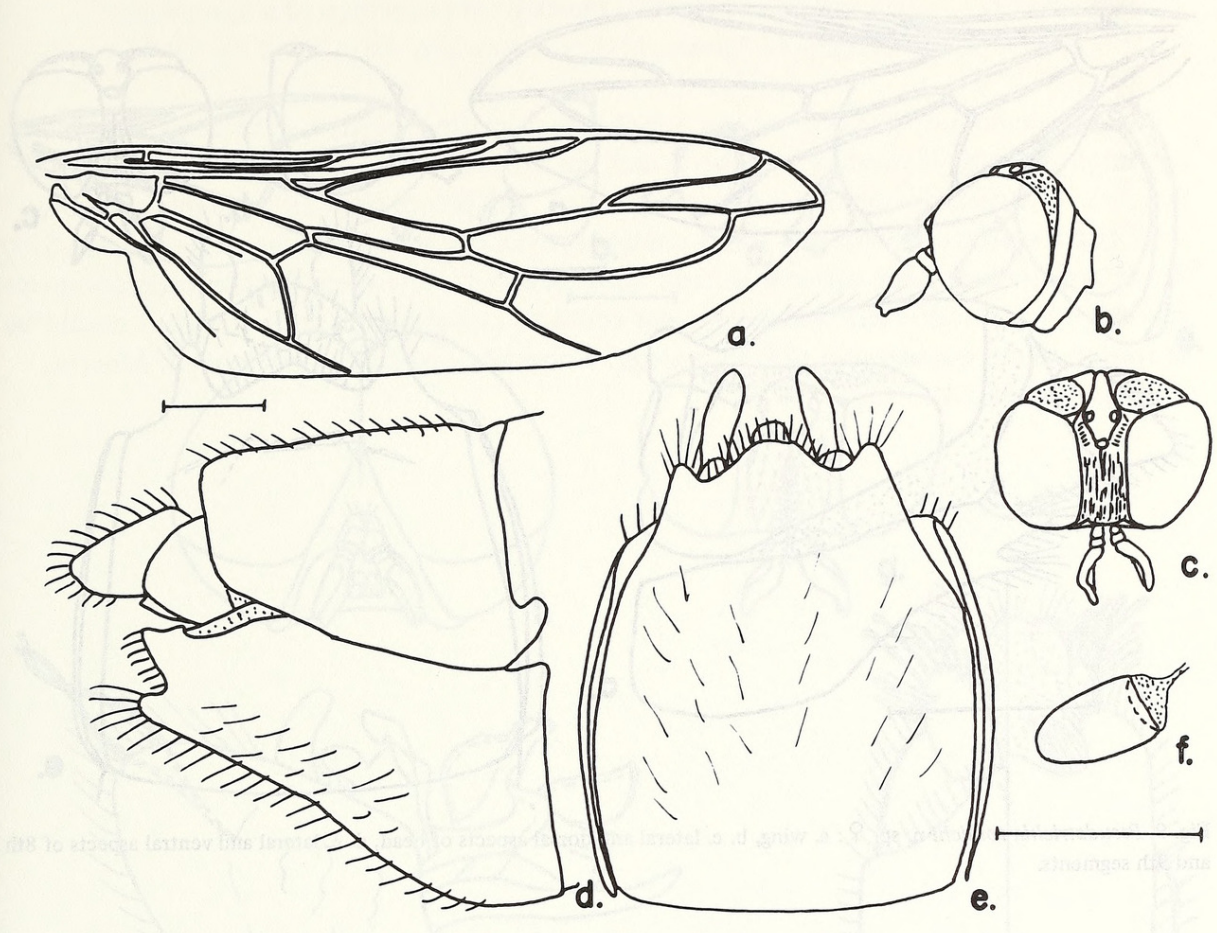


Fig. 7. *Pseudatrichia granti* n. sp. ♀: a. wing, b. c. lateral and dorsal aspects of head, d. e. lateral and ventral aspects of 8th and 9th segments, f. spermatheca.

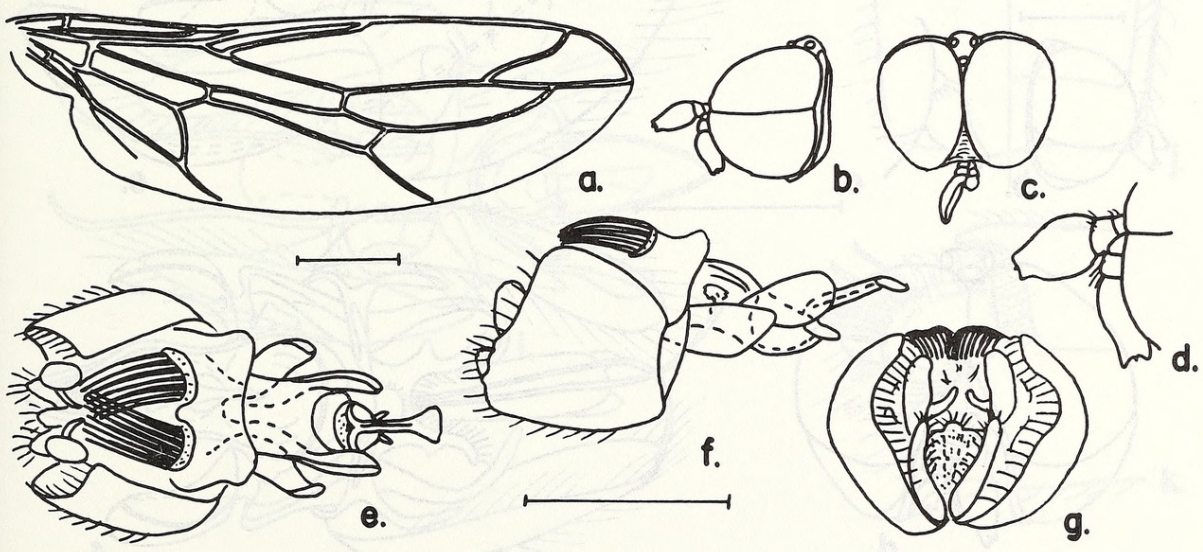


Fig. 8. *Pseudatrichia macalpeni* n. sp. ♂: a. wing, b. c. lateral and dorsal aspects of head, d. enlarged detail of antennae, e. f. g. ventral (dorsal on specimen) lateral and posterior aspects of terminalia.



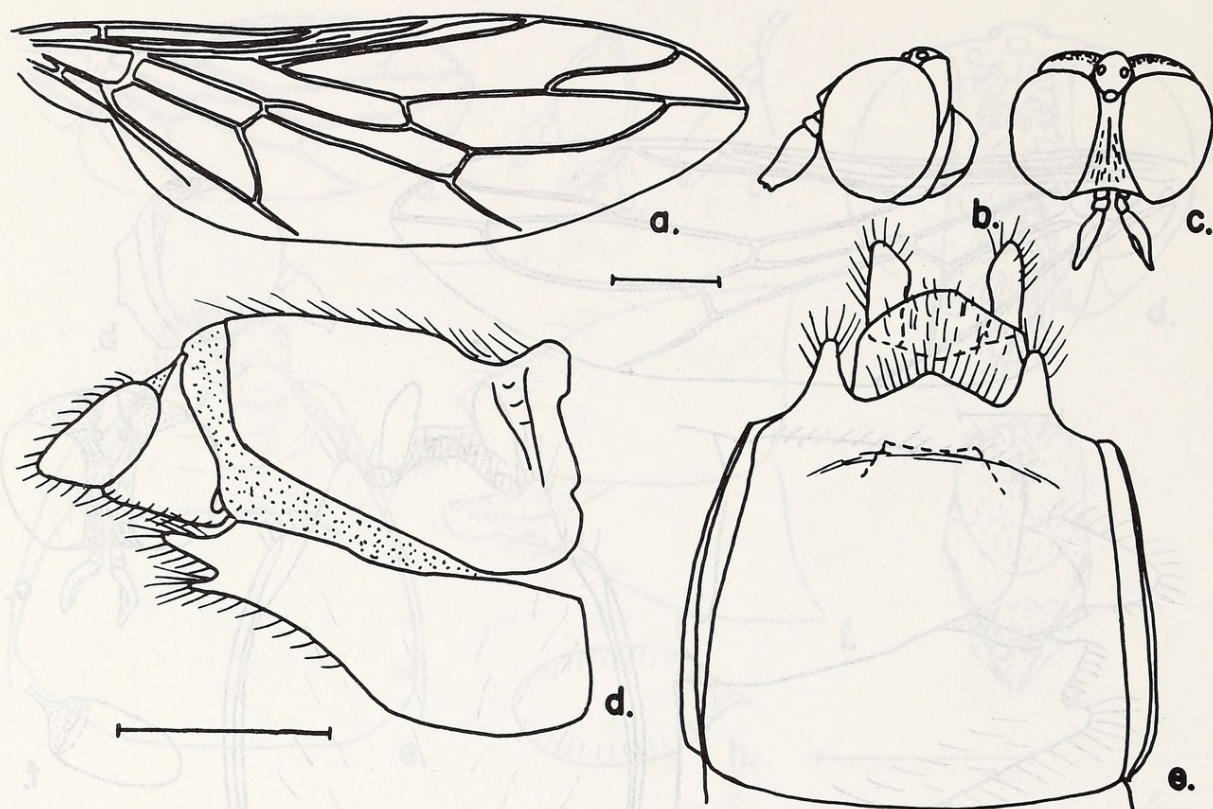


Fig. 9. *Pseudatrichia tomichi* n. sp. ♀: a. wing, b. c. lateral and dorsal aspects of head, d. e. lateral and ventral aspects of 8th and 9th segments.

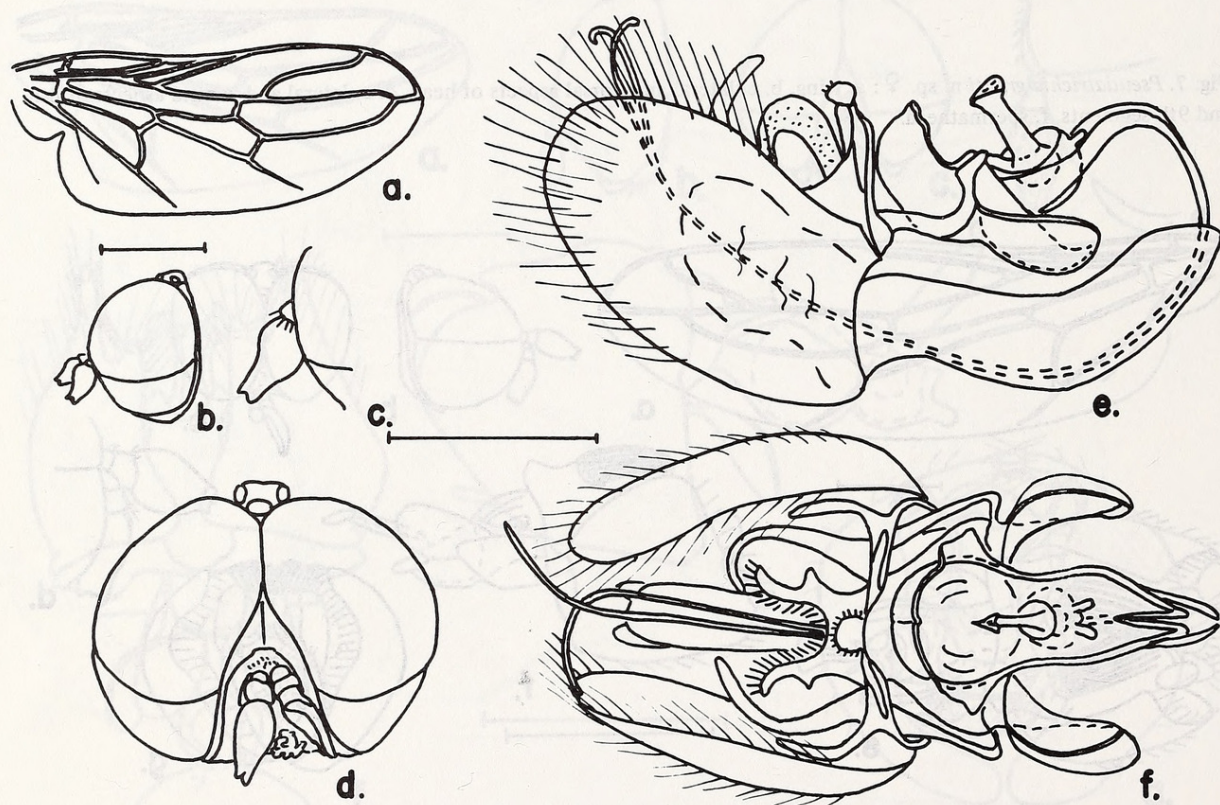


Fig. 10. *Brevitrichia powelli* n. sp. ♂: a. wing, b. lateral aspect of head, c. enlarged detail of antenna, d. enlarged frontal aspect of head, e. f. lateral and ventral (dorsal on specimen) aspects of terminalia.



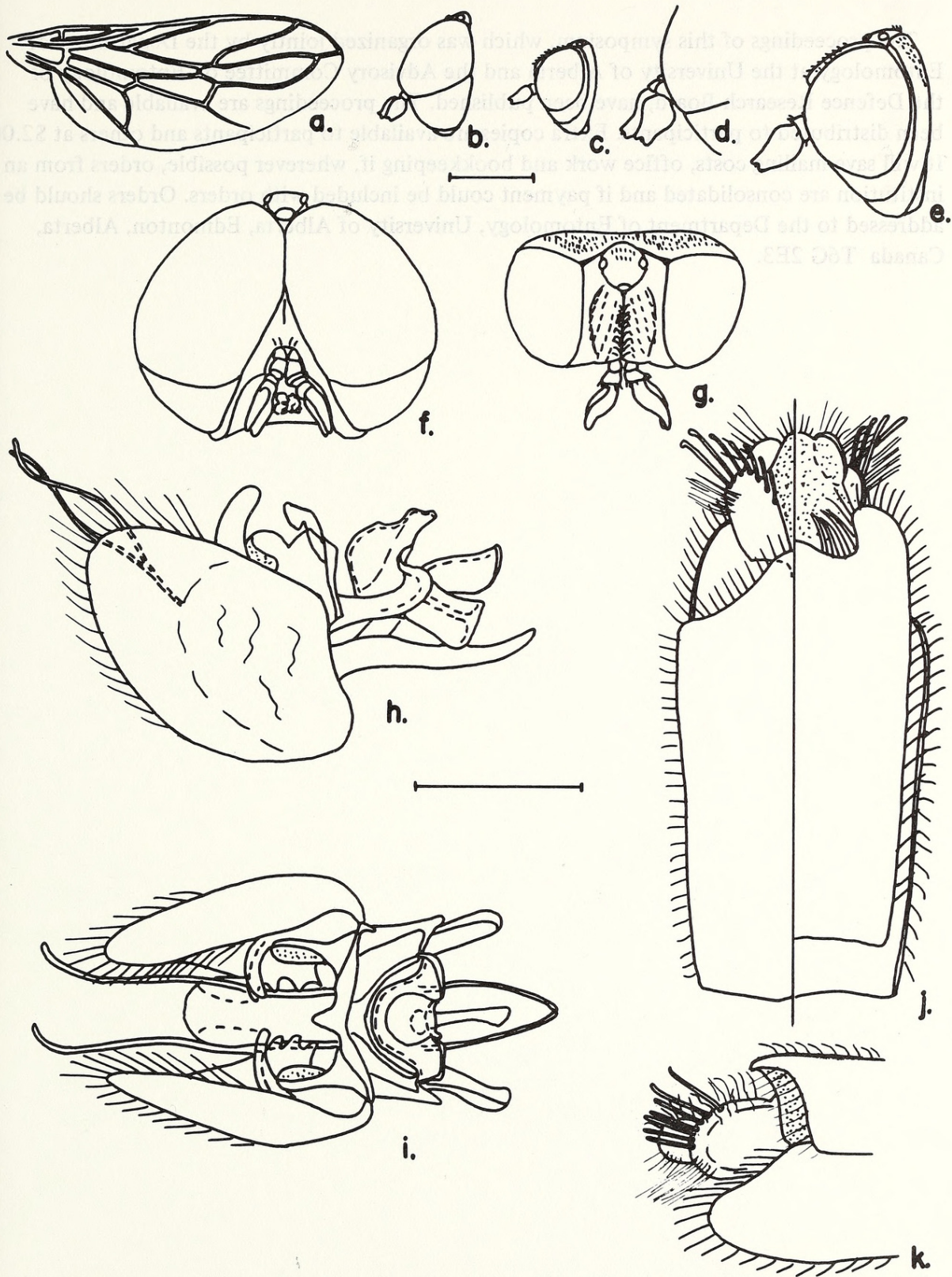


Fig. 11. *Brevitrichia salvadorensis* n. sp. ♂ & ♀: a. wing, b. c. lateral aspects of male and female heads, d. enlarged detail of male antennae, e. enlarged lateral aspect of female head, f. enlarged frontal aspect of male head, g. enlarged dorsal aspect of female head, h. i. lateral and ventral (dorsal on specimen) aspects of male terminalia, j. dorsal, left, and ventral, right aspects of female 8th and 9th segments, k. lateral aspect of tip of 8th and 9th segments of female.





Kelsey, L. P. 1974. "Eleven New Scenopinidae (Diptera) From the Americas." *Quaestiones entomologicae* 10(2), 131-147.

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