

## NEOTROPICAL MIRIDAE, CLIX: TWO NEW SPECIES OF *ZANCHISME* KIRKALDY, 1904 (Pilophorini: Hemiptera)<sup>1</sup>

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(With 10 text figures)

The genus *Zanchisme* Kirkaldy was recently reviewed by Maldonado-Capriles (1966, Proc. Ent. Soc. Wash., 68:21-24). *Zanchisme illustris* Reuter from Jamaica was redescribed and illustrated and comparative notes concerning the second species of the genus, *Z. dromedarius* (Reuter) from Venezuela, were given. Two additional undescribed forms from southern Mexico have since been found, bringing to four the total number of species known. The illustrations accompanying the descriptions were prepared by Mr. Paulo Wallerstein and Dr. J.C.M. Carvalho.

### *Zanchisme mexicanus*. n. sp.

(Figs. 1-5)

Characterized by having two large tubercles on anterior portion of pronotum,

a silver band of scales running across base of scutellum, black semierect hairs on the clavus and endocorium and by the structure of the male genitalia.

**MALE:** Length, 2.92 mm; width, 0.96 mm. Head length, 0.42 mm; head width through eyes, 0.68 mm; vertex width, 0.32 mm. Length of antennal segment I, 0.20 mm; II, 0.52 mm; III, 0.30 mm; IV, 0.30 mm. Pronotal length, 0.74 mm; width, 0.92 mm. Cuneal length, 0.38 mm; width, 0.40 mm.

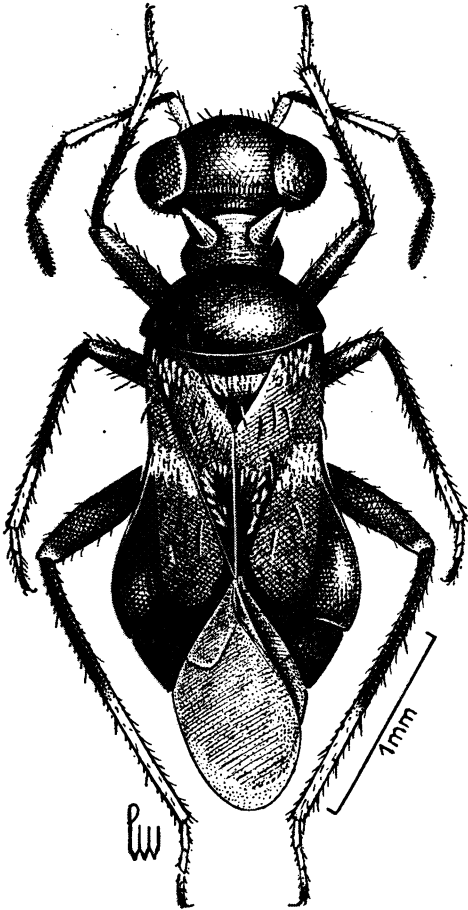
General coloration brown to brownish black; head with eyes reddish brown; vertex, gula and frons brownish black, remainder light brown with apex of clypeus reddish; rostrum light, apex fuscous; antennal segment I pale with fuscous line along outer margin, another running diagonally across upper side from base to apex, line faint apically, segment II light, fuscous at base on outer margin, segment III dark fuscous, light at base, segment IV dark fuscous. Pronotum, mesoscutum and scutellum dark brownish black; clavus dark brown, corium brownish black, apical area of exocorium and embolium shining brown

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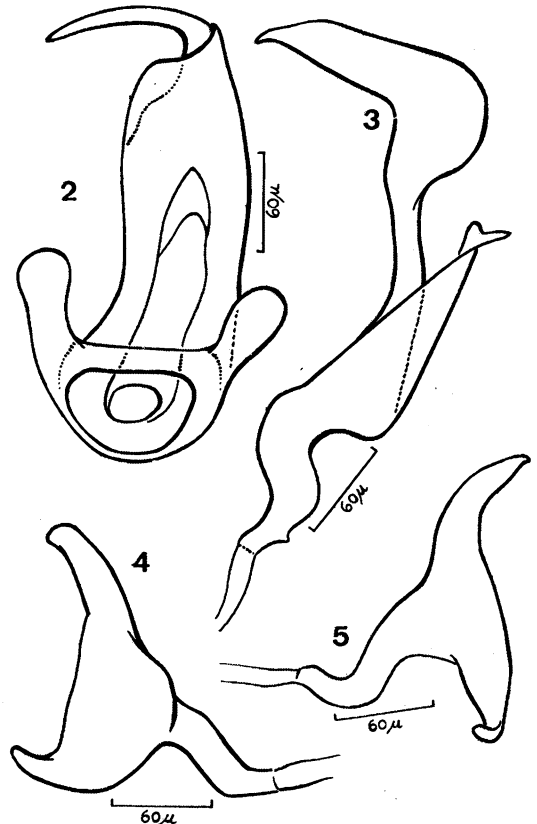


*Zanchisme mexicanus* n. sp. Fig. 1 — female, allotype.

with slight reddish tint, cuneus brown with reddish tint, membrane dark fuscous except along basal margin. Underside of thorax dark brown; front coxa light basally, dark fuscous apically, mid and hind coxae pale, occasionally reddish, trochanters pale, front femur dark castaneous, mid and hind femora pale basally and somewhat pale at apex, remainder dark brownish black, tibiae dark brownish black basally, pale apically, tarsi light.

Vertex slightly convex, frons almost flat; vestiture of head sparse with short semierect hairs and with a few erect fine light hairs on vertex; rostrum surpassing front coxae, not reaching middle of mesosternum. Collar indistinct; anterior

portion of pronotum with two prominent pointed tubercles directed upward to level of vertex of head, anterior margin of pronotum between and in front of tubercles slightly elevated but well below posterior margin of vertex of head; vestiture consisting of scattered light fine decumbent hairs; base of scutellum with band of flat silvery scales more or less continuous with similar band running diagonally across base of clavus, second irregular band of silvery scales running across endocorium and onto clavus about 1/3 of distance from apex; remaining vestiture of hemelytra and scutellum consisting of scattered short light decumbent hairs and black semierect setiform hairs on endocorium and clavus; clavus and endocorium pruinose except at apex of latter, remainder of corium and cuneus shining.



*Zanchisme mexicanus* n. sp. Fig. 2 — penis of male, holotype; fig. 3 — left paramere; fig. 4 — right paramere, ventral view; fig. 5 — right paramere, dorsal view.

Genitalia: Penis (Fig. 2) curved and pointed apically. Left paramere (Fig. 3) bifurcate as shown in illustration. Right paramere (Figs. 4-5 also bifurcate, recurved at one apex.

**FEMALE:** Length, 3.12 mm; width, 1.08 mm. Head length, 0.40 mm; head width through eyes, 0.82 mm; vertex width, 0.44 mm. Length of antennal segment I, 0.18 mm; II, 0.54 mm; III, 0.34 mm; IV, 0.34 mm. Pronotal length, 0.72 mm; width, 0.84 mm. Cuneal length, 0.40 mm; width, 0.40 mm.

General coloration lighter than male; head uniformly brown except for reddish traces on gena and clypeus. Pronotum dark brown, mesoscutum slightly darker, scutellum brownish black; clavus and base of endocorium brown, remainder of corium and cuneus shining dark brownish black to black; membrane uniformly dark fuscous. Abdomen shining dark brownish black to black.

Vestiture and seructure similar to male.

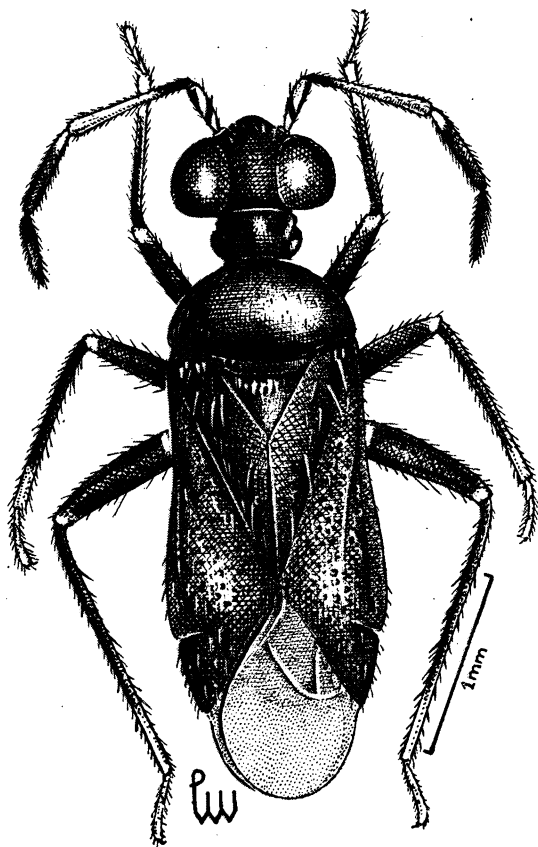
**HOLOTYPE:** male, Mexico: Oaxaca, 11.6 miles west of Jalapa del Marques, July 12, 1971, taken at light, Clark, Murray, Hart, Schaffner. Deposited in the *United States National Museum*, Washington, D. C. **ALLOTYPE:** female, same data as holotype. Deposited in the *United States National Museum*.

The tubercles on the anterior portion of the pronotum are larger than on any other species of the genus.

***Zanchisme inermis* n. sp.**

(Figs. 6-10)

Characterized by the lack of tubercles on anterior portion of pronotum, the presence of a silver band of scales across base of scutellum, light semierect hairs on clavus and by the structure of the male genitalia.



*Zanchisme inermis* n. sp. Fig. 6 — male, holotype.

**MALE:** Length, 3.20 mm; width, 1.04 mm. Head length, 0.32 mm; head width through eyes, 0.78 mm; vertex width, 0.24 mm. Length of antennal segment I, 0.24 mm; II, 0.60 mm; III, 0.42 mm, IV, 0.34 mm. Pronotal length, 0.72 mm; width, 0.90 mm. Cuneal length, 0.38 mm; width, 0.34 mm.

General coloration light brown to dark brown or castaneous; head with eyes dark brownish black; vertex and frons dark brown, remainder light brown with gula, gena and apex of clypeus reddish; rostrum light, apex fuscous; antennal segment I pale with reddish line along outer margin, another running diagonally across upper side of base and continuing along inner margin to apex, segment II light, fuscous at base on outer margin, segments III and IV dark fuscous. Pronotum uniformly dark

brown; mesoscutum and scutellum slightly darker than pronotum, scutellum lighter apically; hemelytra brown, embolium and adjacent area of exocorium shining castaneous apically, cuneus castaneous or reddish, membrane light fuscous, lighter along basal margin. Underside of thorax brown; front coxa red on apical half, light basally, mid and hind coxae completely pale, trochanters pale, front femur castaneous, lighter near apex, mid and hind femora castaneous to reddish with basal half colorless and hyaline, tibiae brown to castaneous, lighter apically, tarsi light.

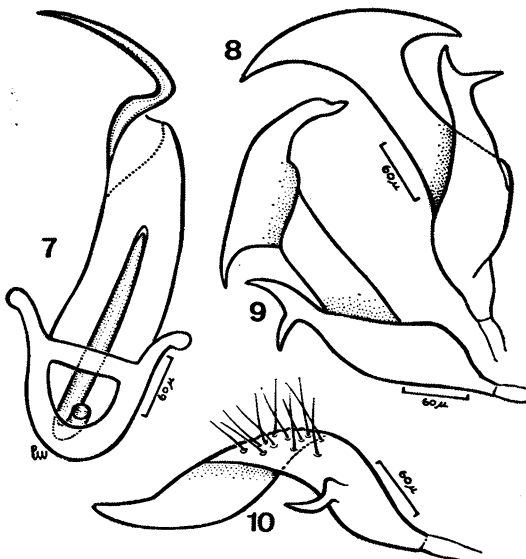
Vertex slightly convex with two inconspicuous shallow depressions along each eye, frons almost flat; vestiture of head sparse with short semierect hairs and with a few erect fine light hairs on vertex; rostrum almost reaching rear of mesosternum. Collar indistinct; anterior portion of pronotum almost completely lacking trace of pair of tubercles; vestiture consisting of scattered light fine decumbent hairs; base of scutellum with wide band of flat silvery scales more or less continuous with similar band running diagonally across base of

clavus, second irregular band of silvery scales running across endocorium and onto clavus about 1/3 of distance from apex; remaining vestiture on hemelytra and scutellum consisting of scattered short light erect or semierect setiform hairs, the latter restricted more or less to clavus; clavus and endocorium pruinose except at apex of latter, remaining part of corium and cuneus shining.

Genitalia: Penis (Fig. 7) with elongate apex curved and pointed. Left paramere (Figs. 8-9) bifurcate as shown in illustration. Right paramere (Fig. 10) flattened, pointed at apex and with spinous structure arising towards base.

HOLOTYPE: male, La Ventosa, 72 mi. E., Oax., Mex., VII-21-63, J. Doyen Collector. From the California Insect Survey, deposited in the collection of the *California Academy of Sciences*, San Francisco, California. Loaned through the courtesy of Dr. J. A. Powell.

In contrast with the other members of the genus, this species lacks almost any trace of the two tubercles found on the anterior portion of the thorax.



*Zanchisme inermis* n. sp. Fig. 7 — penis; fig. 8 — left paramere, dorsal view; fig. 9 — left paramere, ventral view; fig. 10 — right paramere.

#### KEY TO THE SPECIES OF *ZANCHISME* KIRKALDY

1. Head vitreous; note depressed above .....  
..... *dromedarius* (Reuter) (Venezuela)
- Head not vitreous; may or may not be depressed above ..... 2
2. Head depressed; silvery band of scales not complete across scutellum; apex of antennal segment III pale ..... *illustris* Reuter (Jamaica)
- Head rounded above; silvery band of scales continuous across scutellum; apex of antennal segment III fuscous ..... 3
3. Anterior portion of pronotum with two prominent pointed tubercles; semierect setae on clavus and corium black .....  
..... *mexicanus* n. sp. (Mexico)

Anterior portion at pronotum without tubercles;  
semierect setae on clavus light .....

..... *inermis* n. sp. (Mexico)

### SUMMARY

The authors describe two new species of *Zanchisme* Kirkaldy, *Z. mexicanus* n. sp. and *Z. inermis* n. sp., from the state of Oaxaca in Mexico. A key for the separation of the four known species of the genus is provided. Illustrations of the insects and the male genitalia are included.

### BIBLIOGRAPHICAL REFERENCES

- KIRKALDY, G. W., 1904, Bibliographical and nomenclatorial notes on the Hemiptera — n.º 3. *The Entomologist* 37: 280.
- CAPRILES, J. M., 1966, A note on *Zanchisme* Kirkaldy (Hemiptera, Miridae). *Proc. Ent. Soc. Wash.* 68: 21.
- REUTER, O. M., 1892, Voyage de M. F. Simon au Venezuela (décembre 1887-avril 1888) 20e Mémoire. Hémiptères, Hétéroptères 1re partie. Capsides. *Ann. Soc. Entr. Fr.* 61: 402.
- REUTER, O. M., 1907, Capsidae novae in Insula Jamaica mense Aprilis 1906 a D. E. P. van Duzee collectae. *Ofv. F. Vet. Soc. Forh.* 49(5): 11.