A NEW BYTHOSCOPIDAE FROM COSTA RICA.

By S. C. Bruner and Z. P. Metcalf.

The new species described below would seem to constitute a distinct new genus of *Bythoscopidae* and to be worthy of an isolated description.

Chinaia genus nov.

Head broadly rounded anteriorly in both lateral and vertical views, short, scarcely as broad as pronotum. Face nearly vertical, more or less convex, smooth; ocelli situated on the face as in Idiocerus, not strongly differentiated. Genae broadly rounding below to apex of anteclypeus. Rostrum very short, in type species scarcely reaching base of anterior femora. Antenna inserted in shallow cavity beneath sharp ledge near eves; basal segment considerably enlarged, extending laterally to margin of eye, much larger than second segment; the seta filiform, very long, sometimes extending beyond apex of elytra, without preapical enlargement in either sex. Pronotum and scutellum as in Idiocerus. Pronotum broad and short fully three times as broad as long, about as long as crown, anterior lateral margins short strongly divergent, posterior lateral margins broadly curved and merging into posterior margin. Scutellum as long as pronotum forming a nearly equilateral triangle. Elytra elongate, narrow, without an appendix, nervures thin, not distinctly raised, without papillae, evanescent and without distinguishable cross-veins before apex of clavus.

This genus because of the position of ocelli necessarily falls within the family Bythoscopidae and is somewhat nearer the genus *Idiocerus* than any other. However, it is apparently not very closely related to that or any other described genus. It is at once separated from *Idiocerus* by the absence of an appendix to elytra, the greatly elongated antennae inserted under a small sharp ledge near eyes with enlarged basal segment; narrower, rounded, head; and especially by the elongate delicate elytra with evanescent or obsolete venation over basal half. The latter character and general delicate appearance are suggestive of the Eupteryginae in spite of large size.

The species described by Fowler in the Biologia Centrali-Americana, 2, as *Tettigonia dorsignata*, page 282, plate xix, figure 6, and *T. rubescens*, page 282, plate xix, figure 7, and later in the supplement of the same work (page 322) removed from the Cicadellinae, but without generic designation are also members of this genus. The antennae were probably even longer than shown on the plate as they are very fragile and easily broken. These and the new species described below are brightly colored insects, which coloration would appear to be characteristic. The vertex in the three known species is relatively longer than *Idiocerus*.

The genus is dedicated to Mr. W. E. China, of the British Museum.

Orthotype: Chinaia bella n. sp.

Chinaia bella n. sp.

A beautiful orange red and pale green species marked with black, resembling Tettigonia rubescens Fowler. Crown of head wider than long, broadly excavated posteriorly, extending as a narrow triangle behind the eyes, sloping anteriorly and broadly curved and merging into the face. Face with the lateral margins slightly diverging to the lower level of the eyes, then suddenly converging in a distinct ledge above the antennae. Ocelli inconspicuous on a level with the middle of the eves near the lateral borders. Antennae with the flagellum when folded backward extending somewhat beyond apex of elvtra, basal segment as long as and about twice as broad as second segment. Lateral margins of the clypeus broadly converging to the anteclypeus, which is spatulate in shape. Lorae with the lateral margins curved not extending to the apex of the anteclypeus. Lateral margins of the genae broadly curved, converging extending beyond the apex of the anteclypeus. Pronotum broad, nearly three times as broad as long. Scutellum with broad transverse impression, posterior half convex. Venation of elytra obscure except on the translucent apical membrane.

Female genitalia: penultimate ventral segment broad, short, slightly excavated; ultimate segment about three times as long as penultimate, the apical half triangularly produced with sides of the triangle sinuate, giving the appearance of a median tooth, apex with small notch, slightly embrowned; pygofer with a row of pale bristles along inner margin; ovipositor distinctly exceeding pygofer. Male, last ventral segment nearly straight behind, subequal to penultimate segment; plates convex, inner margins raised over central area and meeting at rather acute angle, inserted about one-fifth of length behind posterior margin of last ventral segment, sides rounding to lateral margins, without bristles but with scattered growth of fine white hairs, apices well rounded, exceeded by pygofer which are produced behind into pairs of laterally compressed, horizontal, chitinous processes.

General color above bright yellow or pale greenish yellow,

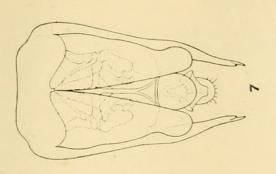
heavily marked with orange red with a few black markings on elytra. Crown light yellow to pale, slightly greenish yellow with a broad band of orange red on posterior margin, and often a pair of obscure, poorly defined, translucent dashes or rounded marks about middle; eyes black. Pronotum light yellow or pale greenish yellow with posterior and lateral margins broadly orange red. Scutellum, basal half pale vellow or greenish yellow, the broad lateral margins and narrower central area usually washed with orange yellow; entire apical half orange. Tegmina with apical fourth translucent pale smoky yellow with 4 or 5 black dots along veins or disc; inner half more largely orange red, this more intense anteriorly next to claval suture and over an oblique area projecting from inner margin before center and towards apex, fading gradually to pale greenish yellow or light yellow over costal area, separated from translucent apical area interiorly by a variable, irregular, incomplete narrow black border; clavus pale yellow or greenish yellow on basal half, paler behind and over outer margin, with broad orange red dash on disc, the apical half orange with an obliquely placed, irregular, narrowly triangular black mark anteriorly followed by a number of black spots along inner and outer margins. Wings pale vellowish to dull pinkish hyaline with yellowish or pink veins, lightly infuscate apically with dark veins behind cross-veins. Beneath including face and legs largely pale flavescent, sometimes distinctly greenish, especially on abdomen which is washed with orange above; base of antennae, lower margins of face, anterior tibiae and knees, basal third of posterior tibiae and sometimes the frons, more or less washed with orange yellow. The sexes are similar, the female usually slightly larger.

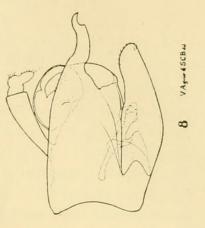
Length: 6–7 mm.

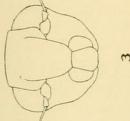
Holotype, male, San José, Costa Rica, March, 1933, C. H. Ballou, coll., on avocado. *Allotype*, female, San José, Costa Rica, June, 1932, C. H. Ballou, coll., on pear and avocado. *Paratypes*, 14 specimens of both sexes from San José, Costa Rica (S. P. de Montes de Oca) all collected on avocado by C. H. Ballou, June, 1932; January and March, 1933. Types and 7 paratypes in collection of Z. P. Metcalf, 5 paratypes in collection of the Estación Agronómica, Cuba, and one paratype in British Museum.

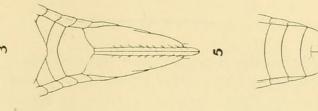
To eliminate any possible uncertainty regarding the specific identity of this form a specimen was sent to the British Museum where Mr. W. E. China very kindly compared it with the type of *Tetti*gonio rubescens Fowler, confirming our belief that it was distinct specificially although congeneric.

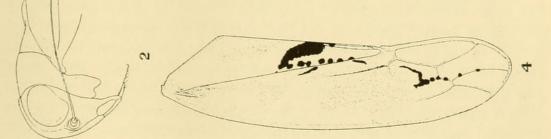
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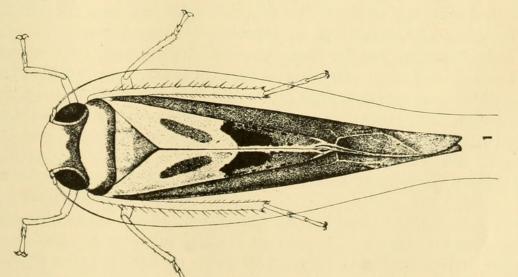












EXPLANATION OF FIGURES.

PLATE VII

Chinaia bella n. sp.

Fig. 1.-Dorsal view of female.

Fig. 2.-Lateral view of head and thorax.

Fig. 3.—Face.

Fig. 4.-Elytron.

Fig. 5.-Female genitalia.

Fig. 6.-Male genitalia.

Fig. 7.-Internal male genitalia, ventral view.

Fig. 8.—Same, lateral view.

Fulvius imbecilis Say, a mirid new to New York .--- It is always a pleasure to add to the faunal list of our great State; and here we have another of those oddities or accidents of collecting, which makes field entomology such an adventure, as this record shows. While getting fire-wood from my cellar, I came across a log with loose bark, which I always pry off to see what may be found-aradids mostly, or perhaps Xylocoris. This time two agile little bugs ran out from under the bark. One got away, but the other I was able to catch with my fingers and to carry up safe, if slightly crushed, to my study, where it landed in a killing bottle. When mounted I saw at once it was something never seen by me before. My friend Dr. R. F. Hussey, to whom it was shown, recognized it as a Fulvius. The determination has been checked by Hemiptera of Connecticut, by Blatchley's Heteroptera of Eastern North America, and by Say's original description. It is unmistakably F. imbecilis. Say originally recorded it from Indiana; Dr. Knight in various papers has given it as found in Florida, Virginia, Alabama, Tennessee, Illinois, District of Columbia and New Jersey; Blatchley records it from North Carolina, Michigan, and Indiana, and Van Duzee's Catalogue recites it from Pennsylvania, Maryland, Delaware, Virginia, and Indiana. It is not recorded in the New York State List by Dr. Knight in the list of Miridae, nor have I been able to find any such record elsewhere. The little bug was found on October 11, 1933, in White Plains, but the logs came from further up the County, so Westchester County, even though a broader record is probably more accurate.- J. R. DE LA TORRE-BUENO, White Plains, N.Y.



Bruner, Stephen C. and Metcalf, Z. P. 1934. "A new Bythoscopidae from Costa Rica." *Bulletin of the Brooklyn Entomological Society* 29, 120–124.

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