
A NEW GENUS AND SPECIES OF NET-WINGED MIDGE (DIPTERA: BLEPHARICERIDAE) FROM MEXICO, WITH A REDESCRIPTION OF *PALTOSTOMA BELLARDII* BEZZI

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ABSTRACT. The new genus and species, *Aposonalco amoyote* Hogue, are described from central Mexico. The holotype female of *Paltostoma bellardii* Bezzi, 1913, also from Mexico, is redescribed, with notes on the Mexican blepharicerid fauna.

INTRODUCTION

On the south slopes of Nevado de Toluca, in April of 1991, only 200 kilometers west of the urban metropolis of Mexico City, I discovered a thriving population of a species of Blephariceridae so distinct morphologically from other known neotropical apistomyiine genera that it requires recognition as a new genus. Aside from this new entity and three additional undescribed *Paltostoma* in my collection, the blepharicerid fauna of Mexico consists only of *P. bellardii* Bezzi, 1913 (locality not given in the original description) and *Phylorus vanduzeei* Alexander, 1963 (NEW COUNTRY RECORD) from the San Pedro Mártir Mountains of the peninsula of Baja California. Many new Mexican members of this family certainly await discovery.

The primary purpose of this paper is to describe the new genus and species. I also take the opportunity to redescribe and figure the holotype female of *P. bellardii*, a species known only from this unique specimen heretofore unexamined and unanalyzed by a specialist on the family.

The terminology and format of this paper follow Hogue (1978, 1981) and Hogue and Bedoya Ortiz (1989). A new anatomical term, "vertexal sclerites" (Fig. 13), refers to a pair of small plates separated dorsally from the cephalic sclerite of the pupa in many blepharicerids. For the pupa, "HM/TA" indicates the ratio of the anterior division (length of anterior margin to posterior margin of scutum)

compared to the posterior division (remaining length to terminus of abdomen).

Aposonalco Hogue, new genus

TYPE SPECIES. *Aposonalco amoyote* Hogue, new species.

DIAGNOSIS

The new genus is characterized by the following features, which appear to be apomorphic and uniquely combined within the Apistomyiini:

Adults of both sexes are immediately identified by their small, colocephalous heads on which a small, unfacetted region of the eye is set off dorsally from the facetted portion, a condition found in no other apistomyiine. The subanal pouch of the male terminalia is wide and strongly depressed, with lateral barlike armature; the cerci are elongate and without well-defined ventral arms. The spermathecae of the female terminalia are internally setose; specialized sensilla are present to base of dorsal margin as well as apex of cercus.

The pupa is not distinctive. The larva is distinguished by the pair of eye lenses, a feature shared only by *Paltostoma palominoi* Hogue and Garcés, 1990 and related species on the Greater Antilles, but differs from them most obviously in having only six ventral gill filaments per tuft instead of ten on segments I–V and a well-developed rather than vestigial dorsal pseudopod VII.

DESCRIPTION

The genus is monotypic. *Adults*.—Medium-sized blepharicerids. Head small, colocephalous, lacking

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mandibles and hypopharynx, palpus small, with a single segment. Wing venation as in most Apistomyiini: Rs forked, M2 missing, 1A present, terminating short of wing margin. Tibial spurs 0-0-1. *Male terminalia*.—Genital capsule short and wide; inner dististyle a simple porrect digit; outer dististyle simple, subtriangular; subanal pouch strongly depressed with narrowed opening; aedeagal filaments long and slender with simple apices; cerci elongate, divergent, without well-defined sclerotizations marking ventral arms. *Female terminalia*.—Spermathecae without necks, internally setate. Tubular setae present dorsally on cercus basally as well as apicad. *Pupa*.—Ovate in outline; moderately convex, scutum evenly rounded. Integument dorsally papillose. Branchiae of four erect plates, inner plates narrower and more flexible than wider, rigid outer plates; primary atrial pore of branchia on base of operculum (Zwick, 1977:18). Three adhesive organs, on segments IV–VI. *Fourth instar larva*.—Body lobiform; without dorsal, sclerotized tubercles or plates; weak circumlateral series of specialized setae present. Two antennal segments. Dorsal pseudopod VII small with plantar sole. Six ventral gill filaments per tuft.

ETYMOLOGY

Aposonalco is from Nahuatl [“atl” (combining form “a”) = water + “pozonalli” = foam]; its gender is declared feminine.

AFFINITIES

The genus exhibits many of the plesiomorphic character states seen in the tribe Apistomyiini and is only related to other genera by the presence of the double eye lens of the larva, a feature also present in Greater Antillean species (*Paltostoma argyrocineta* Curran, 1927 and relatives). The reduced colocephalic head is a homoplasous derivation from the complete head and does not indicate relationship with the many species of *Paltostoma* and *Limonicola* which also possess this condition. The genus represents a stem group that probably dispersed to Mexico early in tribal history from the South American portion of Gondwanaland. Other American members of this group appear to be *Kelloggina* and an undescribed genus from southern Chile and Argentina, all of which display many plesiomorphies, including three adhesive discs in the pupa. Derivatives of the line are species groups of *Paltostoma*. For a more thorough discussion of the placement of the genus relative to other groups of Apistomyiini, see Hogue (in prep.).

Aposonalco amoyote Hogue,
new species

DIAGNOSIS

No other species of *Aposonalco* are known. The species is isolated by the generic characteristics listed above.

DESCRIPTION

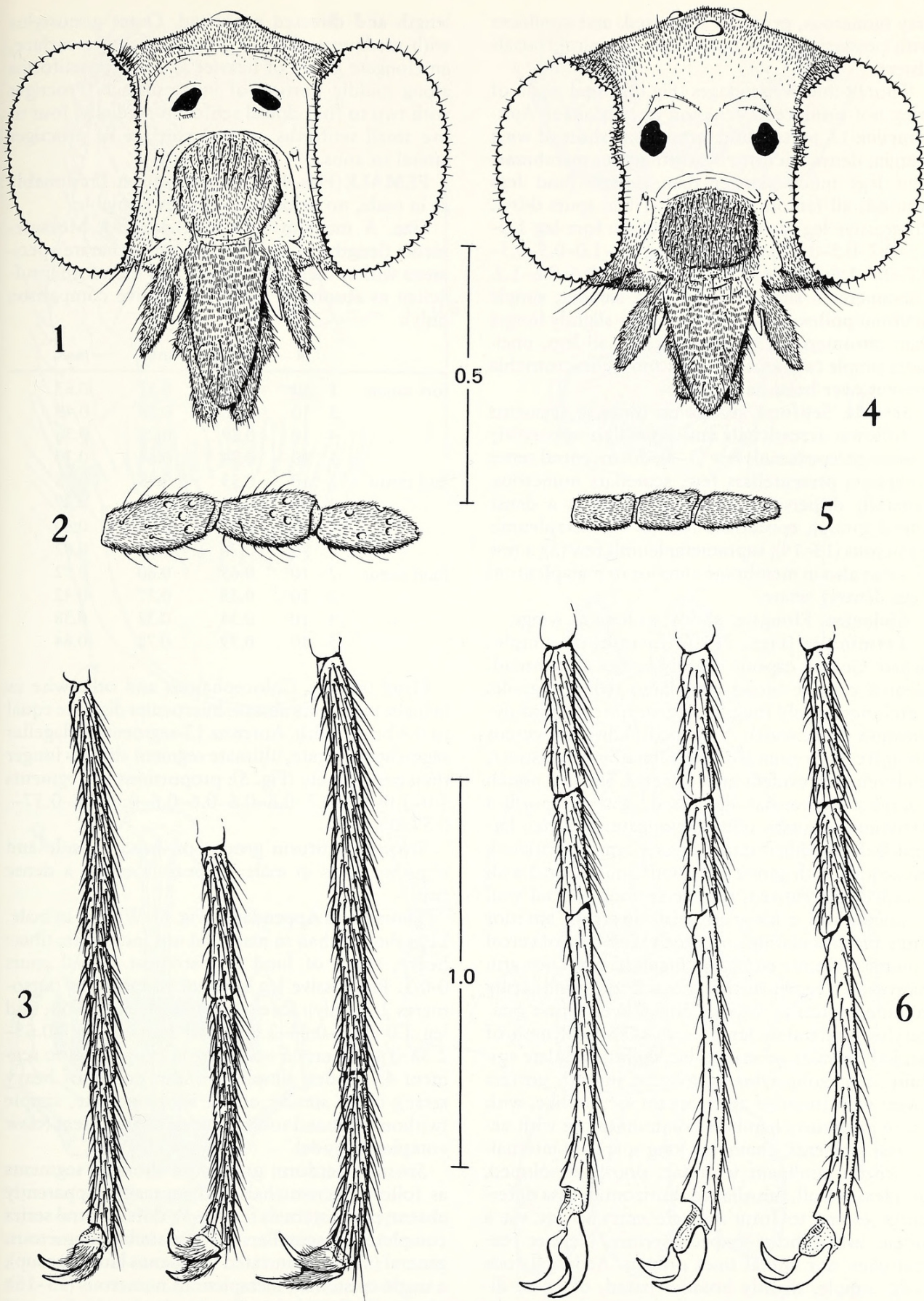
MALE (Figs. 1, 2, 5–8). A composite description from all available material, including holotype. **Coloration**. Wings lightly infusate. Body generally plumbeous, without silvery pollinosity or opalescent reflections seen in other Apistomyiini; humeral area of thorax light brown; head, antennae, and terminalia near black; abdominal tergites mostly black, dark-brown basad. Legs blackish-brown, femora lighter basad.

Size. A medium-sized blepharicerid. Measurements (lengths in mm), from fully mature specimens:

		N	mean	min.	max.
wing		10	7.1	6.8	7.6
fore	femur	10	2.8	2.6	3.0
	tibia	10	3.6	3.3	4.1
	tarsus	1 10	2.5	2.2	2.7
		2 10	1.13	1.03	1.23
		3 10	0.60	0.54	0.63
		4 10	0.33	0.32	0.38
		5 10	0.41	0.38	0.44
mid	femur	10	2.3	2.2	2.4
	tibia	10	2.3	2.2	2.5
	tarsus	1 10	1.2	1.1	1.3
		2 10	0.57	0.52	0.63
		3 10	0.38	0.34	0.43
		4 10	0.26	0.25	0.28
		5 10	0.41	0.38	0.47
hind	femur	10	5.2	4.7	5.5
	tibia	10	5.3	4.8	5.8
	tarsus	1 10	2.6	2.4	2.8
		2 10	1.14	1.03	1.21
		3 10	0.65	0.55	0.72
		4 10	0.39	0.34	0.44
		5 10	0.48	0.42	0.50
Total lengths of legs		41.65	38.60	45.06	

Head (Fig. 1). Colocephalous type, dichoptic. Eyes undivided, a narrow, unfaceted region set off dorsally from main faceted portion (possible vestigium of dorsal division?); eyes disjunct, interocular distance equal to 0.4 head width. Ocellar triangle sessile, barely raised. Mouthparts poorly developed: proboscis very short, labium length about 0.4 head width; hypopharynx absent; labella short, lobulate; palpus a single, fusiform segment without sensory pit; galea small, broad with acute apex. Antenna 13-segmented, flagellar segments elongate, ultimate segment slightly shorter than penultimate (Fig. 2), proportions of segments 1.0–1.0–1.5–1.0–0.7–0.7–0.7–0.7–0.7–0.7–0.66–0.66–0.66.

Sensilla. Setiform groups on head capsule and mouthparts as follows: clypeals short and very numerous, forming a moderately dense mat over entire sclerite (less dense than in female); genals few (5–6); medio-occipitals numerous (21); occipitals



Figures 1-6. *Aposonalco amoyote*. 1. Male head (frontal aspect). 2. Terminal antennal segments of male. 3. Terminal tarsal segments of male (fore leg, left; mid leg, center; hind leg, right); lateral aspect. 4. Female head (frontal aspect). 5. Terminal antennal segments of female. 6. Terminal tarsal segments of female (arrangement and aspect as in male). Note: Numerical values on scale bars in figures are in millimeters.

very numerous, generally dispersed, and confluent with postgenals; labials few (5), subapical; facials absent.

Thorax and Appendages (Fig. 3). Anal angle of wing not produced. Venation as typical for Apistomyiini; 1A present and terminating short of wing margin; dense microtrichia throughout membrane. Mid legs much shorter than others, hind legs stoutest; all femora incrassate. Tibial spurs 0-0-1. Progressive leg segment proportions: fore leg 1.0-1.3-0.7-0.5-0.5-0.6-1.2; mid leg 1.0-1.0-0.5-0.5-0.7-0.7-1.6; hind leg 1.0-1.0-0.5-0.4-0.6-0.6-1.2. Tarsomeres 5 similar on all legs, slender, simple (without pollex of heavy setae), only slightly longer than tarsomeres 4; claws similar on all legs, uncinata, simple (without subbasal tooth); microtrichia present over basal half.

Sensilla. Setiform groups on thoracic segments as follows: acrostichals and supraalars apparently absent; preepisternals few (3-4); dorsocentral series complete; prescutellars few; scutellars numerous, generally dispersed (not concentrated in a dense lateral group); episternals few (3-4); metapleurals numerous (13-14); suprametapleurals few (3); a few (3) setae also in membrane anterior to metapleuron. Legs densely setate.

Abdomen. Elongate, almost as long as wings.

Terminalia (Figs. 7-10). Epandrium simple, broad. Genital capsule slightly longer than broad. Genital capsule broad with large aedeagal guide. Cerci moderately long, divergent; interlobular depression deep, widely V-shaped; individual cercus elongate, with rounded apex. Inner arm indistinct, undeveloped, evident only by setae. Subanal pouch complex: somewhat depressed, anterior portion membranous (with minute elongate spiculae), lateral walls modified into elongate arms articulating posteriorly with gonite and continuous medially with a heavily sclerotized, transverse strap; dorsal wall modified into a flat plate with divergent anterior arms and articulating posteriorly with base of cercal complex. Gonite elongate, angulate, posterior arm narrowed. Tegmen membranous, smooth and evenly rounded apically, without dorsal keel. Outer gonostylus moderately large (length 0.5 midlength of genital capsule), subtriangular, slightly lobulate apically. Inner gonostylus an elongate, smooth, porrect finger with rounded apex. Sperm sac boxlike, with three posterior chambers communicating with aedeagal filaments, chambers long spiculate internally. Piston confluent with sac, poorly developed, apodeme small, fan-shaped, horizontal; vasa deferentia joining to form a single entry to sac via a single, broad, heart-shaped aperture. Neither ventral plate nor lateral tines present. Aedeagal rods long, simple, slightly broader basad, of equal diameter and length.

Sensilla. Epandrium with numerous medium setiforms centrally, extending laterad to margin. Cercus with moderately long setiforms over most of posterior and terminal portions. Setae of inner arm numerous, moderately long setiforms along entire

length and directed proximad. Outer gonostylus with medium setiforms general on outer surface, an elongate group of heavier and longer setiforms along middle portion of inner surface. Proctiger with two to four dorsal setiforms medially; four to five small setiforms on undersurface of proctiger lateral to anus.

FEMALE (Figs. 4-6, 11). **Coloration.** Presumably as in male, no eclosed specimens available.

Size. A medium-sized blepharicerid. Measurements (lengths in mm; values from pharate specimens within their pupal cases and therefore insufficient as absolutes, given for relative comparison only):

	N	mean	min.	max.
fore tarsus	2 10	0.56	0.52	0.63
	3 10	0.36	0.28	0.48
	4 10	0.29	0.26	0.38
	5 10	0.74	0.64	0.79
mid tarsus	2 10	0.53	0.48	0.58
	3 10	0.33	0.28	0.37
	4 10	0.27	0.26	0.30
	5 10	0.76	0.69	0.82
hind tarsus	2 10	0.65	0.60	0.72
	3 10	0.39	0.37	0.42
	4 10	0.34	0.32	0.38
	5 10	0.79	0.72	0.84

Head (Fig. 4). Colocephalous and otherwise as in male; mandibles absent. Interocular distance equal to 0.4 head width. Antenna 13-segmented, flagellar segments elongate, ultimate segment slightly longer than penultimate (Fig. 5); proportions of segments 1.0-1.0-1.3-0.7-0.6-0.6-0.6-0.6-0.6-0.57-0.57-0.6.

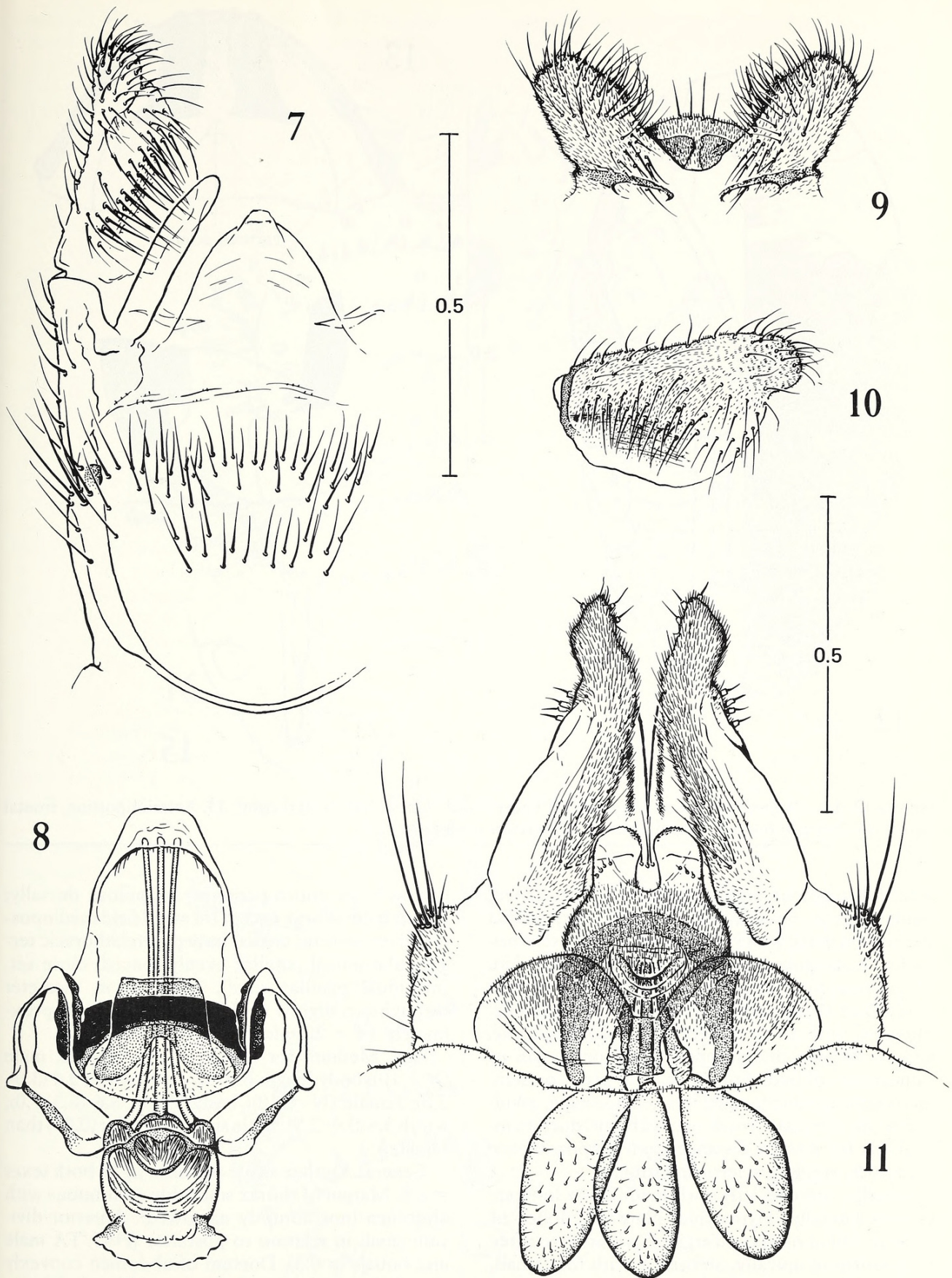
Sensilla. Setiform groups on head capsule and mouthparts as in male; clypeals forming a dense mat.

Thorax and Appendages (Fig. 6). Wing as in male. Legs shorter than in male and not incrassate; tibiae heavy, those of hind legs stoutest. Tibial spurs 0-0-1. Progressive leg segment proportions (tarsomeres 2-5 only): fore leg 1.0-0.64-0.61-2.54; mid leg 1.0-0.64-0.64-2.76; hind leg 1.0-0.60-0.65-2.38. Tarsomeres 5 very long in proportion to segment 4, slender, simple (without pollex of heavy setae); claws similar on all legs, uncinata, simple (without subbasal tooth); microtrichia absent (claw completely nude).

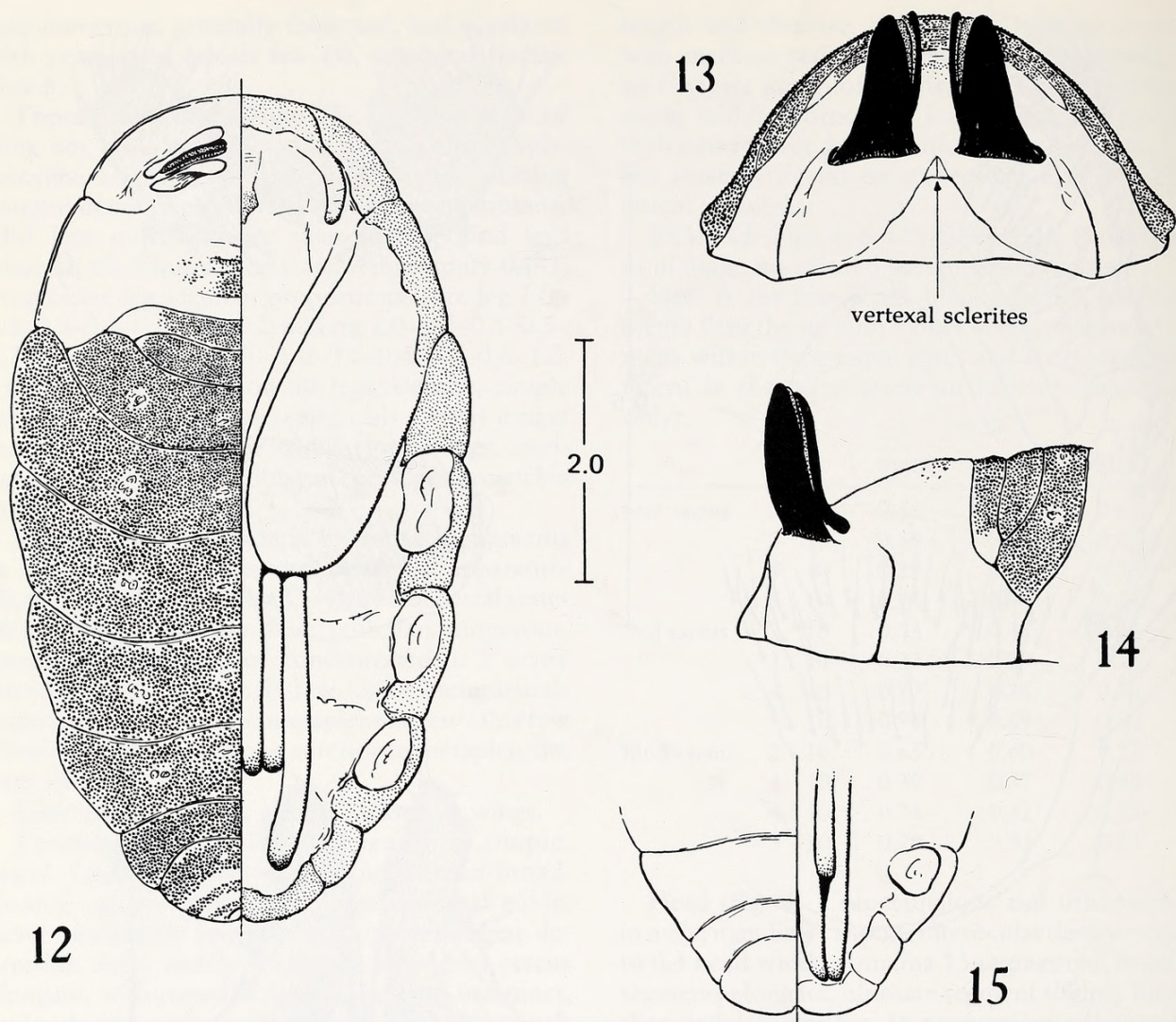
Sensilla. Setiform groups on thoracic segments as follows: acrostichals and supraalars apparently absent; preepisternals few (2-5); dorsocentral series complete; prescutellars few; scutellars numerous, general (not concentrated in a dense lateral group); a single episternal; metapleurals numerous (13-16); suprametapleurals few (4); a single seta also in membrane anterior to metapleuron. Legs generally lightly setate; a dense setal mat on inner surface of mid trochanter (not present in male).

Abdomen. Elongate, as in male.

Terminalia (Fig. 11). Sternite VIII lightly scler-



Figures 7-11. *Aposonalco amoyote*, terminalia of adults (male in dorsal aspect). 7. Genital capsule and gonostyli. 8. Medial genitalic structures. 9. Cerci and inner arms. 10. Inner view of right outer gonostylus. 11. Female, ventral aspect.



Figures 12-15. *Aposonalco amoyote*, pupa. 12. Entire female (dorsal left, ventral right). 13. Anterior portion, frontal aspect. 14. Anterior portion, lateral aspect. 15. Posterior portion of male.

otized throughout, anterior portion a bow-shaped, ligulate piece, broadly lobate posteriorly; medial depression deep, widely V-shaped; internal sclerotization rectangular; VIIIth sternite lobe rounded. Hypogynial plate internally complex, with median folds, base slightly wider than lobes; lobes simple, elongate, with a few minute microtrichia apically, ventral division undeveloped. Anterior margin of gonotreme ribbed. Stirrup-shaped plate present. Spermathecae three, equal in size and shape, asymmetrically elongate ovoid; necks absent, duct membranous for a short distance from corpus, thence a smooth, straight, sclerotized tube.

Sensilla. Sternite VIII with medium to long setiforms laterally. Hypogynial plate and lobes of sternite VIII non-setate. Tergite X with two to three long setiforms apically. Sternite X with four small, short setiforms submedially. Distal two-thirds of corpora of spermathecae set internally with short, straight setae with well-developed alveoli. Tubular sensilla present over entire dorsal portion of cercus, from apical lobes to base.

PUPA (Figs. 12-15). Integument. Border terminate, sharply underfolded and ventrally sclerotized

narrowly on entire periphery. Papillose dorsally; absent from thorax except for small field medioposteriad on scutum, medial only on metathoracic tergite; abdominal papillae evenly spaced, close set. Individual papillae small, subequal in diameter throughout, slightly oval in outline shape (approximately 16×20 micra), non-spiculate.

Size. Medium for family. Measurements, male ($N = 10$): body length 6.0 (5.7-6.4), width 3.4 (3.0-3.6); female ($N = 10$): body length 6.6 (6.3-7.0), width 3.6 (3.4-3.9). Male slightly smaller (0.85) than female.

General. Outline shape oviform, L/W both sexes = 1.8. Margin of thorax smoothly continuous with abdomen (not abruptly narrowed). Anterior division small in relation to posterior (HM/TA male and female = 0.3). Dorsum of abdomen convexly rounded, cross section hemiovate; sides slightly inclined. Dorsal sclerites: cephalic sclerite an equilateral triangle, dorsal portion divided into two small vertexal sclerites; margin slightly reflexed. Branchial sclerite broad, evenly rounded. Anterior margin and sides of scutum steeply inclined, former in line with anterior branchial plates. Suture separating meta-

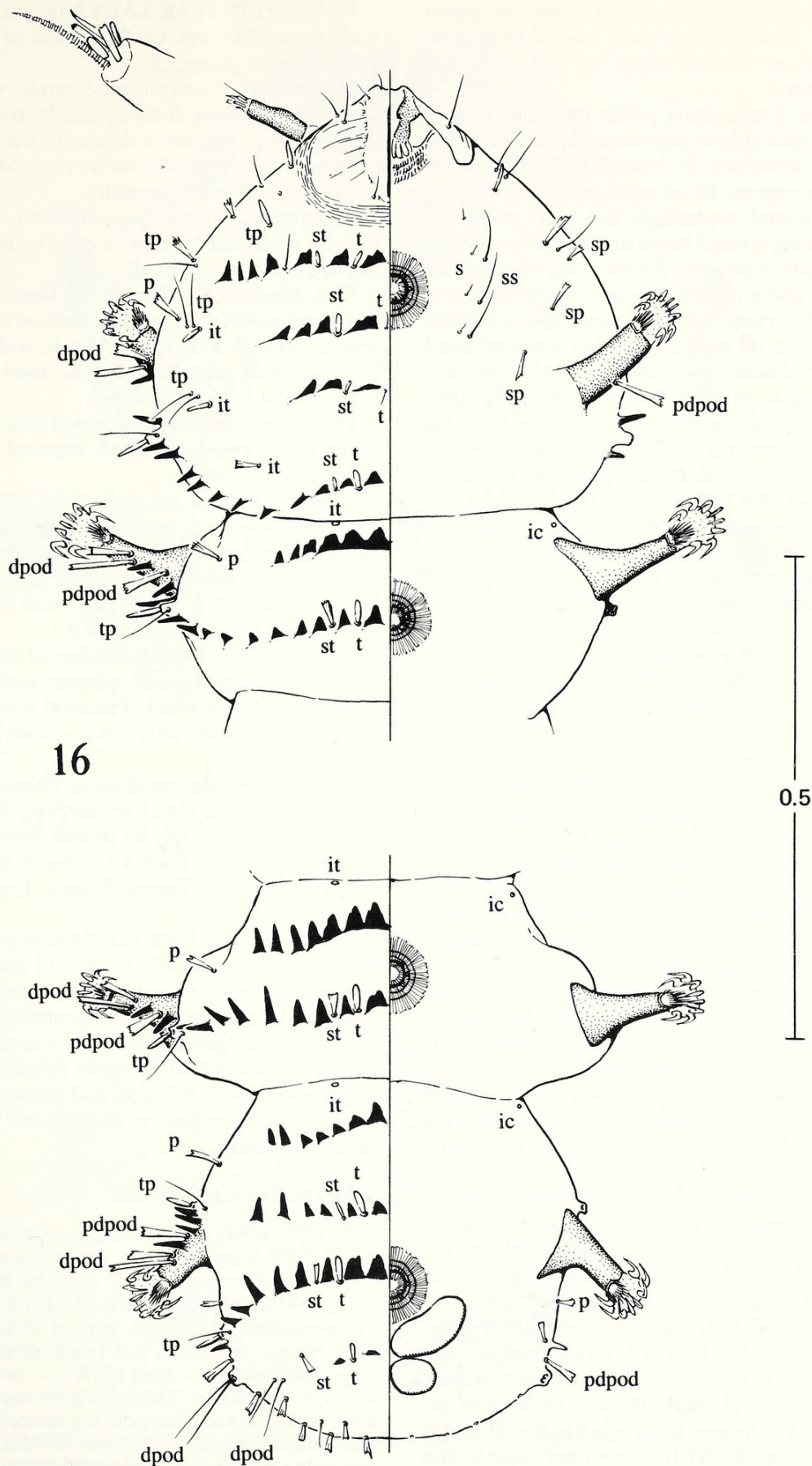


Figure 16. *Aposonalco amoyote*, first instar larva (dorsal left, ventral right). Significant primary setae labeled: it—intertergal, ic—intercalary, t—tergal, st—subtergal, tp—tergopleural, pdpod—pre-dorso-pseudopodal, dpod—dorso-pseudopodal (“geminant”), p—pleural, sp—sternopleural, ss—substernal, s—sternal.

thoracic from abdominal tergite I smoothly curved at midline. Abdominal tergites smoothly convex middorsally (no medial ridges or nodes); lateral margins entire.

Branchiae. Erect; outer plates rigid and heavily sclerotized; inner plates narrower, thinner and flexible. Plates compact; in frontal aspect all plates slightly convergent. Bases of outer plates slightly expanded, lateral expansions the more extensive and converging around bases of inner plates. Outer plates elongate, with acute apices, somewhat curved; inner plates also elongate, similar to outer in shape.

Ventral Sclerites. Antennal cases short, slightly exceeding base of wing pad, other cases of head appendages obscure; leg cases of both sexes unequal in length: in male fore and hind leg long, coterminate, mid leg shorter; in female hind leg long, mid and fore legs short and coterminate. Three adhesive discs (on abdominal segments IV–VI).

FIRST INSTAR LARVA (Fig. 16). Based on two specimens mounted on slides in Hoyer's medium (CLH 91-52, 91-53). Body form cylindrical. Outline shape of anterior division ovate.

Integument. Dorsum poorly sclerotized. Corrugations distinct, mostly irregular. Venter uncorrugated; pseudopods sclerotized.

Size. Large for the family. Measurements of two available specimens: body length 1.6 and 1.4, head capsule length 0.17, antenna 0.06.

Head. Dorsal sclerites weakly developed laterally, bounded posteriorly by series of concentric corrugations. Egg burster distinct. A single, short segment in antenna.

Trunk. Two transverse rows of flattened, slightly irregular denticles on segments II–VI, a single row on segments I and VII–VIII, of VIII weakly developed; otherwise without convexities, projections, tubercles, or large plates. Pseudopods and dorsal pseudopods combined into single conical structure; apices of each with small plate with radiating spines and eversible membrane bearing eight small sclerotized hooks. Lateral gills absent.

Anal Division. Dorsal pseudopod of segment VII undeveloped, a small tubercle. No terminal incision. Terminal lobe broadly and smoothly arcuate throughout.

Primary Sensilla. Medium setiform, elongate oviform, and narrow foliose forms with irregular apices; arranged as figured (Fig. 16). Head and antennal setae as figured, the latter a group of six varied types, longest setiform. Trunk sensilla as follows: tP submedial; stP mediolateral, slightly laterad of stM–T; tpM–T paired, equal long slender setiforms; tpI–VII unequal (inner setiform at base of tubercle, outer elongate oviform on apex of tubercle); tpI–VI distant from stI–VI; tI–VII larger than stI–VII; dpodI–VI foliose (inner shorter and wider) on distal third of combined dorsal pseudopod-pseudopod; dpodVII on small tubercle; itI–VI obscure, faintly visible alveoliforms without setae; icI–VI far laterad, alveoliform; isI–VI indiscernible. Terminal setae few, short.

FOURTH INSTAR LARVA (Fig. 17). **General.** Body form lobiform. Outline shape of anterior division subhexagonal.

Integument. Dorsum moderately well sclerotized. Corrugations distinct, mostly irregular. Small (segment I) to extensive denticulate areas at bases of pseudopods ventrally; entire terminal border extensively denticulate ventrally.

Coloration. Trunk pigmentation even, light-brown; sclerotized portions pale brown, terminal border lightly pigmented.

Size. Medium for the family. Measurements (N = 10; prepupal larvae with branchiae visible): body length 7.3 (6.9–8.0), head capsule width 1.9 (1.8–2.0), antennal segment lengths, basal 0.13 (0.11–0.14), apical 0.15 (0.14–0.17).

Head. Two distinctly separated lenses in eye. Antenna short, two-segmented, segment proportions 1.0–1.2.

Trunk. Dorsum of abdominal segments I–VI smoothly rounded, without convexities, projections, tubercles, or large plates; numerous small platelets in positions as figured. Pseudopods short, broad, truncate. Ventral gills with six filaments (sometimes five on segment VI).

Anal Division. Dorsal pseudopod small, directed obliquely posterolaterad; plantar surface present. Terminal incision small. Terminal lobe short, posterior margin broadly and smoothly arcuate throughout.

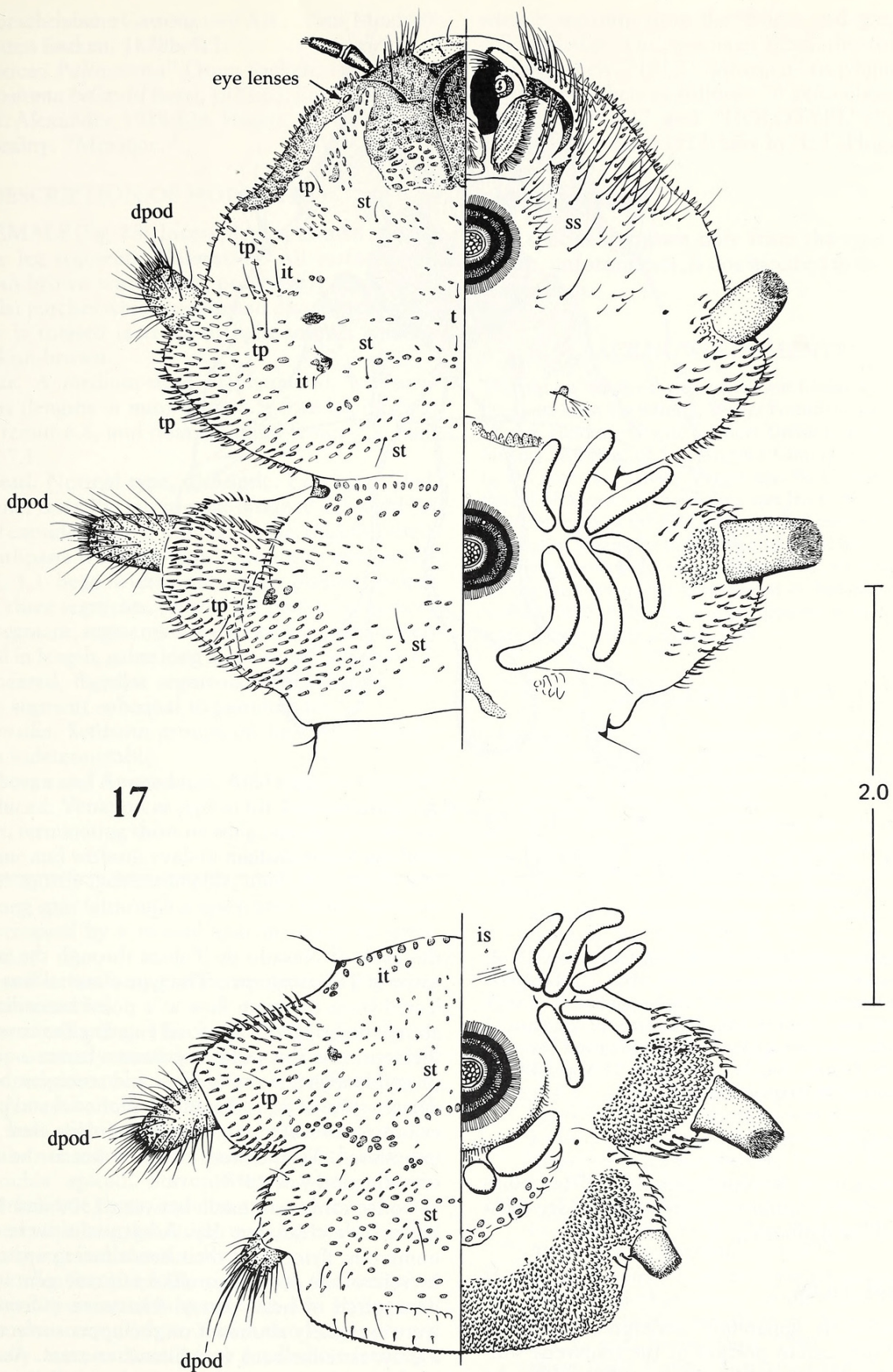
Primary Sensilla (medium setiforms unless otherwise described). tM–T in line, very close to midline. tpM present. tpI–VI distant from stI–VI, tI–VII setiform. stM–T weak to absent. Inner tpII–VI set well anteriad. Terminal setae few and short, ventral.

Dorsal Modified Sensilla. Minute oviforms dorsad, becoming gradually larger and more falciform laterad on trunk segments. All elongate oviform and small on head capsule, generally and evenly spaced in positions as figured. Circumlateral series poorly developed, of elongate falciforms. Sensilla of pseudopods all setiform and generally dispersed dorsally, none ventrally. Background field of fine setiforms absent.

SPECIMENS EXAMINED

TYPES. HOLOTYPE MALE (point mounted on pin), ALLOTYPE female (pharate, ex associated pupal skin, dissected and mounted whole on slides Nos. CLH 91-45H, 91-45W, 91-45B, 91-45F; 25 MALE PARATYPES (point mounted): MEXICO, State of Mexico, southeast slope Nevado de Toluca, Río Temascaltepec, Temascaltepec, 1650 meters, 5 April 1991, C.L. and J.N. Hogue and S. Ibáñez-Bernal. Type specimens deposited as follows: Holotype and allotype in the Instituto de Biología, Universidad Nacional Autónoma de México (UNAM); one male paratype each in National Museum of Natural History, Washington, D.C. (USNM), American Museum of Natural History, New York (AMNH); 22 paratypes in Natural History Museum of Los Angeles County (LACM).

OTHER MATERIAL. Same data as types [238 pupae and pupal skins, 229 larvae]. Deposited as follows: all in



17

Figure 17. *Aposonalco amoyote*, fourth instar larva (dorsal left, ventral right). Significant primary setae labeled as in Figure 16; is—intersegmental.

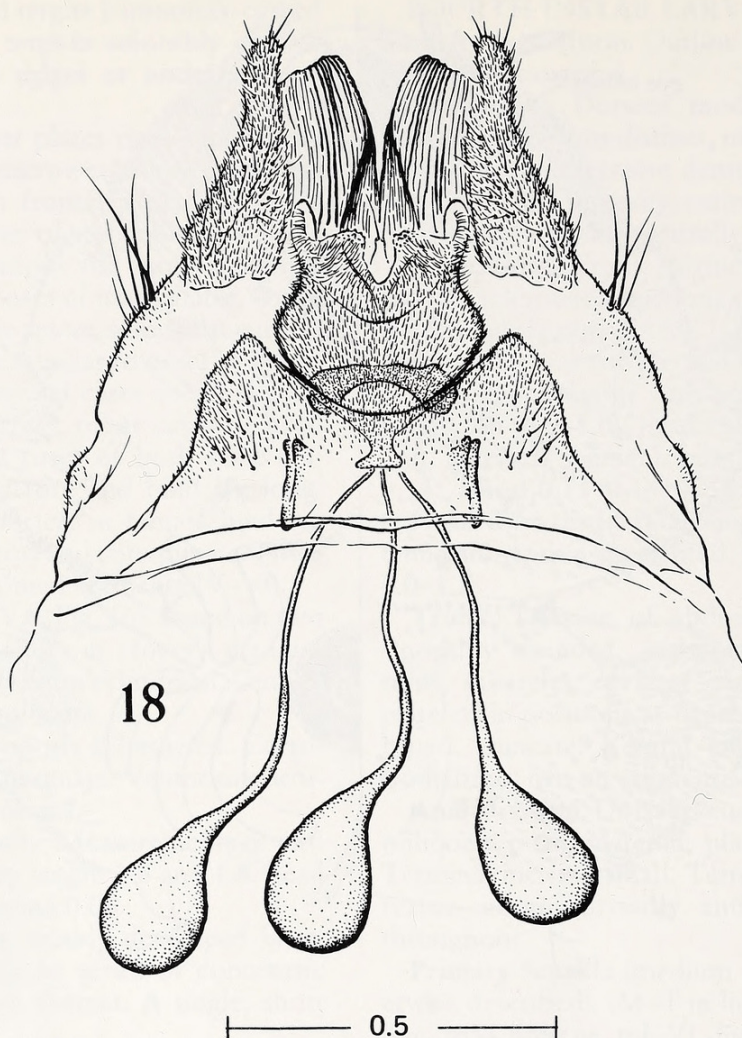


Figure 18. *Paltostoma bellardii* Bezzi. Female holotype, ventral view of terminalia.

LACM except one larva and one pupa each in USNM, AMNH, and UNAM. Same locale as types, 11 May 1991, S. Ibáñez-Bernal, C. Martínez-Campos, and H. Huerta [1 pupa, 39 larvae, LACM]. MEXICO, State of Veracruz, 3 km from Xico, between Municipios of Xico and Teocelo, Cascada de Texolo, Río de La Antigua, 25 May 1991, S. Ibáñez-Bernal [78 larvae, LACM].

ETYMOLOGY

The species name is from Nahuatl ["atl" (combining form "a") = water + "moyotl" = midge (Hispanicized for euphony)].

DISTRIBUTION

The species is apparently widespread, at least through the eastern portion of the transverse volcanic belt of central Mexico, as indicated by the disjunct collections at the type locality (State of Mexico) and one site in central Veracruz State.

REMARKS

At 1650 meters the Río Temascaltepec is a permanent, 6–7th order stream flowing southwest from

the peak of Nevado de Toluca through the small town of Temascaltepec. The type material was collected from the main flow at a point immediately above the bridge on the road entering the town to the south. At this point the stream forms a series of rapids with a stony bottom and emergent boulders. In spite of considerable recreational and power use of its waters, the stream remains clear and unpolluted. Temperature of the water at the time of collection was 18° C.

Collections were made between 1300 and 1430 hours on a clear, hot day. Adult males were very numerous, flying with their heads facing upstream in front of the downstream faces of emergent boulders, often in heavy spray. Immature individuals were extremely abundant on the upper surfaces of a gray, slatelike rock in whitewater areas. Associated with the new species were abundant larvae of an undescribed species of *Paltostoma* and the psychodid genus *Maruina*.

Paltostoma bellardii Bezzi

Paltostoma superbiens ? Osten Sacken, 1878a:17, 218.

"unbeschriebene Gattung und Art . . . aus Mexico"
Osten Sacken, 1878b:411.
"mexican *Paltostoma*" Osten Sacken, 1895:166.
Paltostoma bellardii Bezzi, 1913:63. Edwards, 1929:
68. Alexander, 1958:824. Hogue, 1971:8.7. Type
locality: "Mexique."

REDESCRIPTION OF HOLOTYPE

FEMALE (Fig. 18). Incomplete, specimen missing some leg segments. **Coloration.** All surfaces yellowish-brown with silvery pollinosity, forming irregular patches which appear and disappear as specimen is rotated in front of light source; antenna blackish-brown.

Size. A medium-sized blepharicerid. Measurements (lengths in mm): wing 8.5; fore leg missing; mid femur 6.6, mid tibia 6.7; hind femur 7.8, hind tibia 7.1.

Head. Normal type, dichoptic. Eyes undivided, disjunct dorsally, interocular distance 0.3 width of head capsule. Ocellar triangle sessile, slightly raised. Mouthparts well developed: proboscis moderately long, 1.1 head width; mandibles present; palpus with three segments, sensory pit present at apex of last segment, segments 2–3 elongate, approximately equal in length; galea long and curved. Antenna 15-segmented, flagellar segments barrel-shaped, ultimate segment subequal to penultimate.

Sensilla. Setiform groups on head and mouthparts indeterminate.

Thorax and Appendages. Anal angle of wing not produced. Venation as typical for Apistomyiini; 1A short, terminating short of wing margin; membrane hyaline and without evident microtrichia. Leg characters mostly indeterminate, hind tibia with a single long spur (although a space next to its base may be occupied by a second spur in complete specimens).

Sensilla. Setiform groups on thoracic segments indeterminate.

Terminalia (Fig. 18). Sternite VIII narrowly lobate posteriorly, medial depression shallow, widely U-shaped; internal sclerotization hour-glass-shaped; VIIIth sternite lobe acute. Hypogynial plate quadrate, base slightly wider than lobes; lobes with finger-like ventral division densely set with long microtrichia apicad. Stirrup-shaped plate present. Spermathecae three, equal in size and shape, flask-shaped with long, gradually tapering necks leading directly to membranous ducts.

Sensilla. Sternite VIII with short, fine setiforms on lateral portion of lobe only (14–15). Hypogynial plate non-setate. Tergite X with two long setiforms apically. Sternite X with four small short setiforms submedially.

TAXONOMY

The exact locality and other information concerning the collection of the holotype are unknown. The specimen in the Torino Museum is in fair condition, although lacking several leg segments; one

wing is separate from the thorax and glued to a celluloid slip. The specimen bears the following original labels: "181." "Mexique" to which I have added two labels as follows: "♂ genitalia/on slide no:/CLH 91-82" and "HOLOTYPE"/*Paltostoma bellardii*/Bezzi 1913/affix by/C.L. Hogue '91."

DISTRIBUTION

The species is known only from the type locality which, unfortunately, is not specified in the original description.

ACKNOWLEDGMENTS

The trip on which the new genus was found was financed by grants from the Ralph J. Weiler Foundation and Taylor Science Fund of the Life Sciences Division of the Natural History Museum of Los Angeles County. I am grateful to Dr. José G. Palacios Vargas and Biol. Sergio Ibáñez-Bernal of Mexico City, and my son James N. Hogue, for their company in the field and logistical assistance on that trip and to Ibáñez for providing additional material. I also greatly appreciate the cooperation of Dr. Antonio Rolando for the loan of the holotype of *P. bellardii* which is in the Museo di Zoologia, Dipartimento di Biologia Animale, Università di Torino, Italy.

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Received 8 November 1991; accepted 16 March 1992.



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<https://doi.org/10.5962/p.208162>.

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