

STUDIES ON THE FAUNA OF CURAÇAO, ARUBA,  
BONAIRE AND THE VENEZUELAN ISLANDS: No. 12.

LAND AND FRESH WATER DECAPOD CRUSTACEA  
FROM THE LEEWARD GROUP AND NORTHERN SOUTH  
AMERICA

by

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This small paper consists only of an enumeration of the specimens collected by Dr. HUMMELINCK in 1936 and 1937, together with the records of land and fresh water decapods from the articles by RATHBUN (1936) and SCHMITT (1936) on the collections made in 1930. Identifications of many of the brachyuran crabs were made by the late Dr. MARY J. RATHBUN (U.S. National Museum). The senior author is responsible for the identifications of the remainder of the crabs, as well as of the anomurans, while the junior author has determined the caridean species.

The material has been deposited in the U.S. National Museum, with the exception of the specimens of *Coenobita*, most of the *Gecarcinus*, and some of *Macrobrachium faustinum*, *Cardisoma* and *Uca*, which have been presented to the Rijksmuseum van Natuurlijke Historie at Leiden.

The localities have been briefly described in the 1st and 4th papers of this series.

TABLE 3.

Distribution of the Decapod Crustacea treated in this paper

	Los Testigos	Margarita	Blanquilla	Tortuga	Los Roques	Las Aves	Bonaire	Klein Curaçao	Curaçao	Aruba	Continental S. America and Trinidad
<i>Macrobrachium acanthurus?</i>											×
<i>Macrobrachium jelskii</i>											×
<i>Macrobrachium faustinum</i>							×				
<i>Macrobrachium</i> sp. (near <i>faustinum</i> )							×				
<i>Macrobrachium olfersii?</i>											×
<i>Macrobrachium jamaicense</i>							×		×	×	
<i>Macrobrachium</i> sp.											×
<i>Coenobita clypeatus</i>			×			×	×	×	×	×	×
<i>Pseudotelphusa garmani</i>		×									×
<i>Trichodactylus dentatus</i>											×
<i>Sesarma angustipes</i>											×
<i>Sesarma ricordi</i>					×				×		×
<i>Sesarma roberti</i>											×
<i>Metasesarma rubripes</i>											×
<i>Cardisoma guanhumi</i>			×				×		×	×	
<i>Gecarcinus ruricola</i>							×	×	×	×	
<i>Gecarcinus lateralis</i>				×	×	×	×	×	×	×	×
<i>Ocyroide albicans</i>		×									
<i>Uca mordax</i>							×				
<i>Uca pugnax rapax</i>	×				×		×		×	×	×
<i>Uca spincarpa</i>							×				
<i>Epiplatys bituberculatus</i>							×				

## CARIDEA

## PALAEMONIDAE

*Macrobrachium acanthurus* (Wiegman)?

N.E. CONTINENTAL VENEZUELA: Sta. 1, Rio Chuspa, 30.VII.1936, 40 mg Cl/1, 2 young.

These specimens in all probability belong to the present species, but they are too young to make certain identification possible.

Fresh and brackish water from Georgia to southern Brazil; West Indies.

**Macrobrachium jelskii** (Miers)

SCHMITT, 1935, p. 373 (*M. amazonicus*).

N.W. CONTINENTAL VENEZUELA: La Ceiba, Estado Trujillo, in a ditch at the borders of the Lago de Maracaibo, fresh water, probably oligohaline, with *Metasesarma* and ?*Callinectes*, 2. VIII. 1930, 22 specimens.

These specimens were recorded by SCHMITT (1936) as *Macrobrachium amazonicus* (Heller). Examination of the material showed them to belong to *Macrobrachium jelskii*, a species generally incorrectly considered identical with *M. amazonicum*.

Fresh water of Venezuela, Trinidad, Dutch and French Guiana.

**Macrobrachium faustinum** (De Saussure)

RATHBUN, 1919, p. 324 (*M. olfersii* part).

BONAIRE: Sta. 51, Tanki Kerkhof, Kralendijk, in muddy pool, 31.III.1937, 230 mg Cl/l, 13 specimens; Tanki Kerkhof, Kralendijk, spring 1939, Miss J. HELLMUND coll., 17 specimens; Sta. 57, Pos Caranja, W. Lima, in well, shadow, 14.XI.1936, 2600 mg Cl/l, 11 specimens.

Fresh water of the West Indies.

**Macrobrachium** sp. [near *M. faustinum* (De Saussure)]

RATHBUN, 1919, p. 324 (*M. olfersii* part)?; HUMMELINCK, 1933, p. 319 (*M. olfersii*); SCHMITT, 1936, p. 273 (*M. olfersii*).

BONAIRE: Sta. 55, Pos Calbas, Lima, in well, shadow, 1.IV.1937, 880 mg Cl/l, 1 specimen; Sta. 57a, Pos Caranja, W. Lima, in well, shadow, 31.III.1937, 2500 mg Cl/l, 3 specimens; Pos Caranja, in mesohaline water, 12.V.1930, 2 specimens; same locality, 28.VIII.1930, 12 specimens.

The present form shows much affinity to *Macrobrachium faustinum*, but differs from that species in some important details, so that it is most probable that it belongs to an undescribed species. The material at hand, however, is small and perhaps not even full grown, so that the question of the identity cannot be decided here. SCHMITT (1936) has already indicated the discrepancies between his material and *M. olfersii*. Only those specimens from the 1930 collection which I have been able to examine are listed above. The material from Bonaire identified as *M. olfersii* by Miss RATHBUN (1919) has not been examined. Not included in the enumeration are the specimens from Pos Caranja (17.V.1930, 7.VI.1930) and those from Pos di Booi (3.IX.1930), mentioned in the report on the material collected in 1930 (SCHMITT 1936, p. 372). These specimens have not been examined by me and may belong either to the present species or to *M. faustinum* (De Saussure).

**Macrobrachium olfersii** (Wiegmann)?

N.E. CONTINENTAL VENEZUELA: Sta. 1, Rio Chuspa, 30.VII.1936, 40 mg Cl/l, many young; Sta. 2, Rio Guanta, N. of Barcelona, 7. IV. 1937, 290 mg Cl/l 48 specimens. GOAJIRA, Colombia: Sta. 114, Laguna del Pájaro, 21.I.1937, 820 mg Cl/l, 2 young; Sta. 115, Rio Calancala, San Antonio, in river, 17.I.1937, 85 mg Cl/l, many young.

These specimens in all probability belong to *M. olfersii*, but they are too young to make certain identification possible.

Fresh water of Florida (where probably introduced) and continental Central and South America, from S.E. Mexico to S. Brazil. Not known from the West Indies.

### **Macrobrachium jamaicense** (Herbst)

CURAÇAO: Sta. 82a, Pos Europa, Dokterstuin, in deep pool, 24.X.1936, 470 mg Cl/l, H. B. C. SCHOTBORGH coll., 1 specimen. ARUBA: Sta. 103, Bron di Rooi Bringamosa, near brooklet with brackish water, 6.I.1937, 3150 mg Cl/l, 1 exuvia. BONAIRE: Tanki Kerkhof, Kralendijk, spring 1939, Miss J. HELLMUND coll., 5 specimens.

Fresh and brackish water from Florida to southern Brazil; West Indies.

### **Macrobrachium** sp.

N.E. CONTINENTAL VENEZUELA: Sta. 1, Rio Chuspa, N. of Higueroete, in river, 30.VII.1936, 40 mg Cl/l, 1 young, too small to be identified with certainty.

## **PAGURIDEA**

### **COENOBITIDAE**

#### **Coenobita clypeatus** (Herbst)

RATHBUN, 1919, p. 329; SCHMITT, 1924, p. 80; 1936, p. 377.

N.E. CONTINENTAL VENEZUELA: Sta. 121, Cabo Blanco, near La Guaira, 19.VIII.1936, 1 specimen; Rio Chuspa, 30.VII.1936, in mud of coconut grove, 1 specimen. BLANQUILLA: Sta. 171, Valuchu, 21.VII.1936, 1♀. AVES: Sta. 179, Ave de Barlovento, 27.VII.1936, 3 specimens. BONAIRE: Dos Pos, 24.V.1930, 2 specimens; Kralendijk, 2.XII.1930, 2 specimens; Pekelmeer, 8.VI.1930, 1 specimen. KLEIN CURAÇAO: Sta. 200, 29.VIII.1936, 11 specimens. CURAÇAO: Sta. 210, Kabrietenberg, 16.X.1936, 2 specimens; Sta. 214, Jack Evertszberg, 10.X.1936, 6 specimens; Sta. 217, Hato, 17.IX.1936, 1♂; Sta. 238, Westpunt, 27.X.1936, 2 specimens; Sta. 241, Plaja Abau, 6.XI.1936, 1 specimen; Hofje St. Kruis, 24.IV.1930, 2 specimens; Piscadera Baai, 8.IX.1936, 8 specimens. ARUBA: Fontein, 2.VII.1930, 2 specimens; Cave of Fontein, 29.VI.1930, 1 specimen; Sta. 269, Santa Cruz, 21.XII.1936, 1 specimen; Sta. 278a, Boekoeti, 25.VI.1930, 1 specimen.

Florida to Brazil; West Indies; Bermudas. Very common. Local name: soldaatje (Curaçao, Aruba, Bonaire).

## BRACHYURA

## POTAMONIDAE

*Pseudothelphusa garmani* Rathbun

MARGARITA: Sta. 15, Manantial de Güiri, San Antonio, 13.VII.1936, 80 mg Cl/l, 1 specimen; Sta. 26, Toma de Agua del Valle, 4.VII.1936, 60 mg Cl/l, 1 young ♀; Sta. 149, above the Toma de Agua de La Asunción, 12.VII.1936, wooded part of mountains, 2 ♂♂.  
Fresh water of Trinidad and Venezuela.

*Trichodactylus (Dilocarcinus) dentatus* (Randall)

RATHBUN, 1936, p. 386.

W. CONTINENTAL VENEZUELA: In a cold H<sub>2</sub>S well, east of Ureña (one of the sources of the Río Pamplonita), Estado Táchira east of Cúcuta, about 1600 feet high, fresh water, 20.VII.1930, 1 young.  
Fresh water of Venezuela, Guiana, and Brazil.

## GRAPSIDAE

*Sesarma (Holometopus) angustipes* Dana

N.E. CONTINENTAL VENEZUELA: Sta. 1, Río Chuspa, 30.VII.1936, in mud of coconut grove, 1 ♂.  
Along banks of rivers from Vera Cruz, Mexico, to Nicaragua, and probably to Río de Janeiro; West Indies.

*Sesarma (Holometopus) ricordi* H. Milne Edwards

ROQUES: Sta. 42, Pozo de la Cabecera, Gran Roque, 26.VII.1936, 3650 mg Cl/l, 1 ♂ 1 ovig. ♀. CURAÇAO: Piscadera, 9.X.1936, barren country near shore, 1 ♀.  
Around logs and debris near shore from southern Florida and Bahamas to Río de Janeiro; Bermudas; West Indies.

*Sesarma (Holometopus) roberti* H. Milne Edwards

TRINIDAD: Sta. 116, river near Four Roads, 7.V.1936, 30 mg Cl/l, 1 ♀.  
Banks of brackish rivers of West Indies; also Gorée, Senegambia.

*Metasesarma rubripes* (Rathbun)

RATHBUN, 1936, p. 387.

N.W. CONTINENTAL VENEZUELA: La Ceiba, Estado Trujillo, abundant in

a ditch at the borders of the Lago de Maracaibo, fresh water, probably oligohaline, with ?*Callinectes* and *Macrobrachium*, 2.VIII.1930, 3 ♂ 2 ♀. Greytown, Nicaragua, to the Rio de la Plata.

## GEARCINIDAE

### *Cardisoma guanhumii* Latreille

HUMMELINCK, 1933, p. 319; RATHBUN, 1919, p. 342; 1936, p. 387.

BLANQUILLA: Sta. 36, Pozo de la Playa del Jaque, 22.VII.1936, 1650 mg Cl/l, 1 ♂. BONAIRE: Sta. s.n., Pos Jatoe Largoe, Lima, 29.VIII.1930, 360 mg Cl/l, 1 ♀; Sta. 57, Pos Caranja, 14.II.1936, 2600 mg Cl/l, observed; Pos Caranja, 12.V.1930, mesohaline water, 3 young. Very common in wet caves and wells in crevices of the limestone plateaux in Bonaire and Klein Bonaire. CURAÇAO: Sta. 244, Plaja Chikitoe, St. Kruis, 24.X.1936, 1 young ♀. ARUBA: Entrance of cave of Fontein, 2.VII.1930, 1 ♂; Boca Prins, 2.VII.1930, dirty salt water pool, 1 ♂ 2 ♀♀.

Open fields, bush-covered hills and forests from southern Florida and Bahamas to São Paulo, Brazil; Bermudas; West Africa.

### *Gecarcinus ruricola* (Linnaeus)

RATHBUN, 1919, p. 341; 1936, p. 387.

BONAIRE: Salinja Grandi di Gotó, 26.VIII.1930, 1 dead ♀. KLEIN CURAÇAO: Sta. 200, 29.VIII.1936, 1 ♂. CURAÇAO: Brevengat, XI.1930, V. H. VAN DEN BERGH coll., 1 young ♀; Piscadera, 21.IX.1936, 1 ovig. ♀; Sta. 75, Tanki Mamaja, Hato, 6.X.1936, 450 mg Cl/l, 1 young ♂; Sta. 88a, Bron di Rooi, Beroe, Savonet, 26.III.1937, mesohaline water, 1 young ♀; Sta. 244, Plaja Chikitoe, St. Kruis, 24.X.1936, 1 young ♂. ARUBA: Cave of Fontein, 27.VI.1930, 1 ♂; Cave of Fontein, 30.VI.1930, 1 ♂; Cave of Fontein, 4.VII.1930, 1 ♂.

Low, marshy ground (in dry season) from Florida and Bahamas to Curaçao; West Indies.

### *Gecarcinus lateralis* (Fremenville)

RATHBUN, 1936, p. 388.

N.E. CONTINENTAL VENEZUELA: Sta. 121, Cabo Blanco, near La Guaira, 19.VIII.1936, 3 young. TORTUGA: Sta. 173, 1.VIII.1936, 1 ♀; Roques: Sta. 176, Gran Roque, 25.VII.1936, 1 young ♂. AVES: Sta. 179, Ave de Barlovento, 27.VII.1936, 2 ♂♂ 1 young. BONAIRE: Kralendijk, 2.XII.1930, 5 young. CURAÇAO: Sta. 202A, Seroe di Boca, St. Joris, 7.IX.1936, 1 young ♀; Seroe Pieter, Lagoen, 22.IV.1930, 115 m high, 1 young. ARUBA: Sta. 249, Quadirikiri, 9.II.1937, 2 young; Sta. 272, Hudishibana, Westpunt, 9.XII.1936, 1 young.

Sandy waste places from Florida and Bahamas to Guiana; West Indies; Bermudas; Ascension Island.

## OCYPODIDAE

*Ocypode albicans* Bosc

RATHBUN, 1919, p. 342; 1936, p. 388.

MARGARITA: Sta. 155, Patio del Hotel Central, Porlamar, 25.V.1936, wet place near tank with fresh water, 1 ♂. ARUBA: Boca Prins, 28.VI.1930, sandy beach (marine), 1 ♂ 2 ♀♀ 6 young.

Sandy beaches from Block Island, Rhode Island, to state of Santa Catharina, Brazil; West Indies; Bermudas.

*Uca mordax* (Smith)

HUMMELINCK, 1933, p. 319; RATHBUN, 1936, p. 388.

BONAIRE: Sta. s.n., Pos Shiki, Lima, 3.XII.1930, about 8000 mg Cl/l?, 1 ♀ with zoeae; Pos Tjoebatoe, Brasiel, 3.VI.1930, mesohaline water, 1 specimen; Salinja Playa Frans, 3.VI.1930, near oversalted pool, 1 ♂.

From Bahamas and Gulf of Mexico to Rio de Janeiro.

*Uca pugnax rapax* (Smith)

RATHBUN, 1919, p. 342; 1936, p. 388.

N. CONTINENTAL VENEZUELA: Puerto Cabello, 8.IV.1930, coastal swamps, H. J. MACGILLAVRY coll., 3 ♂♂ 1 ♀; Las Piedras, Paraguaná, 24.II.1937, sandy mud near shore, 1 ♂ 1 ♀. TESTIGOS: Tamarindo, 16.VI.1936, muddy saltwater pool near salinja, 25 young ♂♂ 4 young ♀♀. ROQUES: Sta. 41, Pozo de la Vaca, Gran Roque, 25.VII.1936, 2100 mg Cl/l, 4 ♂♂ 1 ♀; Sta. 42, Pozo de la Cabecera, Gran Roque, 26.VII.1936, 3650 mg Cl/l, 2 ♂♂. BONAIRE: Sta. 54, Pos Baca Chikitoe, Kralendijk, 14.XI.1936, oligohaline water, 1 ♂ 1 ♀. CURAÇAO: Zaquito, near Rifwater, 13.VIII.1930, among *Rhizophora*, 7 ♂♂ 2 ♀♀; Salinja St. Kruis, 22.IV.1930, brackish pools, 1 young ♂ 1 young ♀. ARUBA: Lagoen Boekoeti, near Oranjestad, 18.VI.1930, among *Rhizophora*, 2 ♂♂ 4 ♀♀.

Near water from Miami, Florida, to Rio de Janeiro; West Indies.

*Uca spinicarpa* Rathbun

RATHBUN, 1936, p. 388.

BONAIRE: Pos Baca Chikitoe, Kralendijk, 6.IX.1930, mesohaline water, 1 young ♂.

Florida to Brazil; Jamaica.

## MAJIDAE

*Epialtus bituberculatus* H. Milne Edwards

RATHBUN, 1936, p. 380.

BONAIRE: Sta. 48b, Fontein, 21.V.1930, oligohaline water, 1 ♂. Indian River, Florida, to Desterro, Brazil; Chile.

The record of this ordinarily marine species in oligohaline water should be accepted with caution until additional specimens are obtained from the same or a similar locality.

## LITERATURE CITED

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[Mentions: *Macrobrachium olfersii* (Wiegmann) (= *M. faustinum* and *M. sp.?*) salt water at Curaçao and Bonaire; *Coenobita clypeatus* (Herbst) from Klein Bonaire and Curaçao; *Gecarcinus ruricola* (Linnaeus) from Aruba; *Cardisoma guanhumi* Latreille from Aruba; and *Uca pugnax rapax* (Smith) from Curaçao].
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[Mentions: *Cardisoma guanhumi* Latreille from Caracas Baai; *Gecarcinus ruricola* (Linnaeus) from the plantations Brakke Put and Hato; *Gecarcinus lateralis* (Fremenville) from Caracas Baai; and *Uca pugnax rapax* (Smith) from Caracas Baai].
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[Mentions: *Crangon cristulifrons* (Rathbun) from fresh water on the plantation Hato<sup>1)</sup> and from marine habitats at Caracas Baai and Spaansche Water; and *Coenobita clypeatus* (Herbst) from Caracas Baai and Jan Thiel].
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<sup>1)</sup> Inasmuch as this normally marine species has not been recorded elsewhere from fresh water, it would be of considerable interest to obtain additional specimens from this locality.