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SOME SCUTELLEROID HEMIPTERA OF THE BAHAMA ISLANDS, BRITISH WEST INDIES

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In 1950 and 1951 members of the Department of Insects and Spiders of the American Museum of Natural History conducted collecting trips in the Bimini Islands, those small, isolated bits of land representing a northwestern extension of the Bahama archipelago, about 60 miles due east of Miami, Florida. No special effort was made to gather Hemiptera as distinct from other insects. The following analysis of the scutelleroid fauna of these islands can therefore represent only a sampling of the total biota of this area. It is, however, of great interest to know that in such general collecting a wide range of genera and species of these Hemiptera were taken. Since much of the wild vegetation on the islands is essentially a thorny growth, sweeping and beating methods often favored by hemipterists were seldom attempted. Most specimens were captured by hand picking, on the wing, or as a result of being attracted to lights at night.

The analysis of the collections shows that certain species taken from South Bimini Island, where most of the survey was conducted, have faunal affiliations with the mainland of Florida and the Gulf Coast, while some are linked with either the Greater Antilles or the Lesser Antilles or both. A few forms that are widespread tropical or Neotropical species are also represented. Many genera and species were not taken, probably because, as stated, the collectors did not purposefully concentrate on Hemiptera. Such genera as *Corimelaena*, *Edessa*, *Euschistus*, *Solubea*, and *Arvelius*, which could be expected to occur in these islands, are conspicuous

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by their absence. Many species of these are recorded from most of the adjacent islands as well as from continental North America.

FAMILY **CYDNIDAE** BILLBERG
SUBFAMILY **CYDNINAE** DALLAS
GENUS **AETHUS** DALLAS

Aethus DALLAS, 1851, List of Hemiptera, p. 112.

Aethus communis Uhler

Aethus communis UHLER, 1877, Bull. Geol. Geogr. Surv., vol. 3, p. 379.

Fifteen males and 40 females taken at lights. This species is one instance in which sexual dimorphism is clearly marked. The lateral margin of the pronotum of the male is distinctly and deeply sinuate, while that of the female is weakly and evenly convex arcuate.

TYPE LOCALITY: Cuba and Florida.

GENERAL DISTRIBUTION: Indiana? (Blatchley), Texas, Florida, Cuba, Jamaica, and probably also from other islands of the West Indies.

Aethus curvipes Dallas

Aethus curvipes Dallas, 1851, List of Hemiptera, p. 114.

Thirty-one specimens of this larger, curve-legged species were taken at lights. This is about the largest species in the genus and is readily distinguished by the curvature of the hind tibiae and dusky, fuscous-marked membrane.

TYPE LOCALITY: Jamaica.

GENERAL DISTRIBUTION: Jamaica, Andros Island (Bahamas), Rio de Janeiro (Berlin Museum), and probably other West Indian Islands.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, July and August, 1951.

Aethus diminutus, new species

Castaneous brown to dark fuscous, slightly obovate in outline. Head as wide between the eyes as long through its midline; apex evenly rounded as in allied species; spines along the anterior margin short, blunt, and all of the same size; two spines on apex of tylus and five on anterolateral margin of each jugum; only three long

setae on each jugal margin just in front of eyes; two setae on each side of disc of head, one in front of each eye and one just behind the anterior margin; a pair of setae, one long and one short, on the under side of the apical margin just laterad of the base of the buccula. Pronotal disc slightly convex, without any indentations, a vague double row of obsolescent, wide-spaced punctures across the posterior half; a pair of large setigerous pits near apical margin diagonally behind the ocelli; a pair of less pronounced setigerous punctures inside each lateral margin, one near anterior angle and one larger, about midway along the length; marginal setae of pronotum at least 10 in number on each side. Scutellum with a few small, scattered punctures on the disc; marginal punctures indistinct and tending to become confluent posteriorly; apex of scutellum almost angulate rather than rounded. Hemelytra with some scattered punctures on disc; a row of distinct punctures following the cubital vein, with a second row laterally, converging towards the former posteriorly; a row of subcostal and radial punctures present but not distinct; costal margin with three long setae on the basal third; membrane clear hyaline, with a small fuscous spot near the middle of its base. Abdominal venter impunctate, apical edges of segments obscurely roughened; only two setae laterally on each segment adjacent to the spiracle. Mesosternal evaporating area very large, reaching the lateral margins of the supporting sclerites. Rostrum nearly reaching posterior margins of mesocoxae, second joint almost as long as third and fourth combined. Antennal segments I, II, and III subequal, each slightly shorter than segments IV and V, which in themselves are subequal. Antennae, rostrum, and tarsi testaceous, each becoming paler apically. Hypopygium of the male broadly scoop-shaped, its apical margin entire.

HOLOTYPE: Male, 3.75 mm. long, 2.25 wide across humeri; South Bimini Island, Bahama Islands, British West Indies, May, 1951 (collected by Cazier and Gertsch).

ALLOTYPE: Female, 4 mm. long, 2.5 mm. wide across humeri; same data as for the holotype.

PARATYPES: None.

Types deposited in the American Museum of Natural History.

Closely related to *Aethus indentatus* Uhler but differing in the number and arrangement of spines and setae on head and thorax, the convexity of pronotum, its punctation and that of the scutel-

lum and hemelytra, the presence of three setae on the costal margin of hemelytra, the shorter posterior tibiae, and the absence of an indentation of the disc of the pronotum. While similar in size to *A. indentatus*, this species is still smaller and in that respect outstanding in comparison with allied species in the genus.

GENUS **GEOCNETHUS** HORVATH

Geocnethus HORVATH, 1919, Ann. Mus. Nat. Hungarici, vol. 17, p. 245.

Geocnethus cubensis Barber and Bruner

Geocnethus cubensis BARBER AND BRUNER, 1932, Jour. Dept. Agr. Porto Rico, vol. 16, p. 236.

This appears to be the commonest species of scutellerid in the Bimini Islands. The American Museum collection now has 248 specimens (116 females, 132 males) which, as were the other cydnids, were all taken at lights.

TYPE LOCALITY: Cayamas, Cuba.

GENERAL DISTRIBUTION: Probably throughout a number of Caribbean islands.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, July and August, 1951.

GENUS **AMNESTUS** DALLAS

Amnestus DALLAS, 1851, List of Hemiptera, p. 126.

Amnestus pusio (Stål)

Magoa pusio STÅL, 1858, K. Svenska Vetensk.-Akad. Handl., vol. 2, no. 7, p. 14.

This very small pale brown cydnid appears to be quite common, 35 specimens having been taken on June 20, 1950. Not to be confused with *A. pusillus* Uhler, a species that is nearly one-fifth to one-quarter again larger, though similar in color, and of more northern distribution.

TYPE LOCALITY: Not stated.

GENERAL DISTRIBUTION: Virginia (United States National Museum), Florida (Blatchley), Cuba, Puerto Rico, Grenada, St. Vincent, and probably widely distributed throughout the Caribbean area.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, June, 1950, and May, 1951.

FAMILY **PENTATOMIDAE** LEACH
SUBFAMILY **SCUTELLERINAE** DISTANT
GENUS **DIOLCUS** MAYR

Diolcus MAYR, 1864, Verhandl. Zool. Bot. Gesellsch. Wien, vol. 14, p. 904.

Diolcus irroratus (Fabricius)

Cimex irroratus FABRICIUS, 1775, Systema entomologiae, p. 699.

A common scutellerid of a genus that is restricted to the United States and the Caribbean islands. Distinguishable from other species by the lack of greenish punctations, a rostrum that does not reach beyond the hind coxae, and the absence of furrow on the first few abdominal segments.

TYPE LOCALITY: America.

GENERAL DISTRIBUTION: Cuba, Virgin Islands, Puerto Rico, Jamaica, Antigua, and probably to be found on other West Indian Islands.

NEW RECORD FOR BAHAMA ISLANDS: East Bimini, South Bimini Island, June and July, 1951.

SUBFAMILY **PENTATOMINAE** STÅL
GENUS **THYANTA** STÅL

Thyanta STÅL, 1862, Rio Janeiro Hemiptera, vol. 2, p. 58.

Of half a dozen species of this genus that might be expected to occur in the Bimini Islands, three appear in the collections made in 1950 and 1951. Two that otherwise are common throughout the Caribbean islands, *T. peritor* (Fabricius) and *T. casta* Stål, are, strangely, absent. One species, *T. custator* (Fabricius) typical of the Florida peninsula, is represented, as well as *T. antiguensis* (Westwood), a widely distributed Neotropical form. A species recently described as *T. bimini* Ruckes was collected in abundance and is also represented by two specimens in the United States National Museum collected near Miami, Florida, many years ago. Faunal links between the mainland and the Antilles are indicated by this distribution.

Thyanta custator (Fabricius)

Cimex custator FABRICIUS, 1803, Systema rhyngotorum, p. 164.

The most common green pentatomid in America. It appears in several forms, one being found from Florida northward along

the Atlantic coastal belt, which is the form represented in Bimini.

TYPE LOCALITY: Carolina.

GENERAL DISTRIBUTION: Entire United States, Canada, and northern Mexico.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, August 2-20, 1951.

Thyanta antiguensis (Westwood)

Pentatoma antiguensis WESTWOOD, 1837, Hope catalogue, vol. 1, p. 36.

This small, rather brightly colored, variegated species is found widespread in Neotropical regions, along the Gulf Coast, throughout Mexico and Central America, as well as in Brazil, Peru, and Venezuela. The species is very plastic, and the examples from Bimini tend to be slightly more testaceous green than reddish green.

TYPE LOCALITY: Antigua.

GENERAL DISTRIBUTION: As stated above, Neotropical, also from Texas, eastward to the southern end of the Florida peninsula.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, August 10-20, 1951.

Thyanta bimini Ruckes

Thyanta bimini RUCKES, 1952, Bull. Brooklyn Ent. Soc., vol. 47, p. 65.

Mrs. Patricia Vaurie, who collected most of the several dozen specimens of this recently described species, says that many were taken at lights during the night. This is to be expected since a close relative [*T. custator* (Fabricius)] found in continental United States has a habit of flying in great swarms towards any source of illumination.

TYPE LOCALITY: South Bimini Island.

GENERAL DISTRIBUTION: South Bimini Island; Miami, Florida.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, the type locality, June-August, 1951.

GENUS **LOXA** AMYOT AND SERVILLE

Loxa AMYOT AND SERVILLE, 1843, Hemiptera, p. 137.

Loxa pilipes Horvath

Loxa pilipes HORVATH, 1925, Ann. Mus. Nat. Hungarici, vol. 22, p. 318, pl. 5, fig. 5.

TYPE LOCALITY: Puerto Rico.

GENERAL DISTRIBUTION: Caribbean islands, Puerto Rico, Dominica.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, May, 1951.

***Loxa florida* Van Duzee**

Loxa florida VAN DUZEE, 1909, Bull. Buffalo Soc. Nat. Sci., vol. 9, p. 156 (fig.).

Distinguishable from the preceding species by the less prominent humeral spines, the greater degree of convexity of the scutellum, and less extended apical angle of the last abdominal segment. This is another interesting example of faunal connection between the western Bahamas and the mainland on the one hand and (refer to *L. pilipes* above) the Antilles on the other.

TYPE LOCALITY: Crescent City, Florida.

GENERAL DISTRIBUTION: Florida.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, August 10–20, 1951.

GENUS **MURGANTIA** STÅL

Murgantia STÅL, 1862, Stettiner Ent. Zeitg., vol. 23, p. 105.

***Murgantia histrionica* (Hahn)**

Strachia histrionica HAHN, 1834, Wanzartigen Insecten, vol. 2, p. 116, fig. 196.

This is the common "harlequin" bug found widely distributed throughout continental United States. Only one specimen was taken from Bimini but, as a record, shows faunal connection between the Bahamas and the mainland.

TYPE LOCALITY: Mexico.

GENERAL DISTRIBUTION: Continental United States, Mexico, and Central America.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, May 20, 1951.

GENUS **NEZARA** AMYOT AND SERVILLE

Nezara AMYOT AND SERVILLE, 1843, Hemiptera, p. 143.

Nezara viridula (Linnaeus)

Cimex viridula LINNAEUS, 1758, *Systema naturae*, ed. 10, vol. 1, p. 444.

An extremely common large green pentatomid found in all warmer parts of the world.

TYPE LOCALITY: Indies.

GENERAL DISTRIBUTION: Texas, Florida, and virtually all the Caribbean islands.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, May to August, 1951.

GENUS **BREPHOLOXA** VAN DUZEE

Brepholoxa VAN DUZEE, 1904, *Trans. Amer. Ent. Soc.*, vol. 30, p. 78.

Brepholoxa heidemanni Van Duzee

Brepholoxa heidemanni VAN DUZEE, 1904, *Trans. Amer. Ent. Soc.*, vol. 30, p. 78.

Previously known only from the Florida mainland but now being collected in abundance in the Bimini Islands.

TYPE LOCALITY: Biscayne Bay, Florida.

GENERAL DISTRIBUTION: Apparently localized at the lower tip of Florida, the Florida keys, and Bimini. An allied species occurs in Puerto Rico.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, May, June, July, August, 1951.

GENUS **BANASA** STÅL

Banasa STÅL, 1860, *K. Svenska Vetensk.-Akad. Handl.*, vol. 2, no. 7, p. 24.

Banasa herbacea (Stål)

Piezodorus herbacea STÅL, 1872, *K. Svenska Vetensk.-Akad. Handl.*, vol. 10, no. 4, p. 44 (*Piezodorus*).

Some 82 specimens of this bright green species were, as were many other pentatomids and cydnids, taken at lights. Although originally assigned to the genus *Piezodorus* by Stål, the characters do not conform to those of that genus but are similar to those of *Banasa*. Barber in the "Scientific survey of Puerto Rico and the Virgin Islands" (1939) suggested that this species be removed from *Piezodorus* and assigned to *Banasa*. The author is in agreement with this proposal.

TYPE LOCALITY: St. Thomas Island, Virgin Islands.

GENERAL DISTRIBUTION: Puerto Rico, Virgin Islands, and probably other West Indian islands.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, June to August, 1951.

SUBFAMILY **ASOPINAE** (SPINOLA)

Asopoideae SPINOLA, 1850, Tavola Sinottica, p. 29.

GENUS **PODISUS** HERRICH-SCHAEFFER

Podisus HERRICH-SCHAEFFER, 1853, Die Wanzartigen Insecten, vol. 9, p. 296, p. 337.

Podisus sagitta (Fabricius)

Cimex sagitta FABRICIUS, 1794, Entomologia systematica, vol. 4, p. 99.

This is a common predatory species which is found abundantly in southern Florida. The single specimen from Bimini apparently is a varietal form, as it is much more blotched and punctured with black and possesses black annuli near the apical ends of the femora. Other structural characters are like those accepted for the species.

TYPE LOCALITY: West Indies.

GENERAL DISTRIBUTION: Texas, Florida, St. Croix, Virgin Islands, Mona Island, Puerto Rico, Cuba, Central America, and northern South America.

NEW RECORD FOR BAHAMA ISLANDS: South Bimini Island, August, 1951.

