

INTERESTING NEW SPECIES OF MIRIDÆ FROM THE  
UNITED STATES, WITH A NOTE ON ORTHOCEPHALUS  
MUTABILIS (FALLEN) (HEMIP. MIRIDÆ).\*

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*Heterocordylus acaciæ* new species.

Very similar in general form to *malinus* but smaller, black with the hind femora coral red.

♂. Length 5.2 mm., width 1.7 mm. Shape of head, antennæ, and the vestiture of fine yellowish pubescence intermixed with deciduous white tomentose pubescence, very similar to that of *malinus*; black, hind femora coral red with tips fuscous, the basalar plate reddish; genital claspers distinctive of the species, the right clasper long and slender, curved, thus differing from the short and broad right clasper of *malinus*.

♀. Very similar to the male, slightly more robust.

This interesting new species was found breeding on *Acacia constricta* and a white flowering *Acacia* (probably *A. farnesiana*), it being more numerous on the latter plant. The nymphs are very similar to those of *malinus*, having the blackish hind femora, but in size smaller. At the time of collecting, July 7, the nymphs

\* Contribution from the Department of Entomology of Cornell University.

were quite as abundant as the adults. Most of the specimens were collected at a point along the highway among rolling hills, about twenty miles northeast of Valentine, Texas. That part of the country had received recent rains which brought out the plants and insects, a condition not true of most parts of Texas in 1917.

*Holotype*: ♂. July 17, 1917, twenty miles out from Valentine, Texas (H. H. Knight); Cornell University Collection.

*Allotype*: Taken with the type.

*Paratypes*: 21 ♂♂, 10 ♀♀, taken with the types, also 4 nymphs.

### *Coquillettia balli* new species.

Much smaller than *insignis*, pronotum shorter and broader, collum short, head more vertical, vertex broader and rostrum longer; dark fuscous brown, basal half of the corium and base of the cuneus white, thus somewhat resembling *insignis*.

♂. Length 4.2 mm., width 1.17 mm. *Head*: Width .75 mm., vertex .40 mm., length .34 mm., height from vertex to tip of tylus .77 mm.; eyes small, ovate, height .37 mm., width .23 mm., fuscous brown, more reddish on the lower half of the face. Rostrum, length 1.28 mm., reaching nearly to the posterior margin of the hind coxæ, chestnut brown, more reddish at the base.

*Antennæ*: Segment I, length .22 mm.; II, 1.06 mm.; III, .97 mm.; IV, .65 mm.; uniformly dark fuscous brown, minute pubescent.

*Pronotum*: Length .57 mm., width at base 1.08 mm., collar .48 mm.; basal margin sinuate and rounded at the corners, lateral margins rounded, slightly flaring at the basal angles, disk much flatter than in *insignis*, collar and calli not clearly defined; dark fuscous brown, more reddish on the sides. Scutellum slightly darker than disk of pronotum, shaped much like *insignis* but the mesoscutum longitudinally impressed at the middle and widening to a triangular impressed area at the base of the scutellum; sternum dark chestnut brown, shining, metasternal orifice white.

*Hemelytra*: Greatest width (1.17 mm.) at the base; corium white at the base, clavus and apical half of the corium dark fuscous brown, cuneus dark fuscous, basal third white and extending forward along the membrane to the inner apical angles of the corium; sparsely and minutely pubescent; membrane uniformly shaded with dark fuscous.

*Legs*: Dark fuscous brown to chestnut, the front coxæ and femora more yellowish.

*Venter*: Dark chestnut, much narrowed toward the base, apical margin of the third segment more or less pale.

♀. Length 3 mm., wingless, very ant-like in form, dark fuscous brown to chestnut; tergites of the first and second abdominal segments com-

pressed, whitish and margined with reddish, the third segment pale on the apical margin of the ventral side.

*Head*: Large, conical, shaped much like that of the male; width .85 mm., vertex .51 mm., length .45 mm., height from vertex to tip of tylus 1 mm., eyes small, ovate, height .40 mm., width .23 mm.; lower part of the face thicker than in the male. Rostrum, length 1.48 mm., attaining the posterior margin of the hind coxæ.

*Antenna*: Segment I, length .25 mm.; II, .94 mm.; III, .89 mm.; IV, missing; dark chestnut brown, third segment equally thick as the second.

*Pronotum*: Length .63 mm., width .71 mm., widest at the middle, nearly cylindrical, disk tending to be globose and twice indented at the center, posterior margin curved forward at the middle, collar poorly defined, calli absent. Scutellum scarcely defined, no indication of wings, thorax dark chestnut brown, metasternal orifice white.

*Legs*: Dark fuscous brown, tibiæ darker.

*Venter*: Dark chestnut brown to blackish; globose, constricted at the second segment, tergite of the first segment arched, indented transversely, cream colored and margined with reddish; posterior half of the second tergite and posterior margin of the third sternite and pleurite, pale to cream colored.

*Holotype*: ♀, June 17, 1900, Lamar, Colorado (E. D. Ball); Cornell University Collection.

*Allotype*: Taken with the type.

*Paratypes*: ♀ topotypic; other specimens taken with the types by Dr. E. D. Ball.

The species is named in honor of Dr. E. D. Ball who has perhaps collected and observed more of the ant mimic *Miridæ* than any other worker.

#### *Parthenicus aridus* new species.

Large for *Parthenicus*, pale ash gray marked with black, sericeous tomentose silvery pubescence intermingled with fine golden hairs.

♂. Length 3.9 mm., width 1.37 mm. Head shaped very similar to that of *vaccini*, tylus more prominent and strongly indented at the base; rostrum reaching nearly to the middle of the venter. Antennæ pale, the second segment annulated with black near the base and again at the middle; first segment with a transverse mark across the upper side slightly beyond the middle and two spots nearer the base, black. Entire dorsum sparsely freckled with obscure reddish and a few larger fuscous spots, some black tomentose pubescence across the tip of the embolium and corium; membrane pale, irregularly flecked with fuscous, a larger fuscous spot just beyond the apex of the cunens. Posterior femora broad, saltatorial, closely speckled with black, more densely and with larger spots on the

apical half; under sides of the front and middle femora speckled with black, tibiae with five spots and the posterior pair with seven black spots.

Arolia erect, linear and converging at the apices; genital claspers distinctive, large and prominent, the left clasper with a broad flattened incurved chitinous hook, right clasper having a right angled hook with twisted acuminate tip.

*Holotype*: ♂, July 12, 1917, Deming, New Mexico (H. H. Knight); Cornell University Collection.

*Paratypes*: 33 ♂♂, taken with the types; 5 ♂♂, July 11, 1917, Mesilla Park, New Mexico (H. H. Knight).

Collected on the tent trap light, only males being taken, indicating that the females are probably brachypterous. This species was taken in company with *Argyrocoris scurrilis* V. D., which was abundant, and *Sericophanes triangularis* Kngt. at a camp seven miles out from Deming.

*Parthenicus juniperi* Heid. (*Psallus*) Heidemann, Jour. N. Y. Ent. Soc., xiii, p. 49, 1905.

The writer has seen the type of this species and has later studied type material and finds it to belong in the genus *Parthenicus* Reuter. The arolia are free and converging at their apices which places the species in the subfamily Orthotylinæ, other characters obviously placing it in the genus *Parthenicus*.

*Dichrooscytus elegans* var. *viridicans* new variety.

Very similar in structure to *elegans*, but bright green in color, the pubescence on the pronotum blackish and more conspicuous.

♀. Length 3.3 mm., width 1.4 mm. Bright green, the head, coxæ and femora often turning pale to brownish; pronotum and scutellum sometimes more yellowish green; cuneus green with margins of the apical half reddish; membrane fuscous, cell veins sometimes reddish.

*Holotype*: ♀, July 15, White Plains, New York (J. R. de la Torre-Bueno), Cornell University Collection.

*Paratypes*: ♀, July 24, White Plains, New York, also other specimens taken on cedar by Mr. Torre-Bueno. ♀, July 24, 1902, Lloyds Neck, Long Island, New York (Wm. T. Davis). 3 ♀♀ Franconia, New Hampshire (Mrs. A. T. Slosson).

The writer has taken *Dichrooscytus elegans* Uhler abundantly on white cedar (*Thuja occidentalis* L.) at Batavia, New York, and on red cedar (*Juniperus virginiana*) at Portage, New York, but did not take any forms that could be called *viridicans*. This

form may be a good species but in the absence of any definite structures for separation from *elegans* the writer hesitates in giving it specific rank.

**Dichroscytus speciosus** var. **rubropallidus** new variety.

Structurally not distinguishable from *speciosus* V. D., but differing greatly in general appearance; dark fuscous red marked with pale or white.

♂. Length 4.8 mm., width 1.94 mm. Front of the head white, lower half of face fuscous, more reddish on the loræ, dark spot each side between the eyes just in front of the declivitous vertex, usually eight bright red lines radiating out on each side of the median line of the front; rostrum dark red; antennæ dark yellowish, the first segment fuscous; eyes dark brown. Scutellum, sides of pronotum and transversely across the disk, epimeron of the mesothorax, coxæ, tibiæ, inner margin of the corium and along the claval suture, corium, exterior of the cubitus except across the apex, and inner half of the cuneus, pale to white. Sternum, episternum and venter, dark fuscous red, shining; femora bright reddish.

Female very similar to the male in coloration but with some pale appearing on the sides of the venter.

*Holotype*: ♂, June 7-17, 1916, Jemez Spring, New Mexico, altitude 6,400 feet (John Woodgate); Cornell University Collection.

*Allotype*: Taken with the type.

*Paratypes*: 2 ♂♂, 2 ♀♀, taken with the types.

**Opisthuria clandestina** var. **dorsalis** new variety.

Differs from *clandestina* V. D. in that the scutellum and disk of the pronotum is black.

Length 7.1 mm., width 2.8 mm. Black, base of head, juga, loræ, genæ, sides of pronotum, median vitta on basal half of the scutellum sides of pronotum, bases of middle and posterior femora, venter except the genital segment, orange.

*Holotype*: ♂, Aug. 26, Hanging Rock, Ohio (C. J. Drake); Cornell University Collection.

*Allotype*: Taken with the type.

**Opisthuria clandestina** var. **ventralis** new variety.

Similar to *dorsalis* except the venter is fuscous to black, the orange coloring being replaced by yellowish to pale.

*Holotype*: ♂, Polk County, Wisconsin, Cornell University Collection.

*Paratype*: ♂, July 9, 1915, Ithaca, New York (W. A. Hoffman).

***Orthocephalus mutabilis* (Fallen).**

The writer took 10 ♂♂, 6 ♀♀ macropterous, 31 ♀♀ short-winged. June 16, 1918, Ithaca, New York, also 2 ♂♂, 21 ♀♀ on June 19 at the same spot. This interesting species was accidentally discovered while the writer was picking wild strawberries, it being found breeding on the ox-eye daisy (*Chrysanthemum leucanthemum* L.) about seven miles west of Ithaca on the Mecklenburg road at an altitude of 1,200 feet. The specimens were quite numerous within a limited area, the leaves of the host plant showing plainly the work of the bugs. The species doubtless breeds on the same plant in Europe and could easily have been introduced to this country through the accidental importation of egg-infested plant stems used for packing or in hay. This European species was first recognized from two specimens taken at Orono, Maine, by Dr. C. W. Woods in 1913, and since that time no other specimens were known from America until the present find. Collecting on daisies in other regions may show the species to have a wider distribution than was expected.