

that exceed 25 inches in total length are not rare, and although not particularly tasty, it is considered to be good food.

*M. carcinus* is probably represented in all of the major drainage areas of the island, and it occurs in streams to an altitude of at least 1,000 ft. The young of *M. carcinus* are almost impossible to distinguish from the young of *M. faustinum* and *M. crenulatum*, another circumstance that probably helps account for the relatively small number of specimens recorded here.

**Macrobrachium crenulatum** Holthuis

Fig. 7.

*Description and synonymy.*—Holthuis, 1952: 107–110, pl. 27, figs. a–d; pl. 28.

*Type locality.*—Pejebobo River, Panama. *Distribution.*—Central and South America; West Indies. Fresh water.

*Occurrence in Jamaica.*—**St. James Parish:** Station E—Spring in streamlet, Montego Bay, coll. by E. A. Andrews (USNM). **Hanover Parish:** Station J—Flint River near Sandy Beach, coll. by E. A. Andrews (USNM).

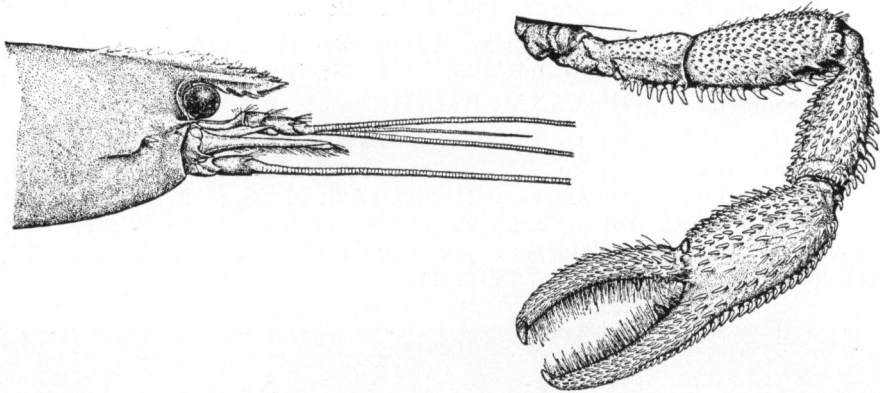


FIGURE 7.—Lateral view of cephalic portion of *MACROBRACHIUM CRENULATUM* (left); smallest of the second chelae of *M. CRENULATUM* (right). [From Holthuis, L. B. 1952—with the permission of Dr. Holthuis.]

*Remarks.*—It seems peculiar that the species was not found in my collections—but since it has not been reported from Jamaica since 1910, it is possible that it no longer is extant there.

The young of this species might be confused with the young of *M. crenulatum* and *M. faustinum*.

**Macrobrachium faustinum** (de Saussure)

Fig. 8.

*Description and synonymy.*—Holthuis, 1952: 88–95, pl. 22, pl. 23 figs. a–c.

*Type locality.*—A river near Jaemel, Haiti. *Distribution.*—West Indian islands.

*Occurrence in Jamaica.*—**Clarendon Parish:** Station 5—4 specimens (USNM); Station 6—3 specimens (USNM); Station 7—3 specimens (USNM); Station 8—7 specimens (ANSP). **Hanover Parish:** Station 17—1 specimen (ANSP); Station 19—2 specimens (USNM); Station 20—1 specimen (USNM); Station J—(USNM). **Portland Parish:** Station 28—4 specimens (ANSP); Station 30—8 specimens (IJ); Station 31—2 specimens + fragment of chela (ANSP); Station 32—25 specimens (RMNH). **St. Andrew Parish:** Station L—(ANSP). **St. Ann Parish:** Station 23—18 specimens (USNM). **St. Catherine Parish:** Station 1—15 specimens (RMNH); Station 2—2 specimens (RMNH); Station 3—6 specimens (RMNH); Station 4—11 specimens (RMNH); Station K—(USNM). **St. Elizabeth Parish:** Station 10—3 specimens (RMNH); Station 11—1 specimen (RMNH); Station 12—18 specimens (RMNH). **St. Mary Parish:** Station 24—2 specimens (ANSP), 1 specimen (USNM); Station 25—11 specimens + fragment of chela (RMNH); Station 26—5 specimens (ANSP); Station 27—7 specimens (USNM). **St. James Parish:** Station E—(American Museum of Natural History coll.). **St. Thomas Parish:** Station 33—10 specimens (USNM); Station 35—9 specimens (IJ); Station 37—5 specimens (USNM); Station 38—12 specimens (IJ); Station H—(USNM). **Trelawny Parish:** Station 21—1 specimen (USNM); Station 22—1 specimen (USNM). **Westmoreland Parish:** Station 15—2 specimens (USNM).

*Literature references to "Jamaica" only.*—*Palaemon faustinus* Benedict, 1892: 77; *Palaemon olfersii* Sharp, 1893: 123; *Bithynis faustinus* Rathbun, 1897: 45; *Bithynis olfersii* Rathbun, 1902: 124.

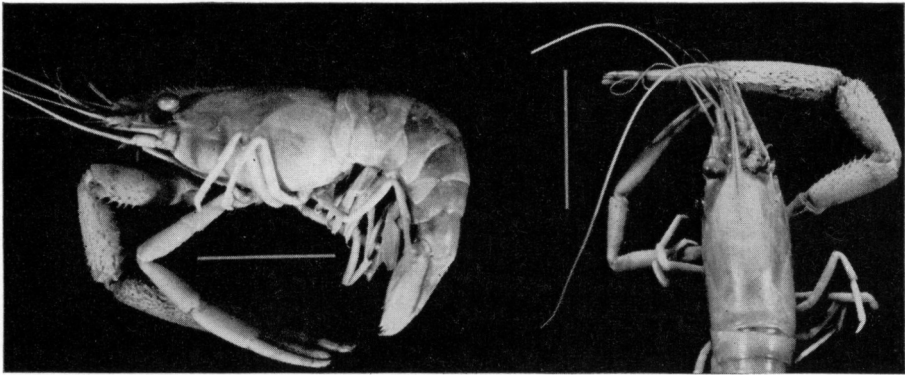


FIGURE 8.—Lateral and dorsal views of *MACROBRACHIUM FAUSTINUM*. The horizontal and vertical lines equal one inch.

*Remarks.*—This is without doubt the most ubiquitous freshwater shrimp in Jamaica (see Table 1). It was found at almost all stations up to an altitude of 1,000 ft., but was not found higher.

This species is similar to *M. crenulatum*, and it is possible to confuse the young of the two. This is also true of the young of *M. carcinus*.

**Macrobrachium heterochirus** (Wiegmann)

Fig. 9.

*Description and synonymy.*—Holthuis, 1952: 69–74, pl. 15 figs. a, b; pl. 16 figs. a–c.

*Type locality.*—"East coast of Mexico." *Distribution.*—Eastern, Central and South America from Mexico to southern Brazil; West Indies. Fresh water.

*Occurrence in Jamaica.*—**St. Andrew Parish:** Station 41—1 fragment of chela (ANSP). **St. Mary Parish:** Station 26—1 specimen (IJ). **St. Thomas Parish:** Station 33—1 specimen (USNM); Station 36—1 specimen (USNM); Station 37—1 specimen (ANSP); Station H—(USNM). **Trelawny Parish:** Station 22—2 specimens (RMNH).

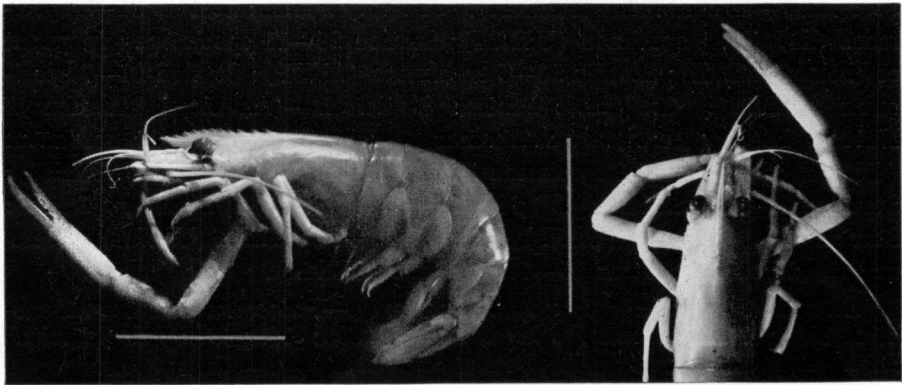


FIGURE 9.—Lateral and dorsal views of *MACROBRACHIUM HETEROCHIRUS*. The horizontal and vertical lines equal one inch.

*Remarks.*—While most of the species of the genus *Macrobrachium* appear to prefer low altitudes and to frequent brackish as well as fresh water, the lowest altitude at which I found *M. heterochirus* in Jamaica was 250 feet (Station 22). It was found in streams up to an altitude of 1,750 ft. (Station 41).

## Superfamily OPLOPHOROIDA

## Family ATYIDAE

**Atya occidentalis** Newport

Fig. 10.

*Description and synonymy.*—Bouvier, 1925: 312–314, figs. 700–702.

*Type locality.*—Jamaica. *Distribution.*—Central America and the West Indies. Fresh water.

*Occurrence in Jamaica.*—**Manchester Parish:** Station 9—2 specimens (USNM). **Portland Parish:** Station 29—4 specimens (USNM). **St. Andrew Parish:** Station 39—6 specimens (USNM). **St. Ann Parish:** Station 23—18 specimens (USNM). **St. Catherine Parish:** Station 3—2 specimens

(ANSP). **St. Mary Parish:** Station 24—4 specimens (7-459-6) (USNM), 4 specimens (7-160-1) (USNM). **St. Thomas Parish:** Station 34—1 specimen (IJ); Station 35—1 specimen (ANSP); Station 36—61 specimens (USNM); Station 37—2 specimens (USNM). **Trelawny Parish:** Station 22—22 specimens (RMNH).

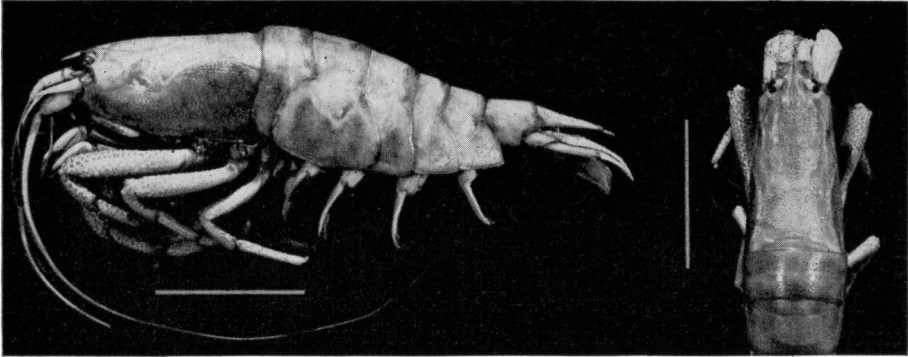


FIGURE 10.—Lateral and dorsal views of *ATYA OCCIDENTALIS*. The horizontal and vertical lines equal one inch.

*Remarks.*—This shrimp occurs in abundance in the streams of Jamaica, and is one of the smaller shrimps that is used by the people as food. It is collected locally by holding baskets made of reeds in the swift waters and then turning over rocks a few feet upstream.

The two specimens from Station 9 (Manchester Parish) may prove to be intermediates between *A. occidentalis* and *A. scabra* (see below).

#### *Atya scabra* Leach

Fig. 11.

*Description and synonymy.*—Bouvier, 1925: 314–317, figs. 703–706.

*Type locality.*—? *Distribution.*—Central and South America, East Africa, Australia, West Indies. Fresh water.

*Occurrence in Jamaica.*—**Clarendon Parish:** Station 6—1 specimen (ANSP); Station 7—2 specimens (RMNH); Station G—2 specimens (coll. by R. Proctor, 12 April 1953, IJ). **St. Catherine Parish:** Station 2—5 specimens (USNM).

*Literature references to "Jamaica" only.*—*Atya scabra* Rathbun, 1897: 44.

*Remarks.*—Rathbun (1897) reported *A. scabra* from Jamaica, but questioned whether *A. scabra* might not be synonymous with *A. occidentalis*. *A. scabra* is not synonymous with *A. occidentalis*, but some doubt exists concerning the validity of the records of this species occurring in East Africa and in Australia.

Specimens possibly intermediate between *A. scabra* and *A. occidentalis* were taken at Station 9 (Manchester Parish).

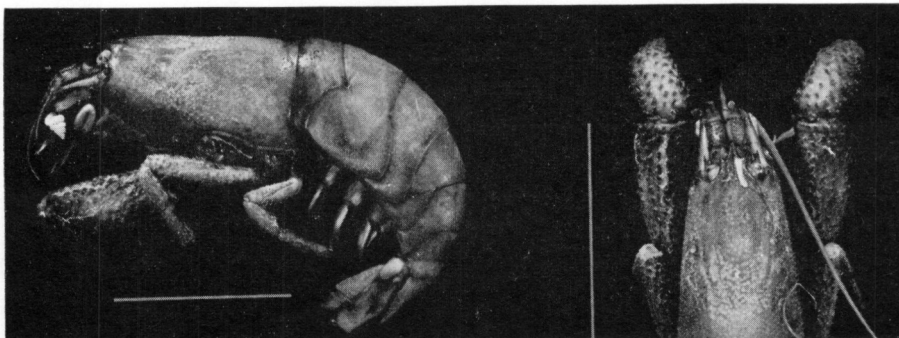


FIGURE 11.—Lateral and dorsal views of *ATYA SCABRA*. The horizontal and vertical lines equal one inch.

**Jonga serrei** (Bouvier)

Fig. 12.

*Description and synonymy.*—The description given by Bouvier (1925), except for the fact that the supraorbital teeth are neglected (they are in his original description—Bouvier, 1909), is an adequate description of this species. Because of the supraorbital spines mentioned above, I have removed this species from the genus *Potimirim* and placed it in a new genus, *Jonga* (Hart, 1961). A complete synonymy is included in that paper.<sup>3</sup>

*Type locality.*—Havana, Cuba. *Distribution.*—Cuba, Jamaica, Barbados, Puerto Rico. Fresh water.

*Occurrence in Jamaica.*—**Hanover Parish:** Station 19—1 specimen (USNM). **Portland Parish:** Station 32—16 specimens (RMNH). **Trelawny Parish:** Station 21—4 specimens (IJ).

*Remarks.*—This species shows some variation in color—ranging from light brown (Station 19) to black (1 of the specimens at Station 32).

This is the first record of this shrimp from Jamaica.

**Micratya poeyi** (Guerin-Meneville)

Fig. 13.

*Description.*—Bouvier, 1925: 325–327, figs. 702–716.

*Type locality.*—Cuba. *Distribution.*—Cuba and Jamaica.

*Occurrence in Jamaica.*—**Portland Parish:** Station 29—16 specimens (USNM); Station 28—2 specimens (ANSP). **St. Ann Parish:** Station 23—7 specimens (USNM). **St. Mary Parish:** Station 24—14 specimens (RMNH); Station 26—1 specimen (USNM); Station 27—11 specimens (RMNH). **St. Thomas Parish:** Station 33—4 specimens (IJ). **Westmoreland Parish:** Station 15—6 specimens (USNM).

<sup>3</sup> I erred in that paper when I stated that Holthuis (1954) included all of the species of *Ortmannia* in the genus *Potimirim* except *O. henschawi*. Actually, Holthuis erected the genus *Potimirim* for Bouvier's second group of *Ortmannia* (containing *O. americana*, *O. mexicana*, and *O. serrei*), and excluded all of his first group (containing *O. henschawi*, *O. alluaudi*, and *O. Edwardsi*).