

## VIII. RHYNCHOTA OF THE ISLE OF PINES.

BY OTTO HEIDEMANN AND HERBERT OSBORN.<sup>1</sup>

### Suborder **HEMIPTERA-HOMOPTERA**.

#### Family *FULGORIDÆ*.

#### Subfamily *DICTYOPHARINÆ*.

#### Genus *DICTYOPHARA* Germar.

##### 1. *D. recurvirostris* Stål. (Osborn *det.*)

One specimen taken at McKinley, July 24. The reference to this species is made in spite of the fact that the only individual at hand<sup>2</sup> differs slightly from the description. (2)

<sup>1</sup> The Editor of the ANNALS OF THE CARNEGIE MUSEUM, who is also the Curator of Entomology in that institution, has decided to attribute the following list jointly to Mr. Otto Heidemann and Dr. Herbert Osborn. When it had been determined to publish an account of the collection of Rhynchota made on the island by Mr. Link, a rough preliminary classification according to families was made by the writer and his assistant, Mr. Hugo Kahl. The specimens were then submitted to Mr. Otto Heidemann, of the U. S. Department of Agriculture and the U. S. National Museum, for final study and identification. The greater portion of the Hemiptera-Heteroptera had been already identified by Mr. Heidemann when his labors were interrupted by his untimely death. Part of the Hemiptera-Homoptera had also been determined by Mr. E. H. Gibson, who was associated with Mr. Heidemann. At the suggestion of Mr. Gibson, and with the concurrent advice of Dr. L. O. Howard, the collection was turned over to Dr. Herbert Osborn, of the Ohio State University, with the request that he would report upon them. This he kindly consented to do, and a list of identifications with notes has been recently received. In its final form the present writer is responsible for the arrangement of the paper and for the description of *O. linki*, the task of describing which was relegated to him by Dr. Osborn, who determined it to be new to science. At the suggestion of Dr. Osborn it has been decided to accompany each species with the name of the person who identified it. Though these insects are not conspicuous, they play an important rôle, and it is of interest to have even a partial list of the species which occur upon the Isle of Pines, from which hitherto very few, if any, species have been reported.

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<sup>2</sup> The numbers in parentheses ( ) after each species are the field-numbers identifying the specimens in our first "rough list."

## Genus RHAMPHIXIUS Fowler.

2. *R. pallidus*, Osborn, sp. nov.

Smaller and lighter colored than *championi*, eyes shorter. Length 6 mm.

Vertex reduced to a line between the eyes, margins elevated, separating anteriorly and sloping to the truncate tip. Front widening to clypeus, with a sharp median carina on the lower portion. Eyes ovate, emarginate above the eyes. Color pallid greenish yellow, the ocelli orange, eyes pallid brown, scutellar carinæ more greenish, abdomen greenish, legs pallid, with tips of tarsi dark.

One specimen, Columbia, Aug. 1. The legs and tips of elytra are mutilated. While barely possible that this may be the male of *R. championi* described from Guatemala from a female, the difference in color, and shape of eyes, as well as the smaller size, precludes the reference to that species. (Type in Carnegie Museum.) (3)

## Subfamily FLATINÆ.

## Gen. ORMENIS Stål.

3. *O. albipennis* var. *brevis* Van Duzee. (Osborn *det.*)

A single specimen taken at Nueva Gerona, July 25. (9)

4. *O. linki* sp. nov. (Holland *descripsit*).

Tegmina in expanded specimens semitranslucent pale brownish testaceous, with the costal margin for about three-fourths of its length from the base creamy white. Just behind this white margin at the base the brown color of the wing is intensified, forming a line of darker brown. At the lower outer angle of the tegmina there are a few obscure darker brown markings, and near the base above the inner margin there are a number of raised pustular prominences, which are dark at their apices. In unexpanded specimens the tegmina appear more or less opaquely dark brown, save on the anterior light margin. The hind wings are whitish, shaded outwardly with pale pinkish, the veins dark brown. Head short, eyes circular and prominent, as broad as the pronotum. Mesonotum broader than long, concavely emarginate on either side in front, rounded behind. Scutellum small and regularly triangular. Body and legs in dried state pale testaceous, probably green in life. Length 3.5 mm.; width at shoulders 1 mm.; expanse of tegmina when spread 8 mm.

Type in Carnegie Museum, from McKinley, July 24.

This is one of the smallest species of the genus, being less than two-thirds the size of *O. pruinosa*.

Eighteen specimens were taken: four at Santa Fé, July 23; twelve at McKinley, July 24; one at Nueva Gerona, July 25, and one at Columbia, August 1. Four of the specimens have been donated to the U. S. National Museum. (10)

Subfamily CIXIINÆ.

Genus MNEMOSYNE Stål

5. *M. cubana* Stål. (Osborn *det.*)

A single specimen, Nueva Gerona, Sept. 9.

Although represented by only one individual, there seems to be no doubt that this represents Stål's species. (4)

Genus MYNDUS Stål.

6. *M. crudus* Van Duzee. (Osborn *det.*)

One example, Santa Fé, July 23. (7)

Genus OLIARUS Stål.

7. *O. complectus* Ball. (Osborn *det.*)

A male taken at Nueva Gerona, July 25, and a female caught at the same place, September 10. This is a common species in the United States. (5)

8. *O. lunatus* (Fabricius). (Osborn *det.*)

One specimen captured at Santa Fé, July 23. (6)

Subfamily DELPHACINÆ.

Gen. STENOCRANUS Fieber.

9. *S. dorsalis* Fitch. (Osborn *det.*)

One example captured at Nueva Gerona, July 25. There seems to be no distinct character by means of which to differentiate the specimens from the nearctic species. (8)

Family CERCOPIDÆ.

Genus LEPYRONIA Serville.

10. *L. angulifera* Uhler. (Kahl *det.*)

Of this insect sixty-six specimens were collected, as follows: fifteen at Santa Fé, July 23, twenty-two at McKinley, July 24, five at Nueva

Gerona, July 25, twenty-four at Columbia, August 1. Eight specimens have been donated to the U. S. National Museum. (11)

Family *MEMBRACIDÆ*.

Genus *STICTOCEPHALA* Stål.

11. *S. rotundata* Stål. (Gibson *det.*)

Four specimens: one taken at McKinley, July 24, one at Nueva Gerona, July 25, two, ♂ and ♀, at Columbia, Aug. 1. One has been given to the U. S. National Museum. (1)

Subfamily *BYTHOSCOPINÆ*.

Genus *AGALLIA* Curtis.

12. *A. fumosa* Uhler. (Gibson *det.*)

Forty-one specimens taken at Nueva Gerona, September 9-11. Eight specimens have been deposited in the U. S. National Museum. (27)

Family *CICADELLIDÆ*.

Subfamily *CICADELLINÆ*.

Genus *CICADELLA* (Latreille.)

13. *C. similis* Walker. (Osborn *det.*)

One hundred and fifty-nine specimens: eleven at Santa Fé, July 23; three at McKinley, July 24; one hundred and forty-five at Nueva Gerona, July 25. Nine specimens have been presented to the U. S. National Museum. This is a very abundant species throughout the West Indies, Central America, and southern Mexico. (12)

Genus *KOLLA* Distant.

14. *K. hasti* Ball. (Osborn *det.*)

Twenty-one specimens: three at Santa Fé, July 23; one at McKinley, July 24; fifteen at Nueva Gerona, July 25; two at Columbia, August 1. Five of these have been given to the U. S. National Museum.

Genus *DRÆCULACEPHALA* Ball.

15. *D. sagittifera* Uhler. (Osborn *det.*)

Sixteen specimens: one at McKinley, July 24; fourteen at Nueva Gerona, July 25; one at Columbia, August 1. Four specimens have been presented to the U. S. National Museum. (13)

16. *D. minor* Walker. (Gibson *det.*)

Eighteen specimens: eight at Santa Fé, July 23, seven at McKinley, July 24; six at Nueva Gerona, July 25-27; one at Columbia, August 1. Four have been donated to the U. S. National Museum. (18)

Subfamily JASSINÆ.

Genus SPANGBERGIELLA Signoret.

17. *S. vulnerata* Uhler. (Gibson *det.*)

A single specimen taken at Columbia, August 1.

Genus DELTOCEPHALUS Burmeister.

18. *D. obtectus* Osborn & Ball. (Osborn *det.*)

One example caught at Nueva Gerona, July 25.

19. *D. flavicosta* Stål. (Osborn *det.*)

A single specimen taken at McKinley, August 1.

20. *D. colonus* Uhler. (Gibson *det.*)

One, captured at Santa Fé, July 23.

Genus PHLEPSIUS Fieber.

21. *P. cinereus* Van Duzee.

Two examples, captured at Nueva Gerona, July 25.

Genus ACINOPTERUS Van Duzee.

22. *A. acuminatus* Van Duzee. (Osborn *det.*)

Two, one at McKinley, July 24, and one at Columbia, August 1.

Genus CHLOROTETTIX Van Duzee.

23. *C. viridia* Van Duzee. (Osborn *det.*)

Eighteen specimens: eight at Santa Fé, July 23; seven at Nueva Gerona, July 25-27; three at Columbia, August 1. Four have been given to the U. S. National Museum. (26)

Genus BALCLUTHA Kirkaldy.

24. *B. abdominalis* Van Duzee. (Osborn *det.*)

One, McKinley, July 24. (21)

Genus EUSCELIS Brullé.

25. *E. exitiosa* Uhler. (Osborn *det.*)

One, taken at McKinley, July 24, one at Nueva Gerona, July 25, and two at Nueva Gerona, Sept. 14.

They belong to the form described by Uhler as *picturatus*, between which and typical *exitiosa* there seems to be no real difference, except in the darker color. (16), (17), (20)

Suborder **HEMIPTERA-HETEROPTERA.**

Family *PENTATOMIDÆ*.

Subfamily *CYDNINÆ*.

Genus *THYREOCORIS* Schrank.

26. *T. minuta* Uhler. (Heidemänn, *det.*)

A single specimen caught at Santa Fé, July 23. (28)

Subfamily *PENTATOMINÆ*.

Genus *MORMIDEA* Amyot & Serville.

27. *M. albisignis* Stål. (Heidemänn, *det.*)

One specimen taken at Columbia, August 1. (32)

28. *M. angustata* Stål. (Heidemänn, *det.*)

Ninety-seven specimens: eight, taken at Santa Fé, July 23; fifteen at McKinley, July 24; twenty-one at Nueva Gerona, July 25; and fifty-three at Columbia, August 1. (33), (34)

29. *M. linki* Heidemann, sp. nov.

Approaching *M. ypsilon*, but narrower, the humeral spines strong and directed forward; the raised ivory-white submargin of the scutellum straight. Length 6.5–7 mm. Width of humeri 3 mm.

Head longer than wide, tylus slightly passing the jugæ; antennal joints 3–4–5, subequal; prothorax with lateral border deeply sinuate, the spines strong and directed outward and forward; scutellum with a strongly raised polished ivory area parallel to the margin, narrowing and disappearing before the apex. Color light yellowish, marked with black. Two stripes of black punctures on the head and thorax; the humeral angles and spines, disk of scutellum, elytra, except narrow border, black. Membrane light, unspotted. Antennæ and legs yellowish, with numerous black points. Beneath yellowish, with a stripe of black punctures on thorax in line with the eyes and the black spiracles. Black spots on the pro-, meso-, and metathorax, followed by stripe of black punctures on the abdomen. A median row of black points on abdomen.

Forty-one specimens: twelve from Nueva Gerona, June 1–July 25; four from Santa Fé, July 23; eleven from McKinley, July 24; fourteen from Columbia, August 1.

Described from eight specimens, taken at Columbia and McKinley, which were submitted to Mr. Heidemann for study and determination, and to which he gave the above specific name, having decided that they were new to science. The description here supplied will serve to distinguish the species, which Mr. Heidemann had intended to name in honor of the collector, the late Mr. Gustav A. Link. (Types in Carnegie Museum, paratypes in U. S. National Museum). (H. O.) (35), (36)

Genus *SOLUBEA* Bergroth.

(*Æbalus* Stål)

30. *S. pugnax* (Fabricius) (Heidemann *det.*)

One specimen from Nueva Gerona, July 25. This species is common in the southern United States. (31)

Genus *EUSCHISTUS* Dallas.

31. *E. ursus* Van Duzee. (Heidemann *det.*)

One specimen from Columbia, August 1. (30)

Genus *THYANTA* Stål.

32. *T. perditor* (Fabricius). (Heidemann *det.*)

One taken at Nueva Gerona, July 25; and another caught at Columbia, August 1. This is a common species throughout the nearctic and neotropical regions of America. (29)

Family *COREIDÆ*.

Subfamily *MYCTINÆ*.

Genus *ACANTHOCERUS* Palisot de Beauvois.

(*Hymenophora* Amyot & Serville)

33. *A. (Hymenophora) lobata* Burmeister. (Heidemann *det.*)

One specimen, Nueva Gerona, June 1. (42)

Subfamily *ANISOSCELINÆ*.

Genus *LEPTOGLOSSUS* Guérin.

34. *L. phyllopus* (Linnæus). (Heidemann *det.*)

Two taken at Nueva Gerona, August 21. (41)

## Subfamily CHARIESTERINÆ.

## Genus CHARIESTERUS Laporte.

35. *C. gracilicornis* Stål. (Osborn *det.*)

One male from Santa Fé, July 23; one female from Nueva Gerona, July 25. (43)

36. *C. sp.* (?)

One specimen, a nymph, from Santa Fé, July 23. (39)

## Subfamily ALYDINÆ.

## Genus LEPTOCORISA Latreille.

37. *L. filiformis* (Fabricius). (Heidemann *det.*)

One specimen, Nueva Gerona, July 25. (40)

## Genus HYALYMENUS Amyot &amp; Serville.

38. *H. pallescens* Stål. (Osborn *det.*)

One, Santa Fé, July 23; one, McKinley, July 24; one, Nueva Gerona, July 25, one, Columbia, August 1. (44)

## Subfamily CORIZINÆ.

## Genus CORIZUS Fallén.

39. *C. sidæ* (Fabricius). (Osborn *det.*)

Two males and two females, Nueva Gerona, September 10. (37), (38)

## Family LYGÆIDÆ.

## Subfamily PACHYGRONTHINÆ.

## Genus ŒDANCALA Amyot &amp; Serville.

40. *O. cubana* Stål. (Osborn *det.*)

Ninety specimens: five, Santa Fé, July 23; twenty-five, McKinley, July 24; six, Nueva Gerona, July 25; fifty-four, Columbia, August 1. Eight specimens have been donated to the U. S. National Museum. (49)

41. *O. crassimana* (Fabricius). (Osborn *det.*)

Thirty-one specimens: nine, Santa Fé, July 23; fifteen, McKinley, July 24; two, Nueva Gerona, July 25; five, Columbia, August 1. Six have been given to the U. S. National Museum. (50)



Subfamily APHANINÆ.

Genus PAMERA Say.

42. *P. longula* Dallas. (Osborn *det.*)

Thirty-five specimens: two, Santa Fé, July 23; nineteen, McKinley, July 24; one, Nueva Gerona, July 25; thirteen, Columbia, August 1. Five have been sent to the U. S. National Museum. (45)

43. *P. parvula* Dallas. (Osborn *det.*)

Ten specimens: nine, Nueva Gerona, July 25; one, Columbia, August 1. Four presented to the U. S. National Museum. (46)

44. *P. vicinalis* Dallas. (Osborn *det.*)

One specimen, Nueva Gerona, September 10. (47)

45. *Gen.? sp.?*

Nymph, McKinley, July 24. (48)

Subfamily LYGÆINÆ.

Genus ONCOPELTUS Stål.

46. *O. varicolor* (Fabricius). (Heidemann *det.*)

One, Nueva Gerona, June 1. (52)

Family PYRRHOCORIDÆ.

Genus LARGUS Hahn.

(*Euryophthalmus* Laporte)

47. *L. sellatus* Guérin. (Heidemann *det.*)

Four specimens: one, Nueva Gerona, June 1; one, McKinley, July 24; two, Los Indios, September and October. (51)

Genus DYSDERCUS Amyot & Serville.

48. *D. mimus* Say. (Heidemann *det.*)

Two specimens, Nueva Gerona, September 10. (53)

49. *D. suturellus* Herrich-Schæffer. (Heidemann *det.*)

One, Los Indios, November. (54)

50. *D. sanguinarius* Stål. (Heidemann *det.*)

Nine specimens, all taken at Nueva Gerona, June 1 to July 31. One specimen sent to the U. S. National Museum. (55), (56), (57)

Family *REDUVIIDÆ*.Subfamily *APIOMERINÆ*.Genus *APIOMERUS* Hahn.51. *A. hirtipes* (Fabricius). (Heidemann *det.*)

Eight specimens taken at Nueva Gerona from June 1 to July 31.  
Two presented to the U. S. National Museum. (60)

52. *A. sp.?* (Osborn *det.*)

One mutilated specimen from Columbia, August 1. Perhaps an  
undescribed species. (61)

Subfamily *HARPACTORINÆ*.Genus *ZELUS* Fabricius.53. *Z. rubidus* Lepeletier & Serville. (Heidemann *det.*)

One example, Nueva Gerona, September 9. (62)

Family *CAPSIDÆ*.Division *MIRARIA*.Genus *TRIGONOTYLUS* Fieber.54. *T. breviceps* Jakolov. (Heidemann *det.*)

Five specimens: four from Nueva Gerona, July 23 and August 7,  
one from McKinley, July 24. Two donated to the U. S. National  
Museum. (58)

55. *T. ruficornis* Fallén. (Heidemann *det.*)

Twelve specimens: four, Santa Fé, July 23; two, McKinley, July 24;  
six, Nueva Gerona, July 25 to 27. Three sent to the U. S. National  
Museum. (59)

Family *NAUCORIDÆ*.Genus *PILOCORIS* Stål.56. *P. femoratus* (Palisot de Beauvois). (Heidemann *det.*)

One, captured at Nueva Gerona, July 31. (63)