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NOTES ON WESTERN ATLANTIC CALLIANASSIDAE (CRUSTACEA: DECAPODA: THALASSINIDEA)

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Abstract.—Senior synonyms are reported for two species: *Callianassa setimanus* (DeKay, 1844), for *Callianassa atlantica* Rathbun, 1926, and *Callianassa grandimana* Gibbes, 1850, for *Glypturus branneri* Rathbun, 1900. The genus *Glypturus* Stimpson, 1866, is removed from the synonymy of *Callianassa* Leach, 1814, and *Glypturus acanthochirus* Stimpson, 1866, is shown to be a senior synonym of *Callianassa armata* A. Milne Edwards, 1870, from the Indo-West Pacific. *Corallianassa,* new genus, is recognized for *Callianassa longiventris* A. Milne Edwards, 1870, and *Callianassa borradailei* de Man, 1928. A list of the western Atlantic callianassids is presented.

Studies on eastern American callianassids, initiated in 1982 at the Smithsonian Marine Station in Fort Pierce, Florida, have revealed that several changes are needed in the nomenclature of American callianassids. Senior synonyms exist for two names now in general use, *Callianassa branneri* (Rathbun, 1900) and *C. atlantica* Rathbun, 1926. The genus *Glypturus* Stimpson, 1866, long considered to be a synonym of *Callianassa* Leach, 1814, is recognized as a distinct genus, and its type species, *Glypturus acanthochirus* Stimpson, 1866, originally described from the Florida Keys, appears to be conspecific with *Callianassa armata* A. Milne Edwards, 1870, from the Indo-West Pacific. A new genus is recognized for *Callianassa longiventris* A. Milne Edwards, 1870, from the western Atlantic and *Callianassa borradailei* de Man, 1928, from the Pacific and Indian Oceans. All of these changes, supplemented with an up-to-date list of Western Atlantic callianassids, needed because of numerous recent changes in callianassid taxonomy, are presented here. Further, the forthcoming publication of a list of scientific and common names of decapod crustaceans of the United States by the American Fisheries Society also makes these name changes timely.

This opportunity is taken to correct the name and authorship of the superfamily containing the Callianassidae erected by M. de Saint Laurent (1979:1395), who recognized the superfamily Axioidea Huxley, 1879, containing the families Callianassidae Dana, 1852, Axiidae Huxley, 1879, and Callianideidae Kossmann, 1880. According to Article 36(a) of the *International Code of Zoological Nomenclature,* third edition, 1985, a superfamily must bear the authorship and date of the oldest family name included in it. A superfamily containing the three families listed above must be known as the Callianassoidea Dana, 1852. For now I prefer to follow Bowman and Abele (1982) and include these families in the superfamily Thalassinoidea Latreille, 1831.

The Status of *Gonodactylus setimanus* DeKay, 1844

Two species of *Callianassa, C. atlantica* Rathbun, 1926, and *C. biformis* Biffar, 1971, are known to occur off the extreme northeastern coast of the United States. *Callianassa atlantica* is a sublittoral species, occurring from near shore to depths of 98–134 meters (Rabalais et al. 1981), and it has been recorded from localities between Nova Sco-

tia and the northwestern Gulf of Mexico (Rabalais et al. 1981, Williams 1984). *Callianassa biformis* generally occurs in shallow water, in intertidal to shallow subtidal habitats, in depths to 10–15 meters. It has been recorded from localities between the Bass River, Yarmouth, Massachusetts, and the northwestern Gulf of Mexico (Biffar 1970, Rabalais et al. 1981, Williams 1984).

In 1844:34, DeKay described and figured *Gonodactylus setimanus* taken from the stomach of a cod from a market in New York. DeKay's description is rather poor, yielding little information on the identity of his species. As it may not be generally available, I quote it here:

"Shield oblong, with its side much elongated; a transverse lunate suture on its lower portion in front, with two spinous projecting teeth covering the ophthalmic ring. Internal antennae long, smooth, and furnished with plumose setae; external shorter, bifid at their extremities, which are articulated. The penultimate segment of the jaw-foot is flattened, carinate on its upper margin, dilated and furnished with long plumose setae; beyond this are three segments gradually diminishing in size to the last, which is oblong-oval, plumose on both margins. First two pair of feet didactyle; the two following with the terminal joints flat and rounded, the edges ciliated. The penultimate abdominal segment slightly arcuated, without spines, and with three rounded unarmed fins on each side, of which the inferior is largest.

"*Color,* greyish; tips of the claws of the anterior pair, ciliae on the extremities of the others, and the fins, black.

"Total length, 3.2; of the anterior pair of feet, 1.5.

"This species was obtained from the stomach of a Cod-fish in the market. I have to regret that it was too much mutilated to enable me to present its characters more in detail. It is only provisionally placed here, for in many particulars it is much more nearly allied to the family *Erichthidae.*"

DeKay's figure (pl. 8, fig. 23) clearly shows

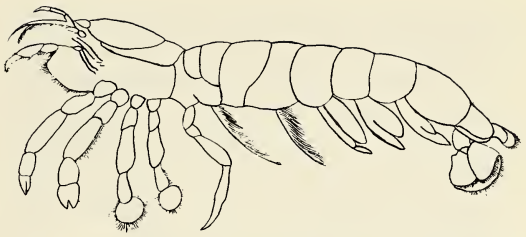

Fig. 1. *Callianassa setimanus* (DeKay, 1844) (from DeKay 1844).

a species of *Callianassa* with: 1) a third maxilliped with a wide ischium and merus; 2) the antennular peduncle longer than the antennal peduncle (although these are reversed by DeKay in the text); 3) the minor cheliped lacking a spine on the merus and with a long carpus (longer than the chela); 4) a long sixth abdominal somite; and 5) a telson shorter than the inner uropods. DeKay's figure is reproduced here (Fig. 1).

These are among the features used by Rabalais et al. (1981:101) to distinguish *C. atlantica* from the similar *C. biformis* Biffar. These features, and the fact that DeKay's specimen was taken from the stomach of a cod, suggesting that *C. setimanus* lived offshore, support the identification of his species with *C. atlantica.*

Curiously, Gibbes (1850:194), who examined DeKay's material, remarked that it indeed was a species of *Callianassa,* and Gibbes considered *Gonodactylus setimanus* DeKay, 1844, to be a synonym of *Callianassa major* Say, 1818. Gibbes, under his account of *Callianassa major,* noted: "The crustacean described by Dr. DeKay as *Gonodactylus setimanus* . . . belongs to this genus, as can be seen from the description and figure, and I regard it as belonging to this species. Most probably the individual he obtained had lost the large anterior foot so striking in this genus, and the error was thus induced. But I have examined the specimen preserved in the New-York Cabinet with his label, and it does not belong to the *Stomapoda,* as the branchiae are in

the position usual in the *Decapoda,* under the shell, and it is in fact a *Callianassa.*"

I have no hesitation in synonymizing *Callianassa atlantica* Rathbun, 1926, with *Gonodactylus setimanus* DeKay, 1844. The oldest name for this species is *Callianassa setimanus* (DeKay, 1844). Original references for this species are as follows:

Gonodactylus setimanus DeKay (1844:34, pl. 8, fig. 23). Type locality New York.

Callianassa stimpsoni Smith, in Verrill, Smith, and Harger (1873:549, pl. 2, fig. 8). Type locality Eastern United States ("Our species from the coast of the Southern States north to Long Island Sound"). [A junior homonym of *Callianassa stimpsoni* Gabb, 1864, a fossil species.]

Callianassa atlantica Rathbun (1926:107). [A replacement name for *C. stimpsoni* Smith, 1873.]

The Status of *Callianassa grandimana* Gibbes, 1850

Gibbes (1850:194) described *Callianassa grandimana,* as follows: "This species was brought *from Key West* by Dr. F. Wurdemann, and is easily distinguished from *C. major* by its large anterior claw or foot. The second segment [=ischium] is slender and narrow near its articulation with the first, and is dilated and incurved as it advances, with distant granules on its lower edge; the third segment [=merus] is broader, dilated so as to form below a sharp, serrated edge, which is truncated as it approaches the posterior articulation, inner surface of the segment is nearly plane, on the middle of the outer is a longitudinal obtuse ridge; the carpus is united with the preceding segment by a small articulating surface near its upper edge, somewhat inflated externally, the breadth, or rather the depth, nearly twice as great as the length, the posterior lower angle rounded, forming an edge without any trace of serrature; the hand broader, or rather deeper, than the carpus, and its length, exclusive of the finger, is nearly double that of the carpus, inflated on the internal surface, and more so on the external, lower edge ciliate, and with a few small distal serrations; whole surface of hand, as well as of carpus, smooth and polished." Gibbes' material has been lost and, until now, the identity of his species has been uncertain.

Balss (1924:179) identified a specimen from Jamaica with Gibbes' species, but in a poor figure showed a species with a trispinous front, a large cornea, and a cheliped with many ventral spines on the ischium and merus. The identity of *Glypturus grandimanus* sensu Balss remains uncertain, but Schmitt (1935:3, 4), recognizing that the species reported by Balss did not agree with Gibbes' account of *C. grandimana,* proposed *Callianassa hartmeyeri* as a replacement name for *Glypturus grandimanus* sensu Balss. The identity of *Callianassa hartmeyeri* Schmitt is still uncertain.

De Man (1928b:19) considered that "*Call. grandimana* is certainly a true *Callianassa,* related to *Call.* (*Callichirus*) *longiventris....*"

Schmitt (1935:2) noted that *C. grandimana* was most similar to *C. branneri* (Rathbun). Schmitt had examined material of the latter species from Dry Tortugas, some 60 miles west of the type locality, and commented "but until we know more of the Callianassas of our southern States we should refrain from making use of Gibbes' specific name."

Biffar (1971a:671–674) summarized the history of *C. grandimana* and evaluated the characters used by Gibbes. He concluded (p. 674) that "After careful comparison and evaluation, it becomes apparent that only *C. branneri* fits all the characters ascribed to *C. grandimana,*" and, "Obtaining specimens from Key West would do much to establish the position of *C. branneri* in relation to *C. grandimana,* and it is hoped that future collections will be successful in this locality."

In July 1984 I visited Key West with the aim of collecting callianassids that might

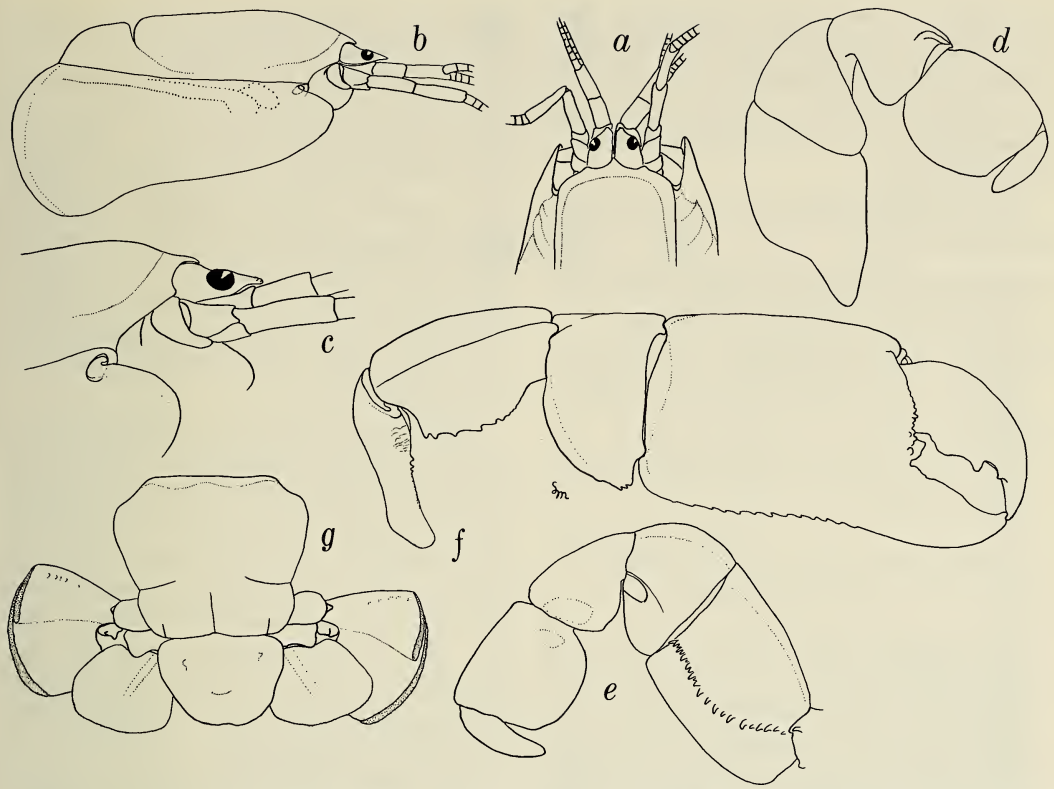

Fig. 2. *Callianassa grandimana* Gibbes, 1850. Male neotype, total length 67 mm, Key West: a, Front, dorsal view; b, Carapace, lateral view; c, Front, lateral view; d, Third Maxilliped, external surface; e, Third maxilliped, inner surface; f, Major cheliped; g, Sixth abdominal somite, telson, and uropods.

settle the identity of *C. grandimana,* and, at one site off the south coast of the island I found a colony of a *Callianassa* that until now would be referred to *C. branneri.* Gibbes description fits this material rather well; compare his account with Fig. 2f herein. On the major cheliped the ischium [second segment of Gibbes] is slender, narrow at its proximal articulation; it is more dilated distally and serrate ventrally. The merus is broader, dilated near its midlength, with a strongly serrate edge; it is distinctly truncated proximally, and there is an obtuse, longitudinal ridge on its outer surface. The carpus has a small proximal articulating surface, it is almost twice as high as long, and the lower edge generally lacks serrations. Two or three distal denticles may be present, but even when present the ventral surface proper is smooth. The palm is distinctly higher than the carpus and its length is nearly double that of the carpus. The lower edge of the palm is ciliated, and there are distinct serrations on the lower edge; these are not always visible in external view on smaller specimens.

In order to settle the identity of *Callianassa grandimana,* I select an adult male from Key West as the neotype of the species. The neotype (USNM 205630) is a male with total length of 67 mm, carapace length of 17 mm; it is shown in Fig. 2. Collection data are as follows: Atlantic Ocean, Monroe County Florida, Key West, South Roosevelt Boulevard (U.S. Highway A1A), 2.3 miles from U.S. Highway 1, clean sand flat behind sand bar about 50 meters from shore, bar separated from shore by *Thalassia* flat, depth

0.5 meter or less at low tide, taken with yabby pump by R. B. and L. K. Manning, 8 Aug 1986 (Sta RBM KW-2). The other specimens from the same collection and some collected on 7 Aug (Sta RBM KW-1) are topotypes.

The original references to *Callianassa grandimana* are:

Callianassa grandimana Gibbes (1850:194). Type locality Key West, Florida.

Glypturus branneri Rathbun (1900:150, pl. 8, figs. 5–8). Type locality Mamanguape, Brazil.

Glypturus siguanensis Boone (1927:85, fig. 17). Type locality Siguanea Bay, Isle of Pines, Cuba.

The Status of the Genus *Glypturus* Stimpson, 1866

In 1866 William Stimpson provided brief diagnoses of two new genera of callianassids, *Callichirus* and *Glypturus*. Both genera have been considered as synonyms of *Callianassa* or as subgenera of *Callianassa*. In a separate paper (Manning and Felder 1986) *Callichirus* was recognized as a genus distinct from *Callianassa*. Here it is shown that *Glypturus* also is a genus distinct from *Callianassa,* and, surprisingly, that *Callianassa armata* A. Milne Edwards, 1870, from Fiji, is a synonym of *Glypturus acanthochirus* Stimpson, 1866.

Glypturus Stimpson, 1866

Glypturus Stimpson, 1866:46. Type species *Glypturus acanthochirus* Stimpson, 1866, by monotypy.

Definition.—Rostrum triangular, with upturned, pointed apex. Carapace with lateral spinous projections anteriorly on each side above antenna, anterolateral spines distinctly separated from carapace by noncalcified membrane. Eye large, extending almost to end of first segment of antennular peduncle. Cornea small, subterminal, situated laterally. Mxp-3 pediform, ischium with row of small spines on inner surface. Both chelipeds: dorsal margin of palm cristate, armed with spines, dorsal margin ending in distal projection; ventral margin of palm cristate; dorsal and ventral margin of carpus with spines; merus spined dorsally and ventrally; ischium spined ventrally, lacking large ventral hook. Sixth abdominal somite inflated, longest of all abdominal somites, about twice as long as telson. Telson wider than long, shorter than uropods. Uropod setation all marginal. Endopod of uropods elongate oval.

Remarks.—*Glypturus,* as defined here, contains only the type species. It can be distinguished from all other callianassid genera by the following combination of characters: front trispinous, with the rostral spine upturned and the lateral spines separated from the front by a noncalcified membrane; the eyes with a small, lateral cornea; and the chelipeds in which the merus and palm of both the major and minor chelae are provided with dorsal spines.

I can find no differences between the accounts of *Glypturus acanthochirus* from the western Atlantic and those of *Callianassa armata* A. Milne Edwards (1870:90) from the Indo-West Pacific; I consider them to be conspecific. Biffar (1971a:660) noted that *G. acanthochirus* appeared to be closely related to *Callianassa armata* A. Milne Edwards. A comparison of Biffar's account and material of *G. acanthochirus* with the accounts of A. Milne Edwards (1870:90), based on material from Fiji, and Kensley's (1975: 48) description and figures of *C. armata* from Mauritius, lead me to synonymize the two species. An original figure for *G. acanthochirus* is given here (Fig. 3), and the figures in A. Milne Edwards (1870: pl. 1) and Kensley (1975: fig. 1) are reproduced as Figs. 4 and 5.

The original references for *G. acanthochirus* are as follows:

Glypturus acanthochirus Stimpson (1866: 46). Type locality Florida Keys and Tortugas.

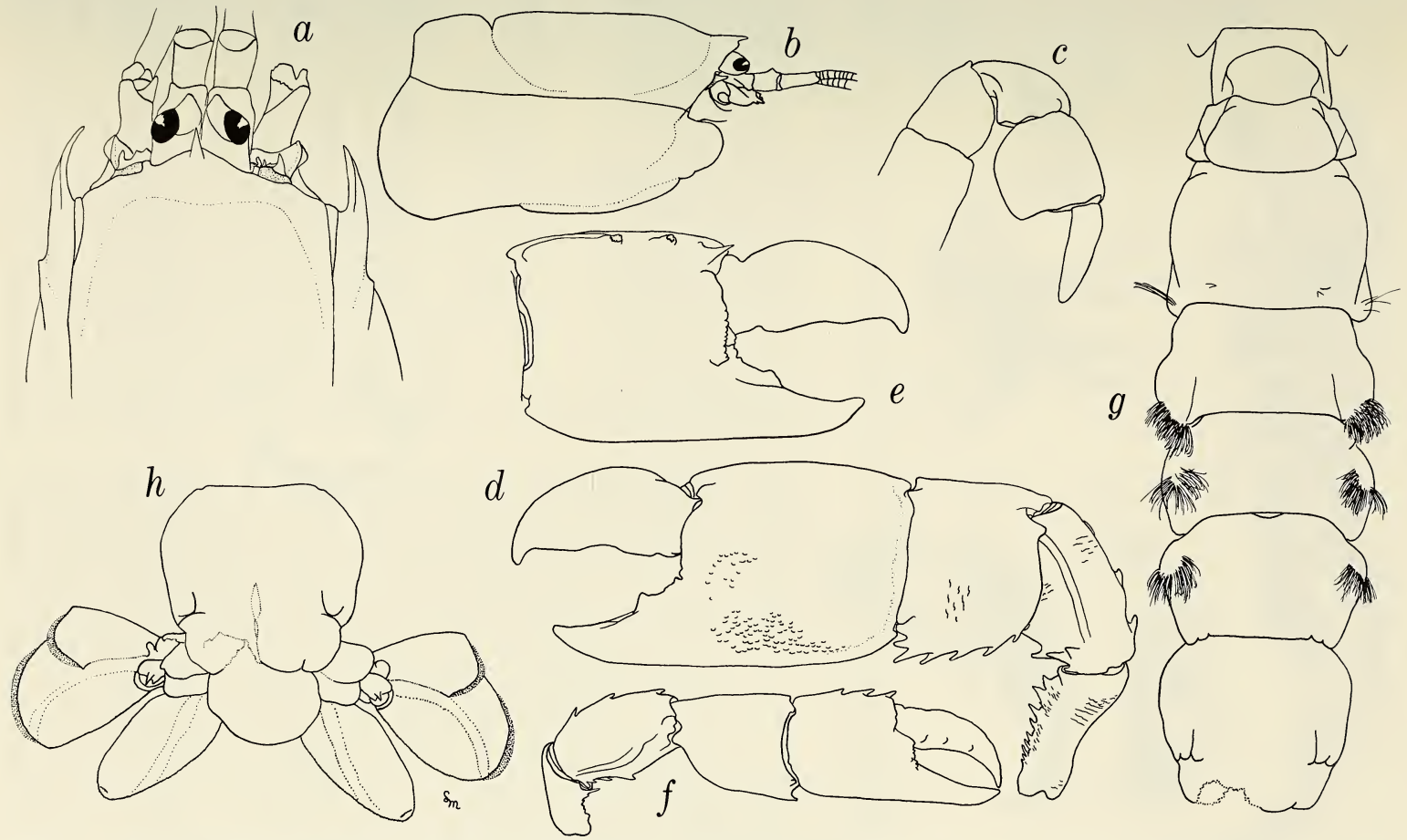

Fig. 3. *Glypturus acanthochirus* Stimpson, 1866. Male, total length 60 mm, Jamaica: a, Front, dorsal view; b, Front, lateral view; c, Third maxilliped; d, Major cheliped; e, Inner surface of major chela; f, Minor cheliped; g, Abdomen; h, Sixth abdominal somite, telson, and uropods.

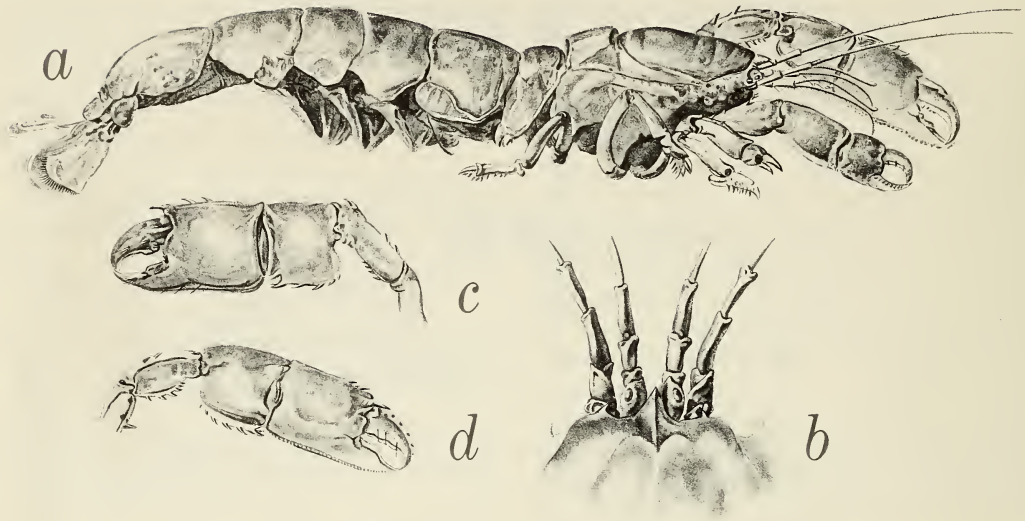

Fig. 4. *Glypturus acanthochirus* Stimpson, 1866. Fiji: a, Lateral view; b, Front; c, Major cheliped; d, Minor cheliped (from A. Milne Edwards 1870).

Callianassa armata A. Milne Edwards (1870:90, pl. 1). Type locality Fiji Islands.

If the primary features used here to distinguish *Glypturus* from other callianassid genera, the sharp, upturned rostral spine, the anterolateral spines of the carapace separated from the carapace by a noncalcified membrane, and the ornamentation of the claw, with dorsal spines on both the merus and propodus (palm) of the cheliped, prove to be variable features, several other species may have to be included in *Glypturus,* as follows: 1, *Callianassa nakasonei* Sakai (1967:46), from Okinawa; 2, *Callianassa intesi* de Saint Laurent and Le Loeuff (1979: 69), from Senegal; 3, *Callianassa haswelli* Poore and Griffin (1979:263), from Queensland, Australia [this species is very similar to *Callianassa nakasonei* and may prove to be synonymous]; and 4, *Callianassa laurae* (de Saint Laurent) (in de Vaugelas and de Saint Laurent 1984:147), from the Red Sea.

In all of these species the front of the carapace is trispinous and the rostrum is upraised, but the anterolateral spines are not separated from the carapace by a noncalcified membrane. *Callianassa laurae,* at least, has a field of granules on the palm, near the base of the fixed finger, a feature it shares with *G. acanthochirus.* All of these species appear to have similar telsons and uropods. I have seen material of none of these species and without examining material I am hesitant to include them in *Glypturus.*

A New Genus for *Callianassa longiventris* A. Milne Edwards, 1870

Corallianassa, new genus

Definition.—Rostrum large, triangular, apex sharp, overreaching base of cornea. Carapace with lateral spinous projections anteriorly on each side above antenna, projections distinctly separated from carapace by articular membrane. Eye large, with ventromesial anterior projection extending beyond cornea; eye extending to or almost to end of first segment of antennular peduncle, cornea terminal, large, occupying distal third of eye. Mxp-3 pediform, ischium with row of small spines on inner surface. Dorsal and ventral margins of both chelipeds cristate, smooth, unarmed; ischium and merus of both chelae with ventral spines, merus lack-

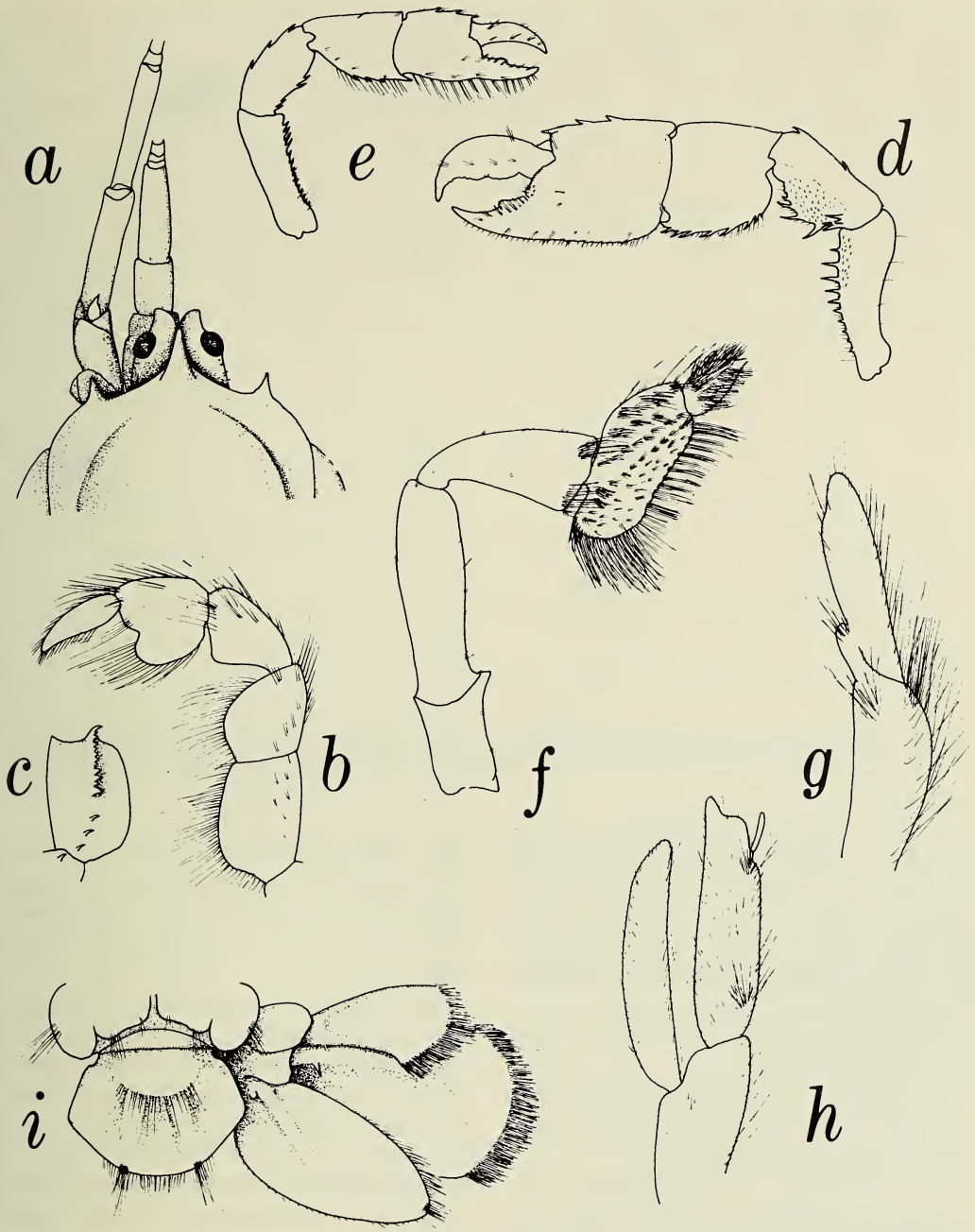

Fig. 5. *Glypturus acanthochirus* Stimpson, 1866. Male, Mauritius: a, Front; b, Third maxilliped; c, Inner face of ischium of third maxilliped; d, Major cheliped; e, Minor cheliped; f, Third pereopod; g, First pleopod; h, Second pleopod; i, Telson and uropod (from Kensley 1975).

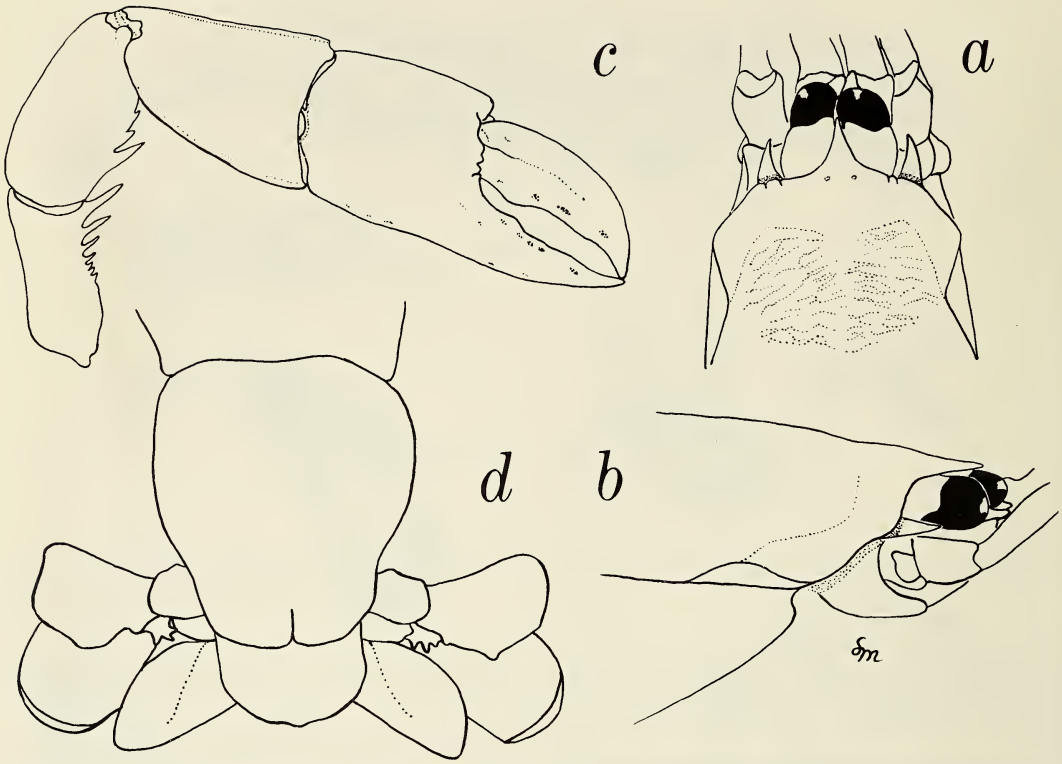

Fig. 6. *Corallianassa longiventris* (A. Milne Edwards, 1870). Male syntype, total length 46 mm, Martinique: a, Front, dorsal view; b, Front, lateral view; c, Minor cheliped; d, Sixth abdominal somite, telson, and uropods.

ing hook. Second abdominal somite long and slender, the longest abdominal somite, almost as long as sixth somite and telson combined. Sixth abdominal somite noticeably inflated. Telson shorter than uropods. Uropod setation all terminal.

Type species.—*Callianassa longiventris* A. Milne Edwards, 1870.

Etymology.—The name is derived from the Greek, korallion, coralline, and anassa, queen. The gender is feminine.

Included species.—Two, as follows:

Corallianassa longiventris (A. Milne Edwards) (1870:92).

Corallianassa borradailei (de Man) (1928a: 27), with *Callianassa oahuensis* Edmondson (1944:56), as its synonym.

Remarks.—The large eyes, with a large, well formed, distinct cornea, three-spined front, with the anteriolateral spines distinctly articulated, the chelipeds with a cristate carpus and propodus, and the long second abdominal somite, all are diagnostic for this genus.

Callianassa placida de Man (1928b:171) may belong here, but the cornea, from de Man's figure, appears to be less well developed, and, as de Man pointed out (1928b: 171), the second abdominal somite in *C. placida* is not longer than the sixth. The elongate second abdominal somite is shared by the two species here placed in *Corallianassa.*

If I had not been able to examine three specimens of *C. borradailei* from Hawaii in the collections of the British Museum (Natural History) [Registry number 1859:79], I might have synonymized both it and *C. borradailei* with *C. longiventris.* However, the

chelipeds of the Indo-West Pacific species are quite different from those of *C. longiventris,* being more sharply carinate, with the dorsal carina on the palm extending distally into a distinct flange. The dorsal carina on the palm of *Corallianassa longiventris* is confined to the proximal third or so.

Figures are provided here for *Corallianassa longiventris,* based on the type (Fig. 6), and three for *Corallianassa borradailei,* one from Borradaile (1902) (Fig. 7), one from a specimen from Fiji (Fig. 8), and one based on a specimen from Hawaii (Fig. 9).

De Man (1928a:27), in his description of *Callianassa borradailei,* based on Borradaile's (1902:752, pl. 58, fig. 2) account of a specimen, now lost, from Goidu, Goifurfehendu Atoll, Maldive Archipelago, pointed out that *C. borradailei* differs from *C. longiventris* in having the carpus of the smaller cheliped as long as the palm; in the type *C. longiventris* proper, also examined by de Man (1928a:24), the palm of the smaller cheliped is shorter than the carpus. This is the condition in the type of *C. longiventris* from Martinique in the collection of the Muséum National d'Histoire Naturelle, Paris, which I examined and which is shown here in Fig. 6, as well as in the specimen illustrated by Biffar (1971a, fig. 14f). However, in other specimens from the Caribbean examined by me, the palm of the smaller cheliped may be subequal to or longer than the carpus. Apparently these proportions may vary, possibly with age. Assuming that these proportions do vary, I can find no difference between *C. borradailei* from the western Indian Ocean and *C. oahuensis* from Hawaii. In the figure of Borradaile's specimen from the western Indian Ocean (Fig. 7) the carpus of the second cheliped is equal to the palm, in the specimens examined from Fiji it is longer than the palm, and in Edmondson's account of *C. oahuensis* it is distinctly shorter than the palm.

In the collection of the Zoological Museum at Copenhagen there is a specimen of

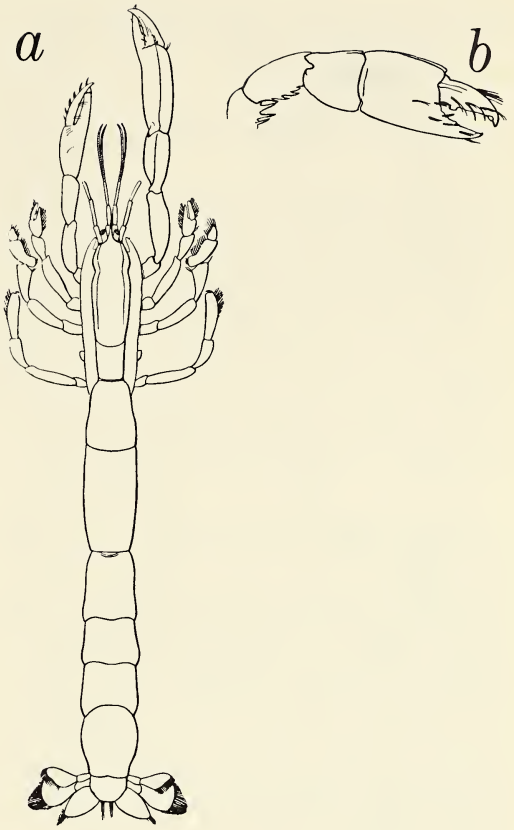

Fig. 7. *Corallianassa borradailei* (De Man, 1928). Holotype, Goifurfehendu Atoll: a, Dorsal view; b, Cheliped (from Borradaile 1902).

Corallianassa borradailei from Fiji. The specimen, obtained from the Paris Museum on exchange, was labelled "*Callianassa armata,* Insel Viti, Museum Godeffroy, Wroblewsky," and was filed in the collection as a type of *Callianassa longiventris.* It is shown here in Fig. 8.

Hult (1938:7) and Schmitt (1939:15) identified specimens from the Galapagos Islands and Clipperton Island, respectively, with *Callianassa hartmeyeri* Schmitt, 1935, and Chace (1962:617), who also studied material from Clipperton Island, synonymized *C. hartmeyeri* Schmitt and *Callianassa oahuensis* Edmondson, 1944, as well, with *Callianassa placida* de Man, 1928. In my opinion the eastern Pacific specimens

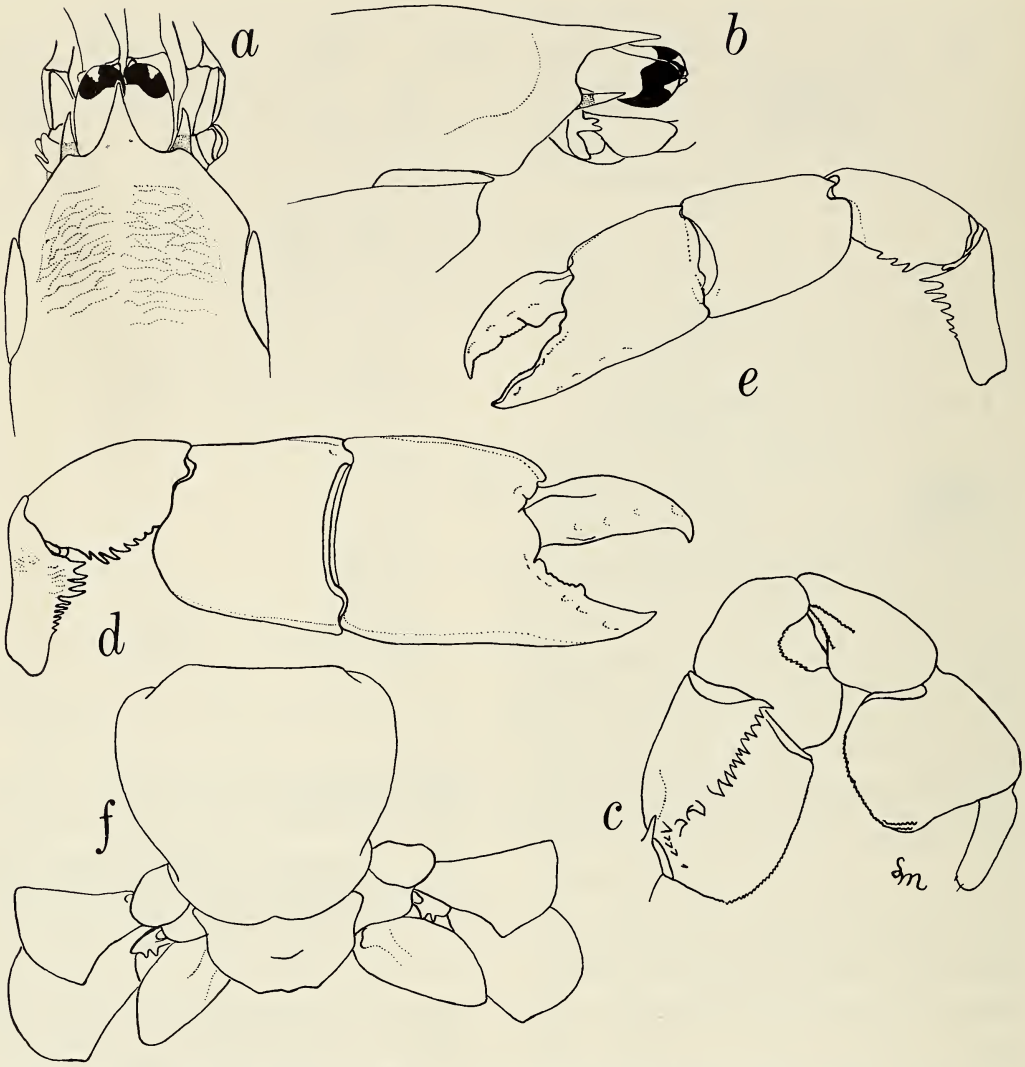

Fig. 8. *Corallianassa borradailei* (De Man, 1928). Ovigerous female, total length 62 mm, Fiji: a, Front, dorsal view; b, Front, lateral view; c, Third maxilliped; d, Major cheliped; e, Minor cheliped; f, Sixth abdominal somite, telson, and uropods.

reported by Hult, Schmitt, and Chace belong to an undescribed species of *Corallianassa*. An account of this species is in preparation.

I have seen no material of *Callianassa coutierei* Nobili (1906:110) from the Red Sea, but, judging by his account of the eyes, the three-spined front, and the relative lengths of the abdominal somites, that species could belong in *Corallianassa*; it may prove to be synonymous with *Corallianassa borradailei*.

Callianassa articulata Rathbun (1906: 892), from Hawaii, may belong in this genus, but it differs from the species placed here in the form of the telson and in the broader ischium and merus on the third maxilliped (see Edmondson's (1944:54) account).

Suchanek (1983) reported the occurrence

of *Corallianassa longiventris* in seagrass beds in shallow lagoons at St. Croix, U.S. Virgin Islands. He commented (p. 288) that rather than being deposit feeders, this species and *Glypturus acanthochirus* capture detrital seagrass and algae floating past their burrows. However, most records for members of *Corallianassa* are from reef, not lagoon, habitats. *Corallianassa longiventris* is very common on the reef flat at Carrie Bow Cay, Belize, where it forms burrows in very coarse coralline rubble. There it is easily attracted to the mouth of its burrow with pieces of conch or fish, and all of the specimens collected by D. L. Felder and myself were attracted to bait. They certainly are carnivorous, and this may be characteristic of the genus.

Members of *Corallianassa,* in contrast to members of *Callianassa,* are brightly colored, as reported by Biffar (1971a:689) for *C. longiventris,* Schmitt (1939:15, 16) for his material from Clipperton Island, and by Edmondson (1944:58) for his material from Hawaii. This, too, may be characteristic for the genus.

Checklist of Western Atlantic Callianassidae

Family Callianassidae Dana, 1852

Genus *Anacalliax* de Saint Laurent (1974: 515). Type species *Callianassa argentinensis* Biffar, 1971b, by original designation and monotypy. Western Atlantic species:

Anacalliax agassizi (Biffar) (1971b:233)

Anacalliax argentinensis (Biffar) (1971b: 229). [*Callianassa agassizi* Biffar was included in *Anacalliax* by de Saint Laurent and Le Loeuff (1979:79).]

Genus *Callianassa* Leach (1814:400). Type species *Cancer Astacus subterraneus* Montagu, 1808, by monotypy. Western Atlantic species:

Callianassa biformis Biffar (1971b:225)

Callianassa fragilis Biffar (1970:45)

Callianassa grandimana Gibbes (1850: 194)=*Glypturus branneri* Rathbun (1900: 150)=*Glypturus siguanensis* Boone (1927: 85)

Callianassa guara Rodrigues (1971:210)

Callianassa guassutinga Rodrigues (1971: 204)

Callianassa jamaicense Schmitt (1935:3, 9)

Callianassa louisianensis Schmitt (1935:12)

Callianassa marginata Rathbun (1901:92)

Callianassa minima Rathbun (1901:92)

Callianassa mirim Rodrigues (1971:214)

Callianassa rathbunae Schmitt (1935:4, 15)

Callianassa setimanus (DeKay) (1844: 34)=*Callianassa stimpsoni* Smith (1873: 549)=*Callianassa atlantica* Rathbun (1926:107)

Callianassa trilobata Biffar (1970:36)

Callianassa sp. Rabalais, Holt, and Flint (1981:106)

Genus *Calliax* de Saint Laurent (1974:514). Type species *Callianassa lobata* de Gaillande and Lagardère, 1966, by original designation and monotypy. Western Atlantic species:

Calliax quadracuta (Biffar) (1970:40). [*Callianassa quadracuta* Biffar was included in *Calliax* by de Saint Laurent and Le Loeuff (1979:95).]

Genus *Callichirus* Stimpson (1866:47). Type species *Callianassa major* Say, 1818, by original designation and monotypy. Western Atlantic species (see Manning and Felder 1986):

Callichirus major (Say) (1818:238)

Callichirus islagrande (Schmitt) (1935:3, 5)

Genus *Corallianassa,* new genus. Type species *Callianassa longiventris* A. Milne Edwards, 1870, by present designation. Included western Atlantic species:

Corallianassa longiventris (A. Milne Edwards) (1870:92)

Genus *Ctenocheles* Kishinouye (1926:63). Type species *Ctenocheles balssi* Kishinouye, 1926, by monotypy. Western Atlantic species:

Ctenocheles holthuisi Rodrigues (1978:113)

Ctenocheles leviceps Rabalais (1979:295)

Ctenocheles A Holthuis (1967:379)

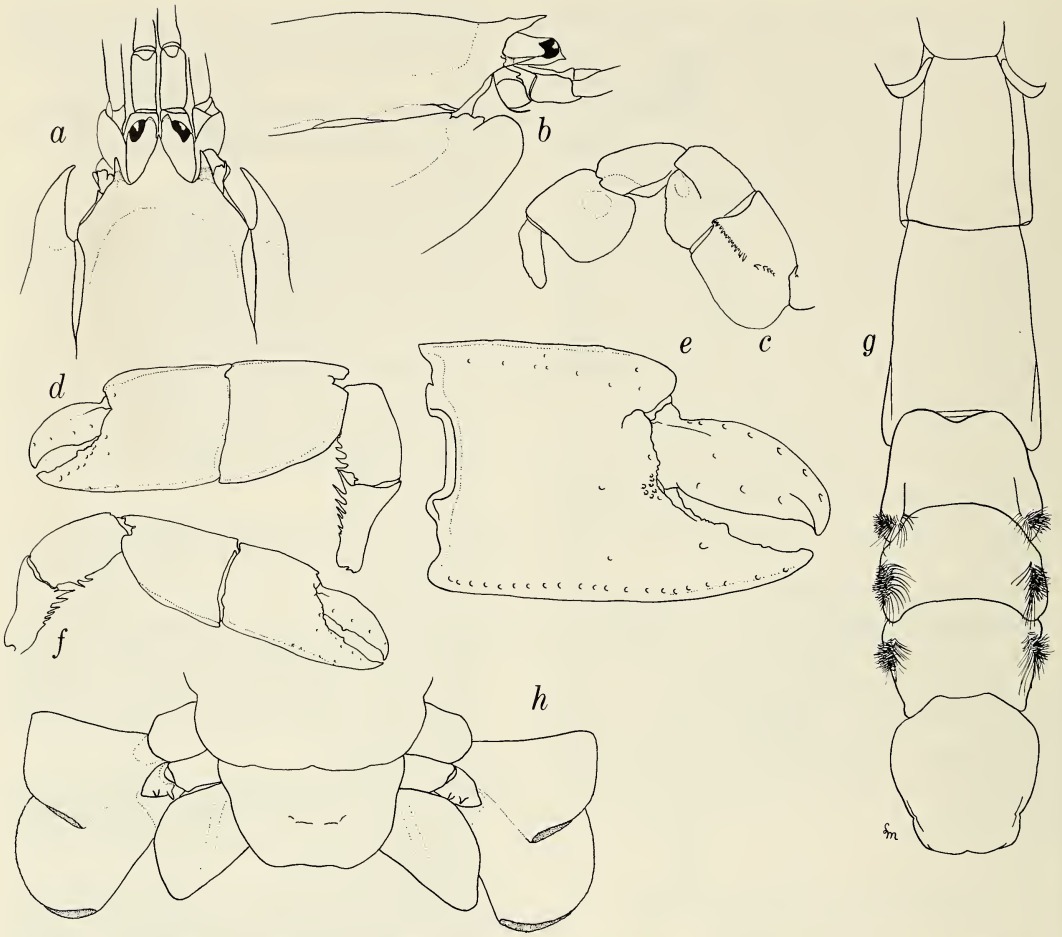

Fig. 9. *Corallianassa borradailei* (De Man, 1928). Female, total length 72 mm, Hawaii: a, Front, dorsal view; b, Front, lateral view; c, Third maxilliped; d, Major cheliped; e, Inner face of major chela; f, Minor cheliped; g, Abdomen; h, Telson and uropods.

Ctenocheles B Holthuis (1967:382)

Genus *Glypturus* Stimpson (1866:46). Type species *Glypturus acanthochirus* Stimpson, 1866, by monotypy. Western Atlantic species:

Glypturus acanthochirus Stimpson (1866: 46)=*Callianassa armata* A. Milne Edwards (1870:90)

Genus *Gourretia* de Saint Laurent (1974: 514). Type species *Callianassa subterranea* var. *minor* Gourret, 1887, by original designation and monotypy. *Callianassa minor* Gourret, 1887 is a junior homonym of *Callianassa minor* Fischer, 1886; it was renamed *Gourretia serrata* by de Saint Laurent, in de Saint Laurent and Le Loeuff (1979:79, footnote). Western Atlantic species:

Gourretia latispina (Dawson) (1967:190). [Transferred to *Gourretia* by de Saint Laurent and Le Loeuff (1979:79). Those authors note (p. 79) that there are two undescribed species of *Gourretia* in the western Atlantic.]

"Incertae Sedis":

Callianassa batei Borradaile (1903:546). [A

replacement name for *Cheramus occidentalis* Bate (1888:32), which, when transferred to *Callianassa* by Borradaile (1903), became a junior homonym of *Callianassa occidentalis* Stimpson, 1856 (itself a subjective junior synonym of *Callianassa californiensis* Dana, 1852) as well as of *Callianassa occidentalis* Bate, 1888.]

Callianassa hartmeyeri Schmitt (1935:3, 4) [A replacement name for *Glypturus grandimanus* sensu Balss (1924:179). *Callianassa hartmeyeri* was synonymized with *Callianassa placida* de Man, 1928, by Chace (1962:617). Chace's material of *Callianassa placida* is, in my opinion, an undescribed species, and I can find no material or other records of *C. placida* from the western Atlantic. Until Balss' specimen can be restudied, the identity of this species remains in doubt.]

Callianassa occidentalis Bate (1888:29) [Preoccupied by *Callianassa occidentalis* Stimpson, 1856. See Schmitt (1935:3) and Biffar (1971a:649) for comments on the status of both of Bate's species.]

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