

THREE NEW SPECIES OF CYRTORHINUS FROM NORTH AMERICA (HEMIPTERA, MIRIDAE).*

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Cyrtorhinus balli n. sp.

Suggestive of *insperatus* Knigt., but femora without color stripes; distinguished by the shorter antennal segments and bi-colored aspect of the hemelytra.

♂. Length 2.7 mm., width .7 mm. Head: width .60 mm., vertex .32 mm.; black, shining, a pale spot each side of vertex bordering eye. Rostrum, length 1.05 mm., just attaining posterior margins of middle coxae, yellowish brown, apex fuscous. Antennae: segment I, length .28 mm.; II, .60 mm.; III, .78 mm.; IV, .52 mm.; uniformly black, a trace of pale at tip of second segment. Pronotum: length .26 mm., width at base .69 mm., sides and basal margin broadly sulcate in outline; pale to fuscous and blackish, anterior margin of disk orange yellow. Mesoscutum and scutellum dark fuscous, with orange tint in hypodermis. Dorsum clothed with very pale yellowish to dusky pubescence.

Hemelytra pale and fuscous, inner half of clavus bordering scutellum, apical half of corium, apical half of embolium except tip, and apical half of cuneus fuscous to blackish; membrane rather uniformly pale fuscous, a shade darker on areoles and veins. Ventral surface of body brownish to blackish, venter paler beneath, genital segment shining black. Legs pale to orange colored, apical half of hind femora becoming infuscated, tibiae and tarsi blackish.

♀. Length 2.6 mm., width .91 mm. Head: width .60 mm., vertex .34 mm. Antennae: segment I, length .30 mm.; II, .99 mm.; III, .78 mm.; IV, .47 mm. Pronotum: length .34 mm., width at base .70 mm. Very similar to the male in form and coloration.

Holotype: ♂, July 23, 1926, Jacksonville, Florida (E. D. Ball); author's collection. *Allotype*: same data as the type. *Paratypes*: ♂, 5♀, taken with the types. TEXAS—3♂, Sept. 28, 1929, Presidio (W. L. Awens). ♀, May 19, 1930, Hidalgo County (J. C. Gaines), taken at light, 2♂, Oct. 8, 1918, Anahuac (H. S. Barber); U. S. National Museum. Named in honor of Dr. E. D. Ball to whom the writer is indebted for this and several other new or rare species of Miridae.

* Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.

Cyrtorhinus alboornatus n. sp.

Distinguished by the dark color with basal two-fifths of hemelytra pale whitish, cuneus likewise pale.

♂. Length 2.3 mm., width .8 mm. Head: Width .54 mm., vertex .30 mm.; vertex and frons broadly and evenly convex, the eyes protruding only very little above contour of frons and vertex; black, without pale spots on vertex. Rostrum, length .95 mm., barely attaining posterior margins of hind coxae. Antennae: segment I, length .346 mm., pale to dusky, darker at base; II, 1.03 mm., dark fuscous brown; III, .77 mm., black, IV, .70 mm., black. Pronotum: length .37 mm., width at base .73 mm., lateral margins of disk only very slightly sulcate.

Color dark brownish black, basal two-fifths of hemelytra and entire cuneus pale whitish; bases of femora and distal half of coxae pale to whitish; tibiae and tarsi pale fuscous, spines black. Membrane and veins rather uniformly pale fuscous. Clothed with very fine, short, pale to dusky pubescence.

♀. Length 2.5 mm., width 1.04 mm. Head: width .56 mm., vertex .33 mm. Antennae: segment I, length .30 mm.; II, broken. Pronotum: length .36 mm., width at base .82 mm.; lateral margins of disk distinctly sulcate. Slightly more robust than the male but very similar in coloration.

Holotype: ♂, July 23, 1926, Jacksonville, Florida (E. D. Ball); author's collection. *Allotype*: ♀, June 20, 1914, Dongan's Island, by Staten Island, New York (H. G. Barber); author's collection.

Cyrtorhinus pubescens n. sp.

Allied to *pygmaeus* Zett., but differs in the longer antennal segments and stronger black pubescence; with longitudinal fuscous stripe on pronotum and scutellum.

♀. Length 2.4 mm., width 1.25 mm. Head: width .70 mm., vertex .346 mm. Rostrum, length 1.08 mm., reaching to middle of hind coxae, pale to dusky, apex blackish. Antennae: segment I, length .34 mm., thickness .086 mm., uniformly pale fuscous, nearly blackish on basal constriction, with two prominent black bristles on dorsal aspect; II, .866 mm., thickness .044 mm., clothed with prominent black pubescent hairs, length of some hairs greater than thickness of segment, pale fuscous, darker on base and apex; III, .99 mm., blackish; IV, broken. Pronotum: length .41 mm., width at base .866 mm., basal margin broadly concave, lateral margins slightly sinuate, calli broadly and evenly convex, subconfluent.

Hemelytra abbreviated, translucent, membrane not extending beyond tip of cuneus; dorsum and elsewhere clothed with dusky to blackish pubescence. Color pale to dusky, pronotal disk and mesoscutum pale yellowish, with median longitudinal fuscous stripe which broadens on scutellum to involve apical half; head fuscous to blackish, pale bordering eyes; prothorax except disk, mesopleura and sides of venter distinctly blackish, venter beneath and the sternum pale. Legs pale, basal angles of coxae blackish, tarsi dusky; tibial spines and pubescence black.

Holotype: ♀, August 4, 1925, Wray, Colorado (H. H. Knight); author's collection.