A NOTE ON ZANCHISME KIRKALDY

(HEMIPTERA: MIRIDAE)

J. Maldonado-Capriles, Department of Biology, College of Agriculture and Mechanic Arts, Mayagüez, Puerto Rico.

The author wants to thank Dr. T. H. Farr, at the Institute of Jamaica, at Kingston, for the loan of most of the material treated in this paper. We are also grateful to Dr. R. C. Froeschner, at the United States National Museum, for comparing our material with that under his care. This paper was made possible through Grant No. NSF-G15891, from the National Science Foundation. In the measurements that follow 20 units are equivalent to 0.5 mm.

Zanchisme belongs to the myrmecomorphic orthotyline mirids of the tribe Pilophorini. It was established by Kirkaldy in 1904 with Schizonotus dromedarius Reuter 1892 as type species. At present it includes only Z. illustris Reuter and Z. dromedarius Reuter.

In Carvalho's key to the mirid genera of the world (1955), page 80, Zanchisme is included in couplet 15. Because Carvalho overlooked the scale-like hairs on the hemielytra of members of this genus his key has to be corrected as follows:

•		
11.	Hemielytra with scale-like or transversal silvery scale-like pubescent bands	2
	Hemielytra without scale-like hairs or silvery bands1	5
12.	Pronotum noticeably constricted at middle, anterior lobe with three	
	tubercles (Jamaica, Venezuela) Zanchisme Kirkald	y
	Pronotum not constricted, anterior lobe without tubercles 1	
13.	Hemielytra with long erect bristles and scale-like hairs; pronotum not	
	strongly narrowed in front1	4
	Hemielytra with semiadpressed pubescence plus scale-like hairs; prono-	
	tum strongly narrowed in front (Bolivia) Lepidotaenia Poppiu	S
14.	Pronotum covering mesoscutum and part of scutellum (Central and North	
	America) Renodaeus Distan	ıt
	Pronotum not covering mesoscutum (North America)	
	Pilophoropsis Poppiu	S
15.	Pronotum noticeably constricted at middle; femora usually somewhat curved1	6
	Pronotum not noticeably constricted at middle; femora straight 2	

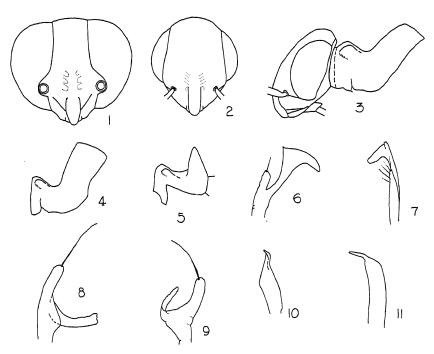
Zanchisme Kirkaldy

Schizonotus Reuter, 1892. Ann. Soc. Ent. Fr. 61:401.

Zanchisme Kirkaldy, 1904. Ent. 37:280.

Schistonotellus Reuter, 1905. Ofv. F. Vet. Soc. Forh 47:32.

Orthotylinae, Pilophorini. Sparsely haired; pronotum and legs with sparse semidecumbent pilosity, hemielytra and sometimes scutellum with scale-like silvery pubescence in addition; pronotum shiny, smooth, strongly constricted before middle, anterior lobe narrower than head, with three tubercles on anterior margin; posterior lobe gibbose, higher and wider than anterior.



Zanchisme illustris Reuter. 1. Head of male, frontal view; 2. Head of female, frontal view; 3. Head and pronotum, female, lateral view; 4. Pronotum, male, lateral view; 5. Pronotum, female ? nymph, lateral view; 6. Right clasper, ventral view; 7. Right clasper, outer lateral view; 8. Left clasper, dorsal view; 9. Left clasper, outer lateral view; 10. Tip of aedeagus, outer lateral view; 11. Tip of aedeagus, dorsal view.

Frons inconspicuously striated above clypeus, vertex smooth; eyes relatively large in males, smaller in females, reaching posterior margin of head. Antenna with second segment longest, first shortest, segments of subequal thickness and somewhat subfusiform; base of antenna partially surrounded by eyes in males, about midway from eyes to clypeus in females. Rostrum slender, thinner than antenna; apex reaching to before middle coxa; first segment partially hidden by bucculae. Hemielytra opaque, costal margin concave; embolium widening to apex; cuneus longer than wide, inner margin semicircular; with sparse long semi-decumbent pubescence and silvery scale-like hairs arranged in bands and stripes on clavus and corium; membrane rounded apically, two-celled. Mesoscutum exposed; scutellum triangular, with or without silvery scale-like hairs. Coxae and trochanters well developed; mid- and hindfemora slightly curved, forefemora straight. Abdomen constricted at base, gradually widening from base to last or genital segment.

Type of genus Schizonotus dromedarius Reuter 1892.

Zanchisme illustris Reuter.

Zanchisme illustris Reuter. Ofv. F. Vet. Soc. Forh. 49 (5):11.

Male—general body color brown; first three antennal segments pale brownish, first brownish along inner margin, fourth brownish. Beak shiny brown. Forecoxa brownish, second and third grayish-white. Trochanters grayish-white. Femora brownish, mid and hind grayish-white at base. Tibiae brownish, paler apically. Tarsi pale brownish basally, darker apically. Thorax dorsally and ventrally shiny brown, posterior lobe darker than anterior, osteolar peritreme grayish-white. Mesoscutum and scutellum brownish. Hemielytra with embolium and cuneus reddish brown; clavus, corium, and membrane brownish; two transverse bands of silvery scale-like hairs on anterior half of pronotum, four or five transverse bands on clavus connected by a diagonal stripe along anal margin; cells of membrane grayish-white. Abdomen dark brown.

Head broader than long (29:17), nearly twice as wide as anterior lobe of pronotum (29:15). Eyes relatively large; interocular space above and in front nearly half the width of eye (6:11 and 7:11 respectively), as in figure 1. Antennal segments as follows: I, 8; II, 25; III, 15; IV, 15; very finely and inconspicuously pilose. Anterior lobe of pronotum dorsally with three conical elevations along anterior margin; posterior lobe gibbose, as in figure 4, posterior margin roundly convex. Mesoscutum exposed; scutellum triangular, wider than long (17:12), tranversely rugose. Exposed genital structures as in figures 6 to 11. Overall length 3.0 mm.

Female—general coloration as in male, dark and lighter parts more contrasting. Second antennal segments reddish brown along inner margin. First visible abdominal segment whitish.

Eyes smaller than in male, interocular space over one and one-half times as wide as width of eye on vertex (13:8), as in figure 2. Pronotum with constriction and elevations as in male, posterior lobe roundly gibbose. Hemielytra with overall color and pattern of silvery scales as in male; clavus, corium, and membrane darker than in male. Legs as in male. Antennal segments: I, 6; II, 22; III, 12; IV, 12. Length 3.0 mm.

Nymph, instar unknown, female (?), general coloration as in the adult stage; body shiny brown; first three antennal segments straw-colored, first and second segments with inner margin reddish, last segment brown. Legs brown, mid and femora grayish-white basally, paler apically.

Eyes as in the female adult; bucculae not well developed; antenna with second segment longest, first shortest, segments of subequal thickness and slightly subfusiform. Pronotum strongly constricted after middle; anterior lobe with three conical lobes on anterior margin, the median not well developed; posterior lobe shorter and narrower than anterior, upwardly produced into a tall cone as in figure 5. Wing pads extending to second or third abdominal segment; metanotum shortly elevated above wing pads. Length 2.2 mm.

The two known species can be separated as follows:

Z. illustris: second antennal segment uniformly pale brownish, scutellum without scale-like hairs, and elevations on anterior lobe of pronotum less prominent, forming low convexities.

Z. dromedarius: second antennal segment dark brown with yellow apical third, scutellum with a band of scale-like hairs, and elevations on anterior lobe of pronotum more prominent, forming conical elevations taller than diameter of antennal second antennal segment.

Eight specimens at hand: two males, four females, and one nymph:

Jamaica, St. Catherine and St. Andrew Parish; the specimens from St. Catherine associated with *Crematogaster* sp. (Formicidae, Hymenoptera), T. H. Farr collector, in the collection of the Institute of Jamaica, Kingston; one female, from Kingston, T. H. Farr and J. Maldonado-Capriles collectors, on *Ipomea fistulosa*, in the author's collection.

REFERENCES

Carvalho, J. C. M. 1955. Keys to the genera of Miridae of the world (Hemiptera). Bol. Mus. Paraense Emilio Goeldi XI (II): 1-151.

Kirkaldy, G. W. 1904. Bibliographical and nomenclatorial notes on the Hemiptera - No. 3, Entomologist 37:279–283.

Reuter, O. M. 1907. Capsidae novae in Insula Jamaica. Ofv. F. Vet. Soc. Forh 49 (5):11.

TYPE DISPOSITION OF SOME RECENTLY DESCRIBED HEMEROBIIDAE

(NEUROPTERA)

Waro Nakahara has recently published two papers in the Proceedings of the U. S. National Museum (vol. 116, pp. 205-223, and vol. 117, pp. 107-122) on the New World Hemerobiidae. The types of all the new species were deposited in the collection of U. S. National Museum. Unknowingly, however, I had mixed in with material from the National Museum many specimens that had been borrowed from the California Academy of Sciences many years before. To further compound the problem, holotypes of three species were designated from the Academy's material. The holotypes of these three species, Sympherobius brunneus, Nusalala krugeri, and Pseudomicromus fuscatus, have now been returned to the California Academy of Sciences, Golden Gate Park, San Francisco, California.—Oliver S. Flint, Jr., Department of Entomology, Smithsonian Institution, Washington, D. C.