

MINISTERIE VAN ONDERWIJS, KUNSTEN EN WETENSCHAPPEN

# ZOOLOGISCHE VERHANDELINGEN

UITGEGEVEN DOOR HET RIJKSMUSEUM VAN  
NATUURLIJKE HISTORIE TE LEIDEN

ONDER REDACTIE VAN PROF. DR. H. BOSCHMA,  
DIRECTEUR VAN HET MUSEUM

No. 26

**THE RECENT GENERA OF THE CARIDEAN AND  
STENOPODIDEAN SHRIMPS (CLASS CRUSTACEA,  
ORDER DECAPODA, SUPERSECTION NATANTIA)  
WITH KEYS FOR THEIR DETERMINATION**

by

**L. B. HOLTHUIS**

(Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands)

LEIDEN  
E. J. BRILL  
29 Januari 1955

LIBRARY  
Division of Crustacea

*Copyright 1955 by*  
Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands  
*All rights reserved, including the right to translate or to reproduce this  
book or parts thereof in any form*

PRINTED IN THE NETHERLANDS

# THE RECENT GENERA OF THE CARIDEAN AND STENOPODIDEAN SHRIMPS (CLASS CRUSTACEA, ORDER DECAPODA, SUPERSECTION NATANTIA) WITH KEYS FOR THEIR DETERMINATION

by

**L. B. HOLTHUIS**

(Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands)

## CONTENTS

Introduction . . . . .	1	Superfamily Psalidopodoida . . . . .	80
Supersection Natantia . . . . .	2	Family Psalidopodidae . . . . .	81
Section Caridea . . . . .	7	Superfamily Alpheoida . . . . .	81
Superfamily Oplophoroida . . . . .	12	Family Alpheidae . . . . .	82
Family Oplophoridae . . . . .	12	Family Ogyrididae . . . . .	93
Family Nematocarcinidae . . . . .	17	Family Hippolytidae . . . . .	93
Family Atyidae . . . . .	18	Family Processidae . . . . .	116
Superfamily Stylodactyloida . . . . .	31	Superfamily Pandaloida . . . . .	117
Family Stylodactylidae . . . . .	31	Family Pandalidae . . . . .	118
Superfamily Pasiphaeoida . . . . .	32	Family Thalassocarididae . . . . .	128
Family Pasiphaeidae . . . . .	32	Family Phyetocarididae . . . . .	128
Superfamily Bresilioida . . . . .	36	Superfamily Crangonoida . . . . .	129
Family Bresiliidae . . . . .	37	Family Glyphocrangonidae . . . . .	130
Family Disciadiidae . . . . .	38	Family Crangonidae . . . . .	131
Family Eugonatonotidae . . . . .	39	Genera dubia Carideorum . . . . .	139
Family Rhynchocinetidae . . . . .	40	Section Stenopodidea . . . . .	142
Superfamily Palaemonoida . . . . .	41	Family Stenopodidae . . . . .	142
Family Campylonotidae . . . . .	41	List of Publications . . . . .	149
Family Palaemonidae . . . . .	42	Index . . . . .	154
Family Gnathophyllidae . . . . .	78		

## INTRODUCTION

The present study was started with the primary object of producing a key to the genera of the sections Caridea and Stenopodidea of the Decapoda Natantia, a group consisting of animals commonly known as shrimps and prawns. Later it was felt that the paper would be of more use to zoologists, if also the synonyms and other particulars of the genera were given. So gradually the paper has become mainly a list of the genera of the Caridea and Stenopodidea, while the key to these genera is of secondary importance.

Fossil genera are not included in the present list. Nomina nuda also are omitted if they could not definitely be assigned to known genera. A list of the dubious genera is given on p. 139.

Of each genus the valid name and the synonyms are listed, each with the full original reference, with the indication of the type species, and the gender of the name. An attempt has been made to include all the emendations and erroneous spelling changes of those names, but this latter enumeration is necessarily incomplete. Also the synonymies of the suprageneric categories are given, as well as a short historical account of the classification of the supersection and the sections.

To facilitate the identification of the genera, the figure of a species of each is included. Practically all of these figures are taken from existing publications, a list of which is added to the end of this paper. The schematic figure of the external shape of a shrimp (fig. A) and that of the structure of a leg (fig. B) will explain most, though not all, of the technical terms used in the keys. For the explanation of the terms dealing with mouthparts a general treatise of the Crustacea should be consulted.

The present publication has been made possible by a grant from the Office of Naval Research, Department of the U. S. Navy, received through the Pacific Science Board of the National Research Council, Washington D.C., U.S.A.

A special word of thanks is due to Dr. Fenner A. Chace, Jr., Curator of the Division of Marine Invertebrates, U. S. National Museum, Washington, D.C., who, with his usual unselfishness, placed valuable manuscript notes at my disposal and made several corrections in the text of the manuscript; the present form of the key to the caridean families also is partly due to his suggestions.

It is inevitable that there are errors and omissions in this paper; the author will be grateful for any corrections and additions.

### Supersection NATANTIA

- Salicoques Latreille, 1817, Cuvier's Règne anim. (ed. 1) 3: 35.  
 Salicoqui Schinz, 1823, Cuvier's Thierreich 3: 51.  
 Carides Latreille, 1825, Fam. nat. Règne anim.: 280.  
 Palaemones s. Carides Van der Hoeven, 1828, Handb. Dierk. 1: 434.  
 Caroidea Burmeister, 1837, Handb. Naturgesch. 2: 564.  
 Caridea McLeay, 1838, Illustr. Annul. S. Afr.: 54.  
 Macroura Carides De Haan, 1849, Fauna Japon., Crust. (6): 167.  
 Caridita White, 1850, List Spec. Brit. Anim. Coll. Brit. Mus. 4: 36.  
 Caridina Van der Hoeven, 1855, Handb. Dierk. (ed. 2) 1: 766.  
 Caridae Heller, 1863, Crust. südl. Europ.: 221  
 Carididae Claus, 1876, Grundz. Zool. (ed. 3) 1: 550.  
 Caridinida Schmarda, 1878, Zoologie (ed. 2) 2: 44.  
 Natantia Boas, 1880, K. Danske Vidensk. Selsk. Skr. (6)1(2): 28, 155, 164.  
 Macrura Caridides Alcock, 1901, Descr. Catal. Indian Deep Sea Crust. Macr. Anom.: 9.  
 Macrura Natantia Bouvier, 1917, Rés. Camp. sci. Monaco 50: 7, 8.  
 Caridoidea Hoedeman, 1950, Encycl. Aquariumhouder, Amsterdam 8(138.4): 2.

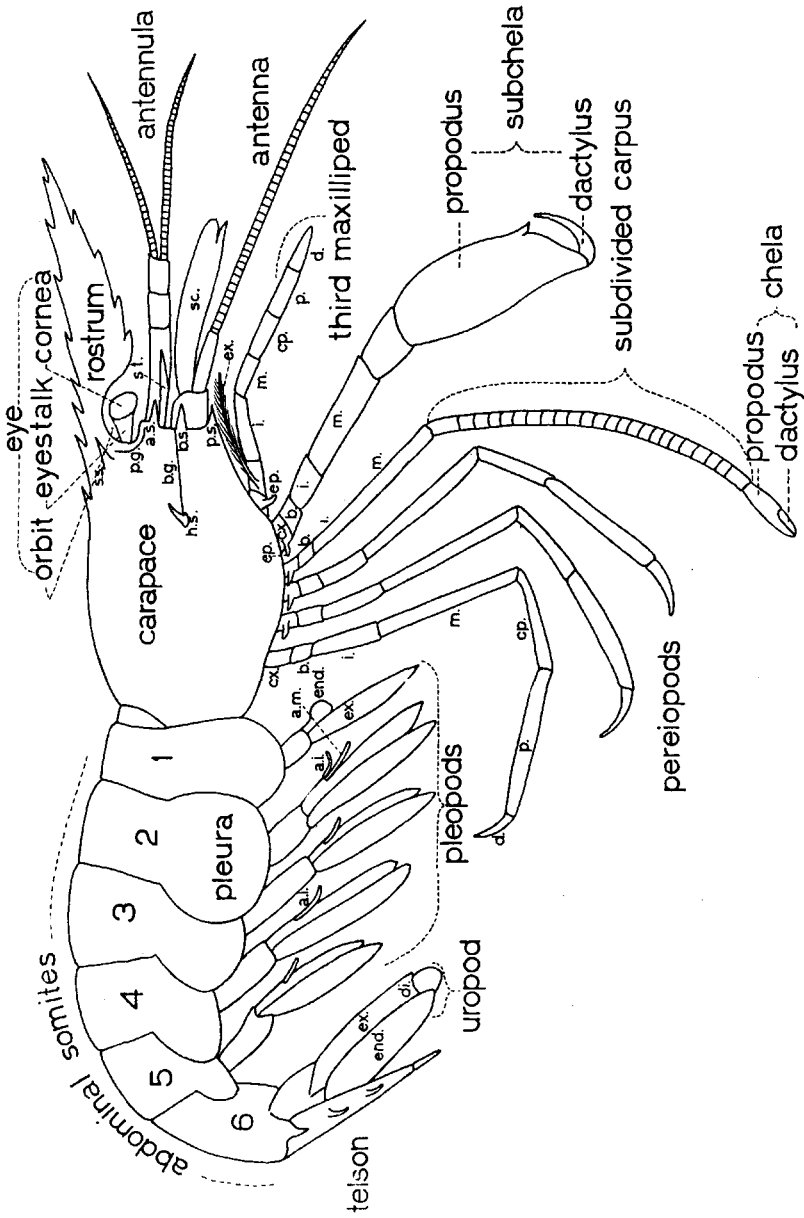


Fig. A. Schematic drawing of a shrimp in lateral view. a.i., appendix interna; a.m., appendix masculina; a.s., antennal spine; b., basis; b.g., branchiostegal groove; b.s., branchiostegal spine; cp., carpus; cx., coxa; d., dactylus; di., diaeresis; end., endopod; ep., epipod; ex., exopod; h.s., hepatic spine; i., ischium; m., merus; p., propodus; p.g., postorbital groove; p.s., pterygostomial spine; sc., scaphocerite; s.s., supraorbital spine; st., stylocerite.

Adopting Bouvier's (1917, Rés. Camp. sci. Monaco 50:8) system of the Decapod Crustacea, the Natantia, or Macrura Natantia as they are sometimes

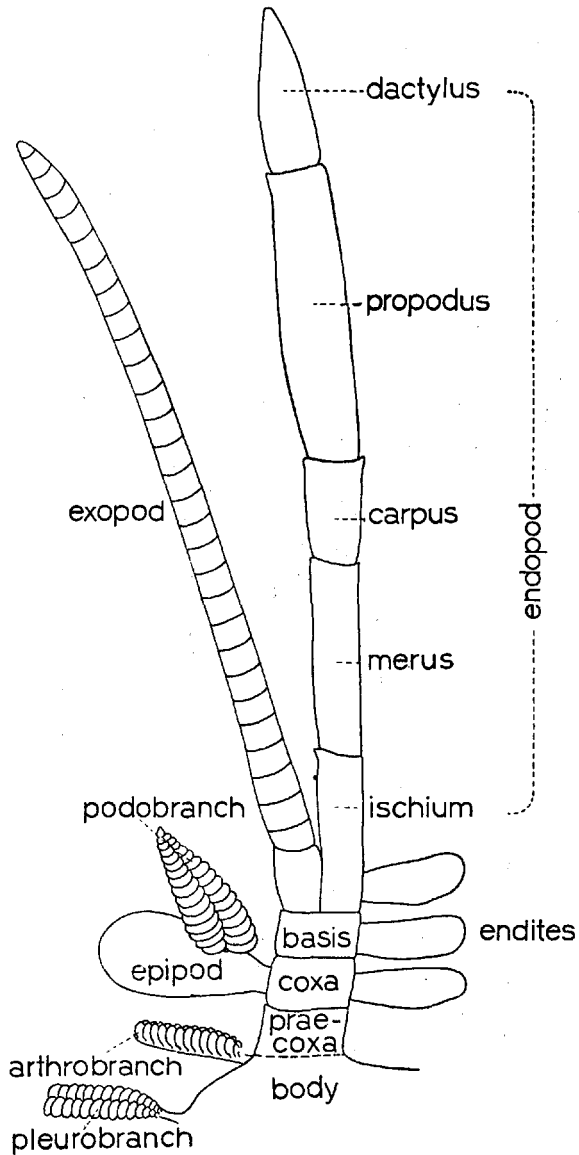


Fig. B. Schematic drawing of a thoracic leg.

called, are treated here as a supersection of the suborder Macrura. The Macrura thereby are considered to be of equal rank with the suborders Ano-

mura and Brachyura. Several zoologists assign to the Natantia the rank of a suborder and place all the other decapods in the suborder Reptantia. This is a good illustration of the fact that the classification of the Decapoda is still very unsettled; as yet no satisfactory system for this group of animals has been proposed. For the present paper it makes little difference whether the Natantia are considered to be a full suborder, or are only ranked as a supersection of the suborder Macrura.

The members of the present group, like all other Decapoda, were placed by Linnaeus (1758, Syst. Nat. (ed. 10) 1:625-634) in the genus *Cancer*. Fabricius (1775, Syst. Ent.: 413-418) erected a new genus *Astacus*, which contained all of the Natantia, in addition to the Astacidea, Palinuridae, Hippidea, Squillidae, Euphausiacea and some Amphipoda. In 1798 the Natantia were placed by Fabricius (Suppl. Ent. Syst.: 402-410) in the genera *Palaemon*, *Alpheus*, *Penaeus*, and *Crangon*. The order Decapoda was first erected by Latreille (1802-1803, Hist. nat. Crust. Ins. 3: 20), who subdivided this order into two "sections": the "Brachyures" and the "Macroures". The genera of Natantia of course were included in the latter group; they were placed, together with the astacidean genera, in the family "Homardiens; Astacini". Leach (1814, Edinb. Encycl. 7: 398-402) also included in this family, which he named "Astacini", the Mysidacea and the Thalassinidea. Latreille (1817, Cuvier's Règne anim. (ed. 1) 3: 35-38) was the first to treat the Natantia as a unit, to which he gave the name "Salicoques", and which he made a section of his family "Décapodes macroures". In 1825 the same author (Latreille, Fam. nat. Règne anim.: 280) gave this section the Latin name "Carides". In the German edition of Cuvier's Règne animal Schinz (1823, Cuvier's Thierreich 3: 51) had already given the group the Latinized name "Salicoqui", while Van der Hoeven (1828, Handb. Dierk. 1: 434) named it "Palaemones" or "Carides". A great variety of other names has been given to the group by later authors. H. Milne Edwards (1837, Hist. nat. Crust. 2: 338-431) divided the family "Salicoques" into four tribes, the "Crangoniens", "Alphéens", "Palémoniens" and "Pénéens". Though McLeay (1838, Illustr. Annul. S. Afr.: 54) gives very few details of his tribe Caridea, it evidently is identical with Latreille's Carides. De Haan (1849, Fauna Japon., Crust. (6): 167) in general followed H. Milne Edwards, the group "Salicoques" is called by him "Macroura Carides", and is divided into five families: Palemonidea, Alpheidea, Crangonidea, Atyadea and Penaeidea. Dana (1852, U. S. Explor. Exped. 13: 501) was the first to make a sharp distinction between the penaeids and stenopodids, which are grouped by him in the subtribe Penaeidea on the one hand and the Caridea on the other. Dana also was the first to use the term Caridea in the sense

in which it is now generally adopted. It is interesting to note that the same author (Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 15) in an earlier publication used the term Caridea for the entire group of the Natantia, and that he divided his "subtribus" Caridea into three "legiones": Palaemoninea, Pasiphaeinea and Penaeinea. Huxley (1878, Proc. zool. Soc. Lond. 1878: 785) divided the Decapoda in two large groups according to the structure of their gills: the carideans were placed in his Phyllobranchiata, while the penaeids and stenopodids were ranged under his Trichobranchiata. Like Huxley, Bate (1888, Rep. Voy. Challenger, Zool. 24: xi-xiii, 6) attached much value to the structure of the gills for the classification of the Decapoda, and he divided the suborder Macrura into four tribes: the Trichobranchiata, in which he placed the stenopodids, the Dendrobranchiata to which the penaeids were assigned, the Phyllobranchiata consisting of the carideans and some larval forms, and the Anomobranchiata, containing the Stomatopoda. Boas (1880, K. Danske Vidensk. Selsk. Skr. (6)1(2): 28, 155, 164) grouped the Decapoda in two suborders: the Natantia and the Reptantia. He is the original author of the term Natantia which he used in the sense adopted here. Practically all subsequent authors, e.g., Ortmann (1890, Zool. Jb. Syst. 5: 437), Alcock (1901, Descr. Catal. Indian Deep Sea Crust. Macr. Anom.: 9), Borradaile (1907, Ann. Mag. nat. Hist. (7)19: 467), Calman (1909, Lankester's Treatise Zool. 7: 310), Bouvier (1917, Rés. Camp. sci. Monaco 50: 8), Balss (1927, Kükenthal & Krumbach's Handb. Zool. 3(1): 998), follow Boas in considering the group Natantia a unit, though they give it different names and place it at different levels in the system of the Decapoda. Carus (1885, Prodr. Faun. Medit. 1: 470) recognised the Sergestidae as a distinct family and placed all the other Natantia in the family Carididae. Beurlen & Glaessner (1930, Zool. Jb. Syst. 60: 49-84) in a revolutionary new classification of the Decapoda, again break up the Natantia. They place the tribes Penaeidea and Stenopodidea in the section Nectochelida of their suborder Trichelida, while the Caridea under the name of Eucyphidea form a tribe of the section Anomocarida of the suborder Heterochelida; all of their suborders and sections are proposed as new by Beurlen & Glaessner.

The definition of the Natantia as given by Calman (1909, Lankester's Treatise Zool. 7: 310) is as follows:

"Body almost always laterally compressed; rostrum usually compressed and serrated; first abdominal somite not much smaller than the rest; antennules generally with stylocerite; antennal scale generally large and lamellar; legs usually slender, except sometimes a stout chelate limb or pair, which may be any one of the first three pairs, with basipodite [= basis] and



ischiopodite [= ischium] very rarely coalesced and with only one fixed point in the carpo-propodal articulation (with some doubtful exceptions), sometimes with exopodites [= exopods], podobranchiae hardly ever present on the first three and never on the last two pairs; male genital apertures in articular membrane; pleopods always present in full number, well developed, used for swimming."

The supersection *Natantia* is divided into three sections: *Caridea*, *Stenopodidea* and *Penaeidea*. These sections usually have been termed tribes. This term, however, cannot be used for them, since during the 14th International Congress of Zoology at Copenhagen, 1953, it was decided that the term tribe is to be used only for units below the subfamily level. Therefore the term section is proposed here for those groups of Decapoda which formerly were indicated by the term tribe.

The three sections may be distinguished as follows:

1. Pleurae of second abdominal somite overlapping those of first and third segments. No chelae on the third pereopods. Gills phyllobranchiate. . . . . *Caridea*
- Pleurae of second abdominal somite not overlapping those of first segment. Third legs with a chela . . . . . 2
2. Third leg distinctly stronger than the preceding. Males without petasma. Gills trichobranchiate . . . . . *Stenopodidea*
- Third leg never stronger than the preceding, generally all chelipeds of equal strength. Males with petasma. Gills dendrobranchiate. . . . . *Penaeidea*

### Section CARIDEA

*Caridea* Dana, 1852, U. S. Explor. Exped. 13: 501, 528.  
*Macroura Typica* Dana, 1852, U. S. Explor. Exped. 13: 501.  
*Caridomorpha* Huxley, 1878, Proc. zool. Soc. Lond.: 783, 785.  
*Eukyphoter* Boas, 1880, K. Danske Vidensk. Selsk. Skr. (6)1(2): 28, 47.  
*Eucyphotes* Boas, 1880, K. Danske Vidensk. Selsk. Skr. (6)1(2): 156.  
*Eukyphotes* Boas, 1880, K. Danske Vidensk. Selsk. Skr. (6)1(2): 163, 170.  
*Phyllobranchiata Normalia* Bate, 1888, Rep. Voy. Challenger, Zool. 24: xii.  
*Eucyphidea* Ortmann, 1890, Zool. Jb. Syst. 5: 437.  
*Carida* Metzger, 1891, Zool. Jb. Syst. 5: 911.  
*Eucipidea* Magri, 1904, Atti Accad. gioen. Sci. nat. Catania (4)17(14): 8.  
*Carides* Borradaile, 1907, Ann. Mag. nat. Hist. (7)19: 467.  
*Eucyphydea* Bacescu, 1937, Bul. Soc. Nat. România 11: 14.  
*Eucyphidae* Brian, 1941, Crost. eduli Mercato Genova: 22.

As has been pointed out above, Dana (1852) was the first to regard the present group as a distinct unit and he gave it the name *Caridea*. I can find no good reason not to use the name proposed by Dana, the more so since there are no definite rules as yet for the nomenclature of groups above family level. Dana's name is the first ever used to denote this group, it is short, euphonious and is not in use at present for any other group in the Animal Kingdom. Boas's (1880: 163, footnote) rejection of Dana's name

and his substitution of the name Eukyphotes for it because "le nom Carides donné par M. Dana à cette division est employé par d'autres auteurs pour tous les Salicoques (y compris les Pénéés)." is not based on any definite rule or common practice, and therefore is not followed here. If Boas's reasons for rejecting the name Caridea were considered valid, then also the name Penaeidea has to be rejected; when originally proposed by Dana, that section also contained the genus *Stenopus*, which at present is placed in a separate section Stenopodidea.

Dana (1852) divided his subtribe Caridea into four families: Crangonidae (with the subfamilies Crangoninae, Lysmatinae and Gnathophyllinae), Atyidae (with the Atyinae and Ephyrinae), Palaemonidae (with the Alpheinae, Pandalinae, Palaemoninae, and Oplophorinae), and Pasiphaeidae. Dana's subfamilies agree well with the families of our present system; he includes, however, the genus *Regulus* (= *Thalassocaris*) in the Oplophorinae, and the genus *Nika* (= *Processa*) in the Lysmatinae, while the hippolytids are placed partly in the subfamily Lysmatinae and partly in that of the Alpheinae. Bate (1888, Rep. Voy. Challenger, Zool. 24: 480, 481) divided his Phyllobranchiata Normalia, which coincide exactly with Dana's Caridea, into four tribes. These tribes are the Crangonidea (containing the family Crangonidae), the Polycarpidea (consisting of the families Nikidae, Alpheidae, Hippolytidae, and Pandalidae), the Monocarpidea (with the families Thalassocaridae, Atyidae, Pontoniidae, Caricyphidae, Acanthephyridae, Palaemonidae, Nematocarcinidae, Tropiocaridae, Stylodactylidae, Pasiphaeidae, and Oodeopidae), and the Haplopodea (containing only the family Hectarthropidae). The family Nikidae differs from our present Processidae by containing the genus *Glyphocrangon*. The families Caricyphidae, Oodeopidae, and Hectarthropidae consist entirely of larval forms, while also several genera based on larvae are (correctly or incorrectly) inserted in other families. The families Acanthephyridae and Tropiocaridae at present are combined and bear the name Oplophoridae, while the Pontoniidae at present are considered to be only a subfamily of the Palaemonidae. Ortmann (1890) divides the Caridea, which he named Eucyphidea, into 13 families: Pasiphaeidae, Atyidae, Alpheidae, Thalassocaridae, Pandalidae, Hippolytidae, Rhynchocinetidae, Pontoniidae, Hymenoceridae, Palaemonidae, Nikidae, Crangonidae, and Gnathophyllidae. His family Atyidae consist of two subfamilies Ephyrinae and Atyinae. Ortmann's families Hymenoceridae and Gnathophyllidae at present are combined under the name Gnathophyllidae. Later Ortmann (1896, Zool. Jb. Syst. 9: 421-425) revised his classification somewhat. He separated the Acanthephyridae as a distinct family from the Atyidae (the Nematocarcinidae were considered by him only a subfamily of the Acanthephyridae).

The Thalassocaridae were inserted in the Pandalidae as a subfamily, Thalassocarinae. A new family Latreutidae was erected for the Hippolytidae with a simple mandible. Finally the name Nikidae was changed to Processidae, and the name Gnathophyllidae to Drimoidae. In 1898 Ortmann (Bronn's Klass. Ordn. Thierr. 5(2): 1122-1133) recognises a third subfamily, Noto-stominae, in the Acanthephyridae and furthermore lists the families Stylo-dactylidae and Psalidopodidae. The Drimoidae are again named Gnathophyllidae. Borradaile (1907) tried to group the Caridean families in super-families. He divided the Caridea (named Carides by him) into seven super-families: Pasiphaeoida (containing the Bresiliidae and Pasiphaeidae), the Hoplophoroida (with the Hoplophoridae, Nematocarcinidae, and Atyidae), the Stylodactyloida (containing only the Stylodactylidae), the Psalidopodoida (with only the Psalidopodidae), the Pandaloida (with the Pandalidae), the Palaemonoida (with the Alpheidae, Hippolytidae, Rhynchocinetidae, and Palaemonidae), and the Crangonoida (with the Gnathophyllidae, Processidae, Glyphocrangonidae, and Crangonidae). Borradaile divided the family Pandalidae into two subfamilies: the Pandalinae and the Thalassocarinae, as Ortmann (1896), had already done. The family Palaemonidae was divided into three subfamilies: Palaemoninae, Pontoniinae, and Hymenocerinae. Borradaile did not include in his classification the family Disciadidae erected in 1902 by Rathbun (Proc. Wash. Acad. Sci. 4: 289) for her new genus *Discias*. In 1913 Sollaud (Bull. Mus. Hist. nat. Paris 19: 184) founded a new family Campylonotidae for the genus *Campylonotus* Bate, while in 1915 Borradaile erected the family Anchistioididae for *Anchistioides* Paulson. Balss (1927, Kükenthal & Krumbach's Handb. Zool. 3(1): 1000-1003) gave a classification of the Caridea (named Eucyphidea by him) which is largely based on Borradaile's system, to which the three families just mentioned were added. The family Ogyridae of Hay & Shore (1918, Bull. U. S. Bur. Fish. 35: 388) is not accepted by Balss. Balss placed the Disciadidae and the Campylonotidae in the superfamily Hoplophoroida, while the Anchistioididae were assigned to the Crangonoida. The Thalassocaridae were again given the full rank of a family, the Hymenocerinae were combined with the Gnathophyllidae, while the family Palaemonidae was divided into four subfamilies Desimocaridinae, Palaemoninae, Typhlocaridinae, and Pontoniinae. The first of these four subfamilies was erected by Borradaile (1915, Ann. Mag. nat. Hist. (8)15: 206), the third by Annandale and Kemp (1913, Journ. Proc. Asiat. Soc. Bengal (n. ser.) 9 (6): 245). After 1927 two new families were erected: the Eugonatonotidae by Chace (1936, Journ. Wash. Acad. Sci. 26: 25) under the name Gomphonotidae, and the Physetocaridae also by Chace (1940, Zoologica, New York 25: 196).

The classification of the Caridea adopted in the present paper differs in several respects from that given by previous authors. The older classifications like those of Borradaile (1907) and Balss (1927) are based partly on characters afforded by the mouthparts. There is little doubt that the mouthparts may provide important characters for the classification of the larger categories, but as yet we know far too little about the variability of the shape and structure of these organs within the genera and higher groups to allow us to use successfully the characters provided by them. The structure of the mouthparts is well known only in a relatively small number of Caridean species. These oral appendages have received so little attention because they must be extracted to be studied; this is not only a tedious job, but it often leaves the specimen severely damaged. Furthermore it is generally assumed that the structure of the mouthparts is constant within a genus or even within a larger group, which makes it seemingly unnecessary to examine these appendages in more than one species of each genus. It is hardly necessary to point out that it is a highly dangerous practice to base a classification on characters of which the variability within the larger groups is so poorly known. The classification proposed here is based mainly on characters afforded by the general shape of the first two pairs of pereopods. The fact that these characters are remarkably constant within the larger groups fully justifies the use of them for the classification of those groups. Since authors like Borradaile (1907) and Balss (1927) also made a rather extensive use of these characters, their classifications and the one proposed here are identical in a good many respects. I fully realize that the arrangement of the families given here is by no means a natural one and that a better knowledge of the mouthparts, the gill formulae, the sexual organs, and the larval development of the Caridea will show many deficiencies in it and point the way to numerous improvements. To attain a more natural classification it is essential that more attention be given to these structures of each species and to the larval development.

The following tentative key serves to distinguish the families and superfamilies of the present section:

- |  |    |
|--|----|
| 1. First pair of pereopods chelate or simple . . . . .   | 2  |
| — First pair of pereopods subchelate . . . . . Crangonoida . . . . .   | 21 |
| 2. Fingers of all four chelae slender, their cutting edges pectinate . . . . .   |    |
| Pasiphaeoida — Pasiphaeidae . . . . .  | 32 |
| — Cutting edges of fingers of chelae not all pectinate . . . . .   | 3  |
| 3. Carpus of second pair of pereopods entire. First pair of pereopods always with well developed chelae . . . . .                      | 4  |
| — Carpus of second pair of pereopods usually subdivided into two or more joints; if not, first pair of pereopods not chelate . . . . . | 15 |

4. Last two joints of second maxilliped placed side by side at end of antepenultimate joint. Fingers of chelae extremely long and slender Stylodactyloida — Stylodactylidae 31  
 — Last two joints of second maxilliped not placed side by side at end of antepenultimate joint. Fingers not extremely long . . . . . 5
5. First pair of pereopods with both fingers movable Psalidopodoidea — Psalidopodidae 50  
 — Chela of first pereopod with only one movable finger . . . . . 6
6. First pair of pereopods stronger and heavier, though often shorter, than second  
     Bresilioida 7  
 — First pair of pereopods usually more slender than, rarely subequal to, second. 10
7. First pair of legs with movable finger compressed, semicircular, deeply recessed in a slit in propodus when chela is closed. Rostrum dorsoventrally flattened. . . . .  
     Disciadiidae  
 — First pair of legs with normal chelae. Rostrum laterally compressed . . . . . 8
8. Ends of fingers of first two pairs of pereopods dark coloured. Last joint of second maxilliped applied as a strip along side of penultimate joint. Exopod of first maxilliped with a distinct flagellum . . . . . 13 9  
 — Ends of fingers of first two pairs of pereopods not dark coloured. Last joint of second maxilliped placed at end of penultimate joint. Exopod of first maxilliped without flagellum . . . . .  
     Bresiliidae 27
9. Rostrum immovable. Exopods on pereopods. . . . . Eugonatonotidae  
 — Rostrum movable. No exopods on pereopods . . . . . Rhynchocinetidae
10. Pereopods usually with exopods; if not, fingers of chelae with terminal brushes of long hairs . . . . . Oplophorida 11  
 — Pereopods without exopods. Chelae without terminal brushes of long hairs . . . . .  
     Palaemonoidea 13 41
11. Mandible without palp. Fingers of chelae usually with conspicuous terminal brushes of hairs. Last three pairs of legs not conspicuously lengthened. Pereopods with or without exopods. Almost exclusively confined to fresh water . . . . . Atyidae  
 — Mandible with a palp. Fingers of chelae without terminal brushes of hairs. Pereopods with exopods. Deep sea forms . . . . . 12
12. Last three pairs of pereopods not conspicuously lengthened; carpus of these legs distinctly shorter than propodus . . . . . Oplophoridae  
 — Last three pairs of pereopods enormously lengthened; carpus of these legs several times longer than propodus . . . . . Nematocarcinidae
13. Arthrobranchs and epipods at bases of first four pairs of pereopods. Upper antennular flagellum simple . . . . . Campylonotidae  
 — Pereopods without arthrobranchs or epipods. Upper antennular flagellum bifid. . . . . 14
14. Mandible usually with incisor process; if not, third maxilliped not expanded leaf-like.  
     Palaemonidae  
 — Mandible without incisor process. Third maxillipeds expanded leaf-like . . . . .  
     Gnathophyllidae
15. Chela of first pair of pereopods distinct, at least on one side. Alpheoidea 16  
 — Chelae of first pair of pereopods microscopically small or absent. Pandaloidea 19
16. First pair of pereopods both chelate . . . . . 17  
 — Only one of first pair of pereopods chelate, the other ending in a simple claw-like dactylus . . . . . Processidae
17. Ends of fingers of first pair of chelae usually dark coloured. First pair of chelipeds short and rather heavy but not swollen. Eyes free, never extremely elongate.  
     Hippolytidae  
 — Ends of fingers of first pair of chelae not dark colored. Eyes either extremely long or partly or wholly covered by carapace . . . . . 18
18. Eyes extremely elongate, reaching almost to end of antennular peduncle; cornea small. First pair of pereopods shorter than and about as robust as second. . . . .  
     Ogyrididae

- Eyes usually partly or wholly covered by carapace, never very elongate. First pair of pereiopods distinctly stronger than second, often unequal and swollen Alpheidae 52
19. Carpus of second pair of pereiopods not subdivided. Chelae of second pair of pereiopods heavy, robust . . . . . Thalassocarididae
- Carpus of second pair of pereiopods divided into two or more articles. Chelae of second pair of pereiopods small and slender . . . . . 20
20. Mandible bifid, with palp. Rostrum laterally compressed, distinctly dentate. . . . . Pandalidae
- Mandible simple, without palp. Rostrum a broad, inflated prolongation of carapace, with some dorsal denticles . . . . . Phyetocarididae
21. Carpus of second pair of pereiopods multi-articulate . . . . . Glyphocrangonidae
- Carpus of second pair of pereiopods not subdivided . . . . . Crangonidae

### Superfamily OPLOPHOROIDA

- Hoplophoroida Alcock, 1901, Descr. Catal. Indian Deep Sea Crust. Macr. Anom.: 55.
- Oplophorida Fowler, 1912, Ann. Rep. New Jersey State Mus. 1911: 548.
- Hoplophoroidea Balss, 1921, K. Svenska Vetensk. Akad. Handl. 61(10): 7.
- Hoplophorida Schmitt, 1926, Biol. Res. Fish. Exper. "Endeavour" 5(6): 372.
- Oplophoroida Hale, 1927, Crust. S. Aust. 1: 41.

My conception of this superfamily differs from that of Balss (1927) in that I consider the families Campylonotidae and Disciidae as belonging to other superfamilies (the Palaemonoidea and Bresilioidea respectively). Also the genus *Eugonatonotus* Schmitt, which Balss evidently included in his family Hoplophoridae and which was made the type of a separate family by Chace in 1936, is removed to the superfamily Bresilioidea.

Three families are left in this superfamily.

### Family OPLOPHORIDAE

- Ephyrinae Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 16.
- Oplophorinae Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 18, 27.
- Ephyridae Sars, 1885, Norske Nordhavs Exped. 6: 35.
- Miersiidae Smith, 1886, Ann. Rep. U. S. Fish Comm. 13: 608, 619, 667.
- Acanthephyridae Bate, 1888, Rep. Voy. Challenger, Zool. 24: xiii, 481, 927.
- Tropiocaridae Bate, 1888, Rep. Voy. Challenger, Zool. 24: xiii, 481, 927.
- Eryphinae Bate, 1888, Rep. Voy. Challenger, Zool. 24: 732.
- Hoplophoridae Faxon, 1895, Mem. Mus. comp. Zoöl. Harvard 18: 159.
- Acanthephyridae Riggio, 1895, Natural. Sicil. 14: 244.
- Acanthephyrinae Ortmann, 1898, Bronns Klass. Ordn. Thierr. 5(2): 1126.
- Notostominae Ortmann, 1898, Bronns Klass. Ordn. Thierr. 5(2): 1126.
- Tropiocarinae Perrier, 1899, Trait  Zool. 3: 1030.
- Oplophoridae Rathbun, 1902, Proc. U. S. Nat. Mus. 24: 904.
- Oplophoridae Guiler, 1952, Rec. Queen Victoria Mus. Tasmania 3(3): 35.

The seven genera contained in this family may be distinguished by the following key, which is taken largely from Chace's (1936, Journ. Wash. Acad. Sci. 26: 24-31) revision of the present family. The genus *Meningodora*

Smith is resurrected here and separated from *Notostomus* on characters already mentioned by Chace (1940, *Zoologica*, New York 25: 153).

1. Exopods of at least the third maxillipeds and first pair of pereopods foliaceous and generally rigid; outer margin of antennal scale usually armed with a series of spines; telson not truncate at tip, but ending in a sharp point; eyes large and well pigmented. . . . . *Oplophorus*
- None of the exopods of the pereopods foliaceous or rigid. . . . . 2
2. Last four abdominal somites, at least, carinate along dorsal midline. . . . . 3
- Sixth abdominal somite never dorsally carinate . . . . . 5
3. No straight ridge or carina running entire length of lateral surface of carapace from orbit to hind margin along median lateral line; hind margin of hepatic groove not cut off abruptly by an oblique ridge or carina; incisor process of mandible toothed for its entire length . . . . . *Acanthephyra*
- Carapace decorated with at least one straight carina traversing the lateral surface from hind margin of orbit to posterior edge of carapace; hind margin of hepatic groove abruptly cut off from branchial region by an oblique carina; anterior half incisor process of mandible unarmed. . . . . 4
4. A single longitudinal carina on lateral surface of carapace; dorsal margin of carapace not denticulate on posterior three-fourths of its length; abdomen not dorsally carinate on first somite . . . . . *Meningodora*
- More than one longitudinal carina on lateral surface of carapace; dorsal margin of carapace denticulate for nearly its entire length; abdomen dorsally carinate on every somite . . . . . *Notostomus*
5. Ischial and meral joints of pereopods very broad and much compressed laterally. . . . . *Ephyrina*
- Pereiopods normal . . . . . 6
6. Eyes very small and poorly pigmented; anterior margin of first abdominal somite entire, not toothed; telson terminating in a truncate, spinose tip. . . . . *Hymenodora*
- Eyes very large and well pigmented; anterior margin of first abdominal somite armed with a distinct lobe or tooth overlapping hind margin of carapace; telson terminating in a sharp-pointed end-piece laterally armed with spines . . . . . *Systellaspis*

**Oplophorus** H. Milne Edwards, 1837 (fig. 1a)

*Oplophorus* H. Milne Edwards, 1837, *Hist. nat. Crust.* 2: 423. Type species, by monotypy: *Oplophorus typus* H. Milne Edwards, 1837, *Hist. nat. Crust.* 2: 424. Gender: masculine.

*Hoplophorus* Agassiz, 1846, *Nomencl. Zool., Index Univ.*: 185, 262. Invalid emendation of *Oplophorus* H. Milne Edwards, 1837. Invalid junior homonym of *Hoplophorus* Lund, 1838, *Overs. K. Danske Vidensk. Selsk. Forh.* 1838: 11 (Mammalia).

**Acanthephyra** A. Milne Edwards, 1881 (fig. 1b)

*Ephyrina* P. Roux, 1831, *Mém. Class. Crust. Salic.*: 24. Type species, selected by Kingsley, 1880, *Proc. Acad. nat. Sci. Phila.* 1879: 416, : *Alpheus Pelagicus* Risso, 1816, *Hist. nat. Crust. Nice*: 91. Gender: feminine. Invalid junior homonym of *Ephyrina* Péron & Lesueur, 1810, *Ann. Mus. Hist. nat.*

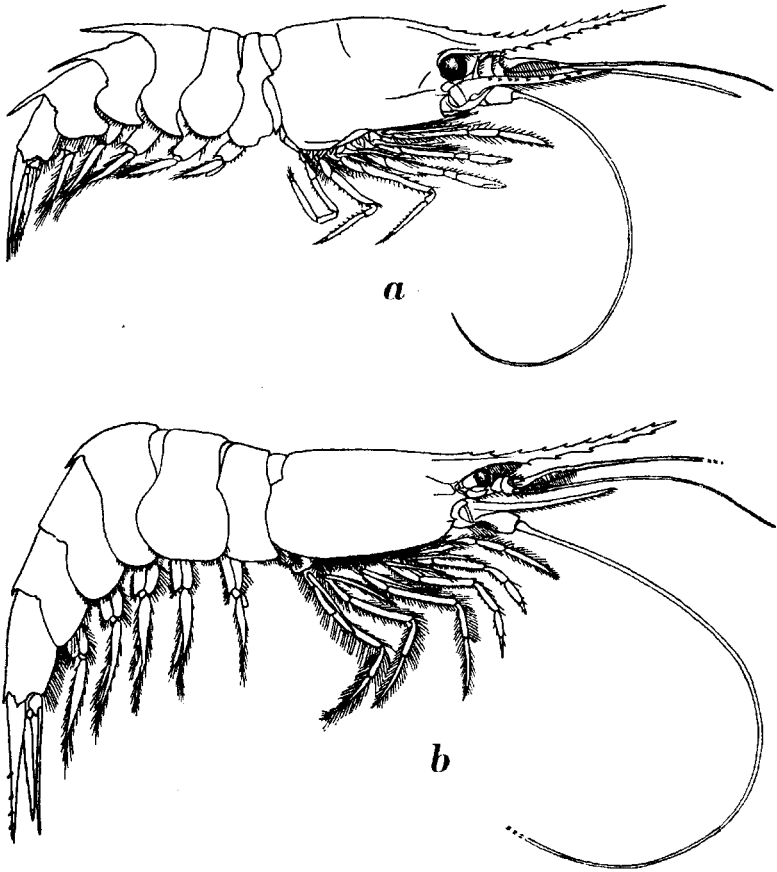
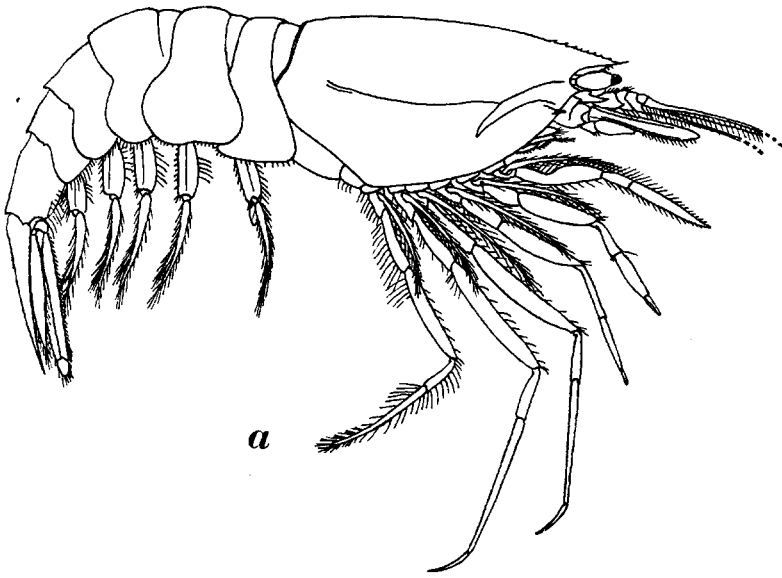


Fig. 1a. *Oplophorus spinosus* (Brullé). After Chace, 1940.

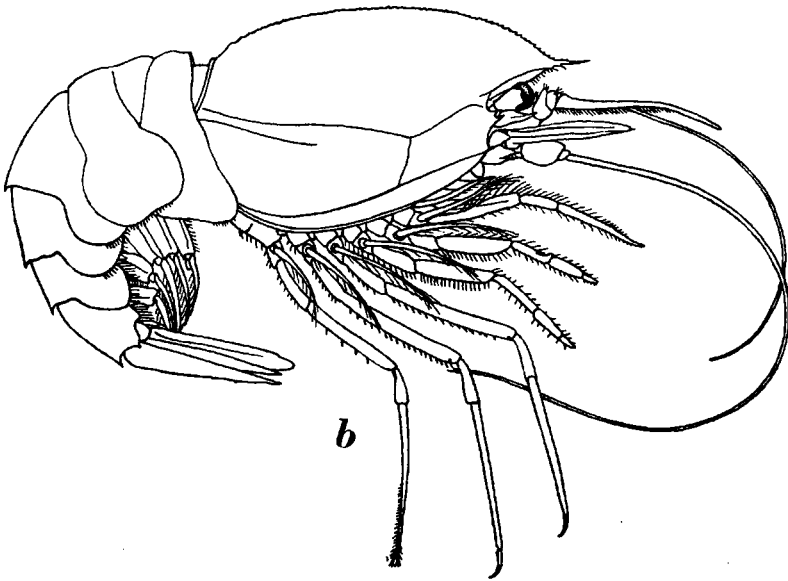
Fig. 1b. *Acantheephyra purpurea* A. Milne Edwards. After Chace, 1940.

- Paris 14 (83): 354 (Coelenterata), and *Ephyra* Duponchel, 1829, Godart's Hist. nat. Lépid. France 7 (2) (Noct. 4 pt. 2): 108 (Lepidoptera). *Miersia* Kingsley, 1880, Proc. Acad. nat. Sci. Phila. 1879: 416. Substitute name for *Ephyra* P. Roux, 1831. Gender: feminine.
- Acantheephyra* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 12. Type species, by original designation: *Acantheephyra armata* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 12. Gender: feminine.
- Acantheephyra* Filhol, 1884, La Nature, Paris 12(1): 231. Erroneous spelling of *Acantheephyra* A. Milne Edwards, 1881.
- Bentheocaris* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 723. Type species, by present selection: *Bentheocaris stylorostratis* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 726. Gender: feminine.





*a*



*b*

Fig. 2a. *Meningodora mollis* Smith. After Chace, 1940.  
 Fig. 2b. *Notostomus robustus* Smith. After Chace, 1940.

*Myersia* Lo Bianco, 1901, Mitt. zool. Sta. Neapel 15: 439. Erroneous spelling of *Miersia* Kingsley, 1880.

*Acanthephyra* Magri, 1904, Atti Accad. gioen. Sci. nat. Catania (4)17(14):8.

Erroneous spelling of *Acanthephyra* A. Milne Edwards, 1881.

*Hoplocaricyphus* Coutière, 1907, Bull. Inst. océanogr. Monaco 104:7. Type species, by monotypy: *Hoplocaricyphus similis* Coutière, 1907, Bull. Inst.

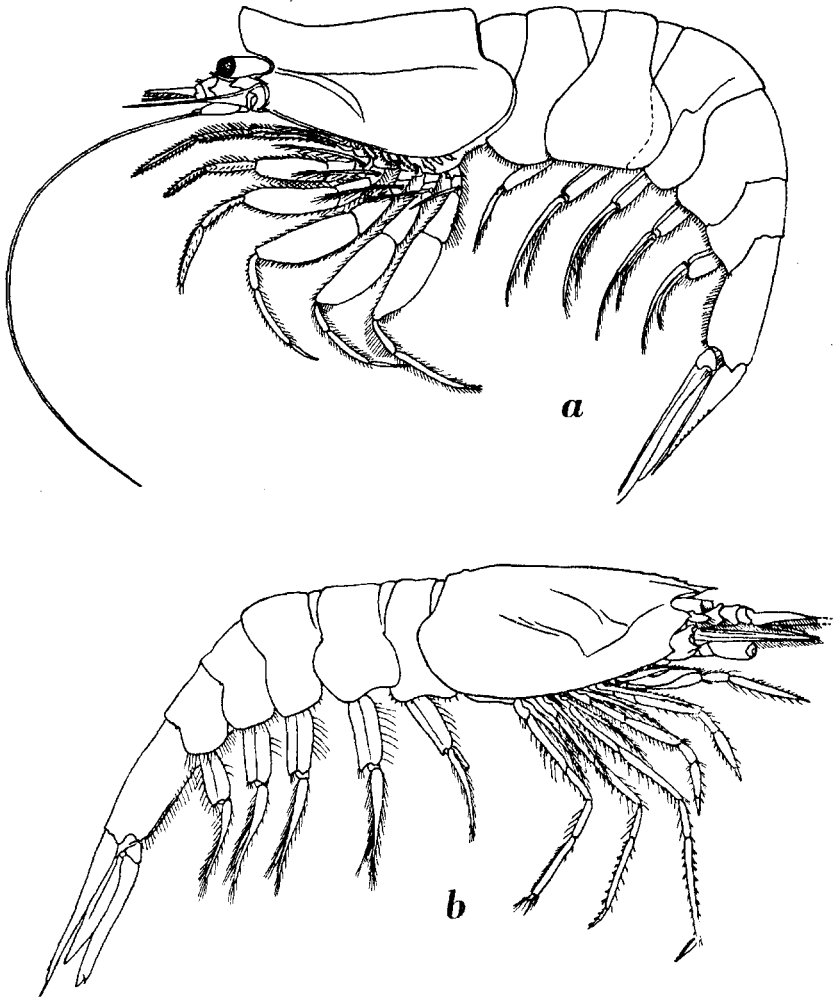


Fig. 3a. *Ephyrina hoskyni* Wood Mason & Alcock. After Chace, 1940.

Fig. 3b. *Hymenodora gracilis* Smith. After Chace, 1940.

océanogr. Monaco 104:7 (? = *Alpheus Pelagicus* Risso, 1816, Hist. nat. Crust. Nice: 91). Gender: masculine.

*Acanthephyra* Calman, 1939, Sci. Rep. John Murray Exped. 6(4):184. Erroneous spelling of *Acanthephyra* A. Milne Edwards, 1881.

*Acathephyra* Lebour, 1949, Proc. zool. Soc. Lond. 118(4): 1107. Erroneous spelling of *Acanthephyra* A. Milne Edwards, 1881.

*Acanethephyra* Lebour, 1952, Proc. zool. Soc. Lond. 121(4): 753. Erroneous spelling of *Acanthephyra* A. Milne Edwards, 1881.

**Meningodora** Smith, 1882 (fig. 2a)

*Meningodora* Smith, 1882, Bull. Mus. comp. Zoöl. Harvard, 10: 73. Type species, by monotypy: *Meningodora mollis* Smith, 1882, Bull. Mus. comp. Zoöl. Harvard 10: 74. Gender: feminine.

**Notostomus** A. Milne Edwards, 1881 (fig. 2b)

*Notostomus* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 7. Type species by original designation: *Notostomus gibbosus* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 7. Gender: masculine.

**Ephyrina** Smith, 1885 (fig. 3a)

*Ephyrina* Smith, 1885, Proc. U. S. Nat. Mus. 7: 506. Type species, by monotypy: *Ephyrina Benedicti* Smith, 1885, Proc. U. S. Nat. Mus. 7: 506. Gender: feminine.

*Calymarina* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 731. Gender: feminine. Nomen nudum.

*Tropirinus* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 750. Gender: masculine. Nomen nudum.

*Tropiocaris* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 834. Type species, by original designation: *Tropiocaris planipes* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 835 (= *Ephyrina Benedicti* Smith, 1885, Proc. U. S. Nat. Mus. 7: 506). Gender: feminine.

**Hymenodora** Sars, 1877 (fig. 3b)

*Hymenodora* Sars, 1877, Arch. Math. Naturvidensk. 2: 340 [240]. Type species, by monotypy: *Pasiphaë glacialis* Buchholz, 1874, Zweite Deutsche Nordpolarfahrt 2: 279. Gender: feminine.

**Systellaspis** Bate, 1888 (fig. 4)

*Systellaspis* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 757. Type species, by original designation: *Systellaspis lanceocaudata* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 758. Gender: feminine.

Family NEMATOCARCINIDAE

Nematocarcininae Smith, 1884, Rep. U. S. Fish Comm. 10: 368.

Nematocarcinidae Smith, 1886, Rep. U. S. Fish Comm. 13: 608, 619, 664.

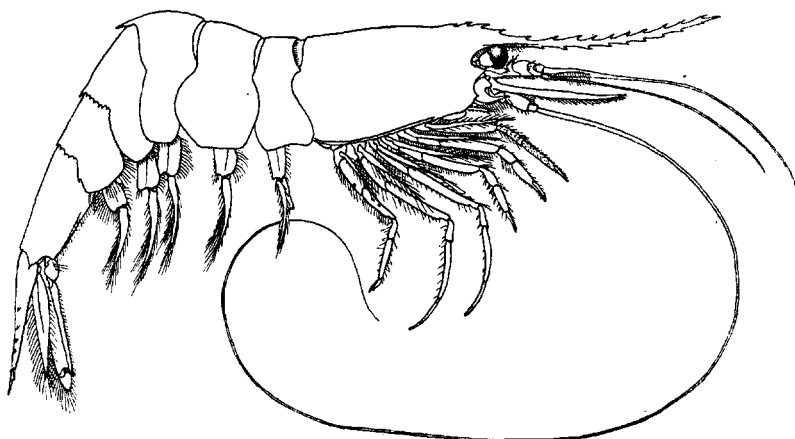


Fig. 4. *Systellaspis debilis* (A. Milne Edwards). After Chace, 1940.

The present family contains only one genus:

**Nematocarcinus** A. Milne Edwards, 1881 (fig. 5)

*Nematocarcinus* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 14.

Type species, by monotypy: *Nematocarcinus cursor* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 14. Gender: masculine.

*Eumiersia* Smith, 1882, Bull. Mus. comp. Zoöl. Harvard 10: 77. Type species, by monotypy: *Eumiersia ensifera* Smith, 1882, Bull. Mus. comp. Zoöl. Harvard 10: 77. Gender: feminine.

*Stochasmus* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 822. Type species, by monotypy: *Stochasmus exilis* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 823. Gender: masculine.

Family ATYIDAE

Atyadea De Haan, 1849, Fauna Japon., Crust. (6): 168, 184.

Atyidae Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 13, 16.

Atyinae Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 16.

Atyoidées A. Milne Edwards, 1864, Ann. Soc. entom. France (4) 4: 145.

Xiphocarinae Ortmann, 1895, Proc. Acad. nat. Sci. Phila. 1894: 399.

Attidae Yu, 1936, Chin. Journ. Zool. 2: 88.

The following key to the genera of this family is largely based on Bouvier's (1925, Encycl. entom. (A) 4: 1-370) monograph of the group.

1. Arthrobranchs present on the first four pereopods. Chelae without long tufts of hairs at the tips of the fingers . . . . . *Xiphocaris*
- Arthrobranchs absent from at least the last four pereopods. Chelae with long tufts of hairs at the tips of the fingers . . . . . 2
2. Supraorbital spines present . . . . . 3
- Supraorbital spines absent from carapace . . . . . 8

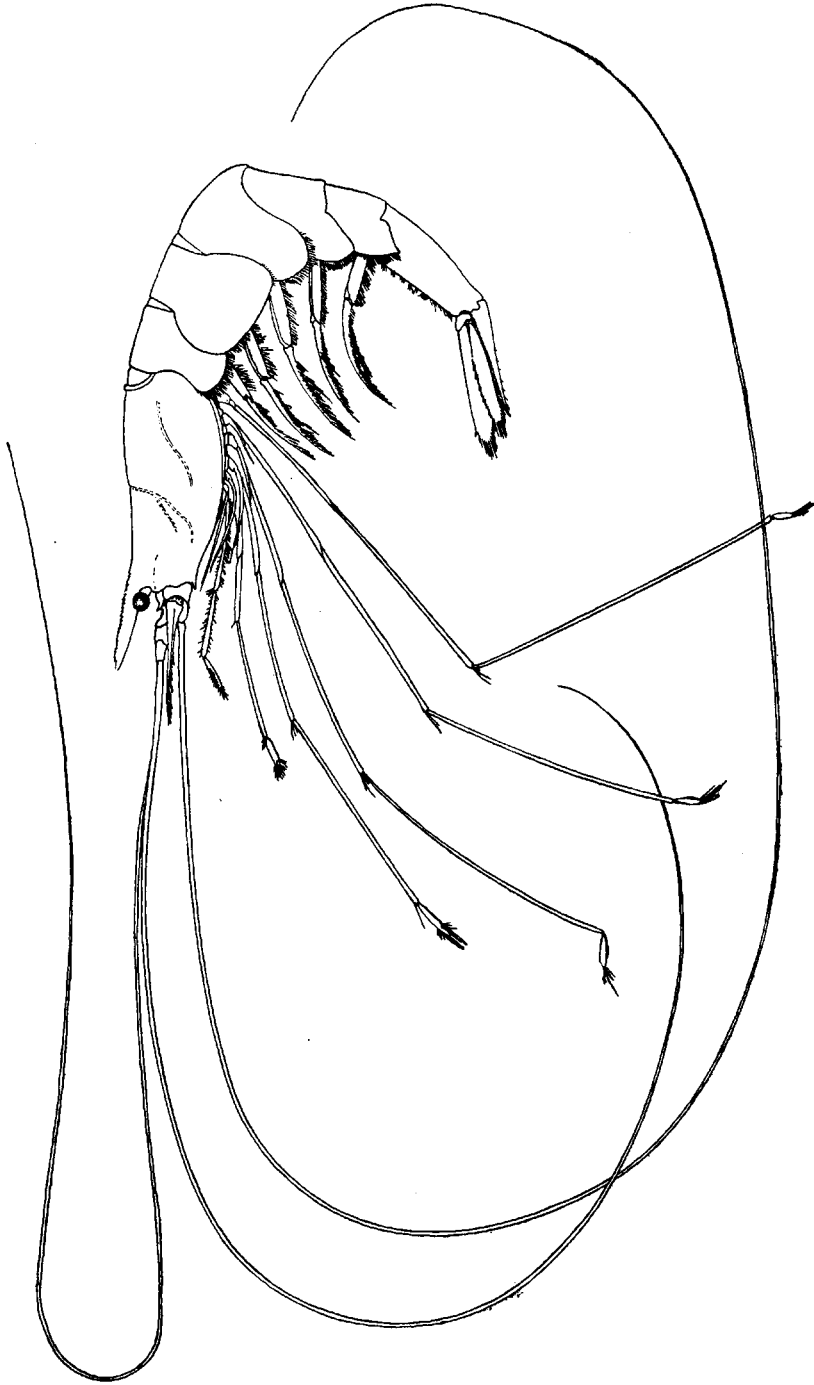


Fig. 5. *Nematocarcinus ensifer* (Smith). After Kemp, 1910.

3. Carapace without pterygostomian spine . . . . . 4  
 — Carapace with a pterygostomian spine . . . . . 6
4. All pereopods with exopods. Eyes well developed, cornea pigmented. *Paratya*  
 — Fifth leg mostly without exopod. If, however, this exopod is present then the eyes  
 are reduced and without pigment . . . . . 5
5. Eyes greatly reduced, without pigment. Adult specimens with exopods on the first  
 four or five legs. Third maxilliped with arthrobranch. . . . . *Troglocaris*  
 — Eyes well developed, with pigment. Adult specimens without exopods on any of the  
 legs. Third maxilliped without arthrobranch. . . . . *Atyaephyra*
6. Carpus of second legs without, that of first legs with an anterior excavation.  
 Fifth leg without exopod. . . . . *Syncaris*  
 — Carpus of both first and second legs anteriorly hollowed. Fifth leg generally with  
 a rudimentary exopod . . . . . 7
7. Eyes greatly reduced, without pigment. . . . . *Palaemonias*  
 — Eyes well developed, with pigment. . . . . *Dugastella*
8. Exopods present on all the legs. Eyes reduced, without or with little pigment in  
 the cornea . . . . . 9  
 — Exopods absent at least from the last 4 legs. Eyes generally well developed and  
 with pigment . . . . . 10
9. Pterygostomian and antennal spines present . . . . . *Mesocaris*  
 — Neither pterygostomian nor antennal spines present . . . . . *Typhlatya*
10. First pereopods with an arthrobranch. . . . . 11  
 — No arthrobranch at the base of the first pereopods. . . . . 14
11. Carpus of the second pair of legs very short, being shorter than broad, and  
 having the anterior part deeply excavate. . . . . *Atya*  
 — Carpus of second pair of legs longer than broad, generally not very deeply  
 excavate anteriorly . . . . . 12
12. Exopod present at the base of the first pereopod. . . . . *Caridinides*  
 — First pereopod without exopod . . . . . 13
13. Palmar portion of chelae distinct. Dactylus of these chelae much shorter than  
 the propodus. Rostrum generally laterally compressed and with teeth on both upper  
 and lower margin, seldom unarmed on one or both margins. Carpus of second  
 chelipeds hardly if at all excavate anteriorly. Africa, Indo-West Pacific region.  
*Caridina*  
 — Palmar portion of chelae very small. Dactylus of these chelae almost as long as  
 the propodus. Rostrum short, in the basal part dorsoventrally depressed and without  
 dorsal, though with ventral teeth. Carpus of second chelipeds generally distinctly  
 excavate anteriorly. America . . . . . *Potimirim*
14. Carpus of first pereopod anteriorly excavate. . . . . 15  
 — Carpus of first pereopod not or not noticeably excavate anteriorly . . . . . 17
15. Palmar portion of the chelae obsolete. Chelae cleft to or almost to their base so  
 that the dactylus and propodus are of the same length. Carpus of second leg  
 excavate anteriorly . . . . . 16  
 — Chelae with a distinct palmar portion. Dactylus of these chelae much shorter  
 than propodus. Carpus of second leg not excavate. . . . . *Caridella*
16. Anterolateral angle of basal segment of antennular peduncle with a slender tooth.  
 Several teeth of dorsal rostral series are placed behind the orbit. Lake Tanganyika.  
*Atyella*  
 — Anterolateral angle of basal segment of antennular peduncle without a tooth. All  
 dorsal rostral teeth confined to the rostrum proper. Cuba. . . . . *Micratya*
17. Epipods present on the first four pereopods. All pereopods with pleurobranches.  
 Third maxilliped with two arthrobranches, second maxilliped with a podobranch.  
 Rostrum rather long, but the dorsal spines concentrated behind the orbit, no spines  
 or teeth on the dorsal margin of the rostrum proper . . . . . *Caridinopsis*

- No epipods on the fourth pereopod. Pleurobranch on the fifth leg generally (or always?) absent. Third maxilliped with at most 1 arthrobranch, no podobranch on the second maxilliped. Rostrum with teeth on the upper margin in front of the posterior limit of the orbit. . . . . 18
18. Epipods present on the first three pereopods. A rudimentary arthrobranch present on the base of the third maxilliped . . . . . *Limnocaridella*
- No epipods on any of the pereopods. No gills on the third maxilliped. . . . . *Limnocaridina*

**Xiphocaris** Von Martens, 1872 (fig. 6a)

*Xiphocaris* Von Martens, 1872, Arch. Naturgesch. 38(1): 139. Type species, by monotypy: *Hippolyte elongatus* Guérin Méneville, 1856, R. de la Sagra's Historia Cuba, Hist. nat. 7: xx. Gender: feminine.

*Xiphicaris* Edmondson, 1935, Occ. Pap. Bishop Mus. Honolulu 10(24): 17. Erroneous spelling of *Xiphocaris* Von Martens, 1872.

**Paratya** Miers, 1882 (fig. 6b)

*Paratya* Miers, 1882, Ann. Mag. nat. Hist. (5)9: 194. Type species, by monotypy: *Ephyra compressa* De Haan, 1844, Fauna Japon., Crust. (6/7): pl. 46 fig. 7. Gender: feminine.

*Xiphocaridina* Bouvier, 1909, C. R. Acad. Sci. Paris 148: 1729. Type species, by present selection: *Ephyra compressa* De Haan, 1844, Fauna Japon., Crust. (6/7): pl. 46 fig. 7. Gender: feminine.

*Xiphatyoida* J. Roux, 1915, Act. Soc. Helv. Sci. nat. 1915 (2) (Zool.): 225. Type species, selected by J. Roux, 1926, Nova Caledonia 4(2): 196.: *Paratya (Xyphatyoida) tyra* J. Roux, 1926, Nova Caledonia 4(2): 196. Gender: feminine.

*Xyphatyoida* J. Roux, 1926, Nova Caledonia 4(2): 196. Erroneous spelling of *Xiphatyoida* J. Roux, 1915.

*Xiphicaridina* Edmondson, 1935, Occ. Pap. Bishop Mus. Honolulu 10(24): 17. Erroneous spelling of *Xiphocaridina* Bouvier, 1909.

**Troglocaris** Dormitzer, 1853 (fig. 6c)

*Troglocaris* Dormitzer, 1853, Lotos, Prague 3: 85. Type species, by monotypy: *Troglocaris Schmidti* Dormitzer, 1853, Lotos, Prague 3: 85 (= *Pa-laemon anophthalmus* Kollar, 1848, S. B. Akad. Wiss. Wien 1: 137). Gender: feminine.

*Xiphocaridinella* Sadovsky, 1930, Zakavk. Kraeved. Sborn. (A) 1: 95. Type species by monotypy: *Xiphocaridinella kutaissiana* Sadovsky, 1930, Zakavk. Kraeved. Sborn. (A) 1: 95. Gender: feminine.

*Troglocaridella* Babič, 1930, Glasnik hrvad. Zagreb 34: 303. Type species, by monotypy: *Troglocaridella hercegovinensis* Babič, 1930, Glasnik hrvad. Zagreb 34: 303. Gender: feminine.

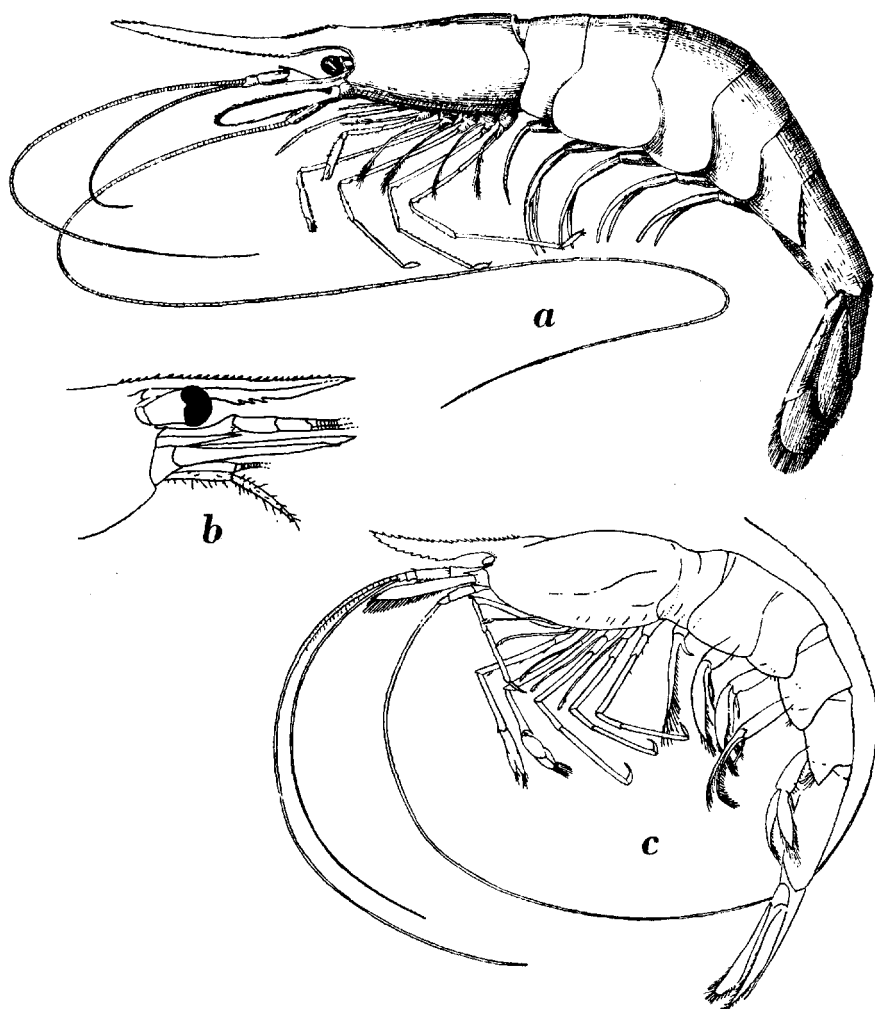


Fig. 6a. *Xiphocaris elongata* (Guérin-Ménéville). After Bouvier, 1925.

Fig. 6b. *Paratya compressa* (De Haan). Anterior part of body. After Kubo, 1938.

Fig. 6c. *Trogllocaris anophthalmus* (Kollar). After Stammer, 1932.

**Atyaephyra** de Brito Capello, 1867 (fig. 7)

*Symethus* Rafinesque, 1814, Préc. Découv. somiol.: 23. Type species, by monotypy: *Symethus fluviatilis* Rafinesque, 1814, Préc. Découv. somiol.: 23 (= *Hippolyte Desmarestii* Millet, 1831, Mém. Soc. agric. sci. Angers 1: 56). Gender: masculine.



*Symathus* Rafinesque, 1815, Anal. Nature: 98. Erroneous spelling of *Symethus* Rafinesque, 1814.

*Acilius* Rafinesque, 1815, Anal. Nature: 221. Substitute name for *Symethus* Rafinesque, 1814. Gender: masculine.

*Symaethus* Agassiz, 1846, Nomencl. Zool., Index Univ.: 357. Invalid emendation of *Symethus* Rafinesque, 1814.

*Atyaephyra* de Brito Capello, 1867, Mem. Acad. R. Sci. Lisboa, Sci. math. phys. nat. (n. ser.) 4(1) (7): 5. Type species, by monotypy: *Atyaephyra Rosiana* de Brito Capello, 1867, Mem. Acad. R. Sci. Lisboa, Sci. math.

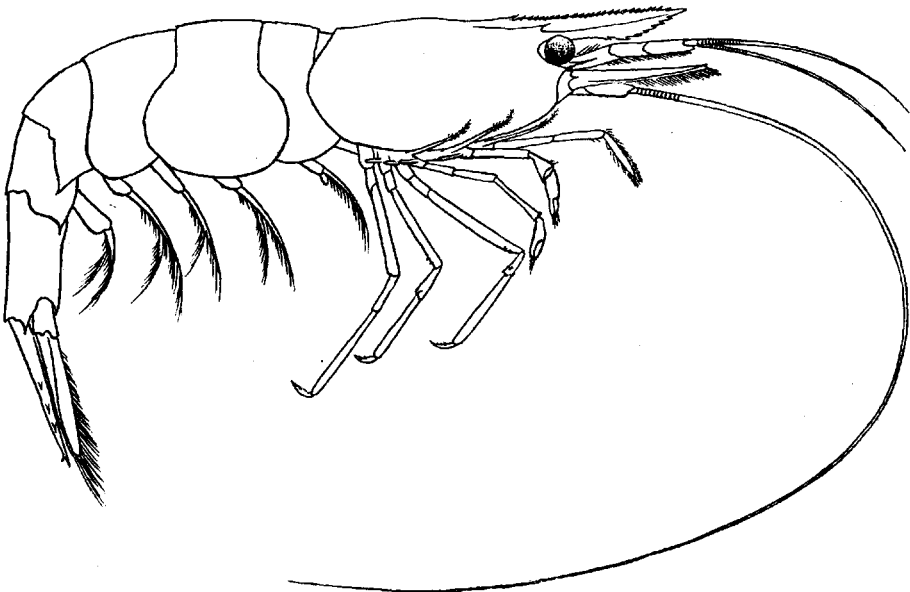


Fig. 7. *Atyaephyra desmarestii* (Millet). After Holthuis, 1950.

phys. nat. (n. ser.) 4(1) (7): 6 (= *Hippolyte Desmarestii* Millet, 1831, Mém. Soc. agric. sci. Angers 1: 56). Gender: feminine.

*Atyephyra* Von Martens, 1868, Arch. Naturgesch. 34(1): 51. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.

*Atyephira* Ishikawa, 1885, Quart. Journ. micr. Sci. (n. ser.) 25: 391. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.

*Hemicaridina* Ortmann, 1890, Zool. Jb. Syst. 5: 464. Type species, by monotypy: *Hippolyte Desmarestii* Millet, 1831, Mém. Soc. agric. sci. Angers 1: 56. Gender: feminine.

*Lemicaridina* Matzdorff, 1894, Helios 12(7): 118. Erroneous spelling of *Hemicaridina* Ortmann, 1890.

- Atyaephyra* Ortmann, 1895, Proc. Acad. nat. Sci. Phila. 1894: 398, 399, 401, 413. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Athejaephyra* Magri, 1923, Natural. Sicil. 24: 83. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Athejëphira* Magri, 1923, Natural. Sicil. 24: 94, 97. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Atyaephyra* Ferrer Galdiano, 1924, Bol. Soc. Esp. Hist. nat. 24: 210. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Atyaephrya* Hertzog, 1930, Bull. Ass. philom. Alsace Lorraine 7(5): 355. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Athyaeephyra* Werner, 1938, S. B. Akad. Wiss. Wien, math.-naturw. Kl. (1)147: 134. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Atyalphyra* Birstein, 1939, Zool. Journ. Moscow 18: 972. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.
- Athyaepora* Sterk, 1950, Natuurhist. Maandbl. Maastricht 39: 14. Erroneous spelling of *Atyaephyra* de Brito Capello, 1867.

**Syncaris** Holmes, 1900 (fig. 8a)

- Syncaris* Holmes, 1900, Occ. Pap. Calif. Acad. Sci. 7: 211. Type species, by original designation: *Miersia pacifica* Holmes, 1895, Proc. Calif. Acad. Sci. (2)4: 577. Gender: feminine.

**Palaemonias** Hay, 1901 (fig. 8b)

- Palaemonias* Hay, 1901, Proc. biol. Soc. Wash. 14: 179. Type species, by monotypy: *Palaemonias Ganteri* Hay, 1901, Proc. biol. Soc. Wash. 14: 180. Gender: masculine.
- Palaemonias* J. Roux, 1915, Act. Soc. Helv. Sci. nat. 1915 (2) (Zool): 226. Erroneous spelling of *Palaemonias* Hay, 1901.
- Palaemonies* Giovannoli, 1933, Amer. Midl. Nat. 14: 620. Erroneous spelling of *Palaemonias* Hay, 1901.
- Poiotmonias* Birstein, 1939, Zool. Journ. Moscow 18: 972. Erroneous spelling of *Palaemonias* Hay, 1901.

**Dugastella** Bouvier, 1912 (fig. 8c)

- Dugastella* Bouvier, 1912, C. R. Acad. Sci. Paris 155: 993. Type species, by monotypy: *Dugastella marocana* Bouvier, 1912, C. R. Acad. Sci. Paris 155: 993. Gender: feminine.

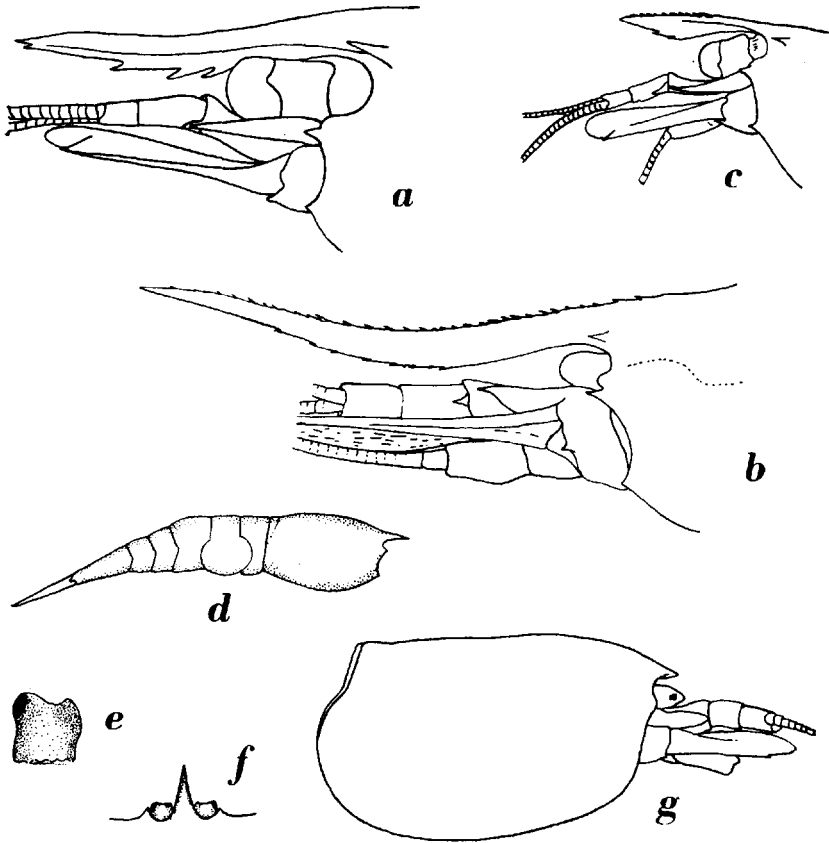


Fig. 8a. *Syncaris pasadenae* (Kingsley). Anterior part of body. After Bouvier, 1925.

Fig. 8b. *Palaemonias ganteri* Hay. Anterior part of body. After Fage, 1931.

Fig. 8c. *Dugastella marocana* Bouvier. Anterior part of body. After Bouvier, 1925.

Fig. 8d-f. *Antecaridina lauensis* (Edmondson). d, body in lateral view; e, eye; f, rostrum in dorsal view. After Edmondson, 1935.

Fig. 8g. *Typhlatya garciai* Chace. Carapace. After Chace, 1942a.

**Antecaridina** Edmondson, 1954 (fig. 8d-f)

*Mesocaris* Edmondson, 1935, Occ. Pap. Bishop Mus. Honolulu 10(24): 13.

Type species, by monotypy: *Mesocaris lauensis* Edmondson, 1935, Occ. Pap. Bishop Mus. Honolulu 10(24): 13. Gender: feminine. Invalid junior homonym of *Mesocaris* Ortmann, 1893, *Ergebn. Plankton Exped.* 2 (Gb): 73, 82 (Crustacea, Decapoda, Macrura).

*Antecaridina* Edmondson, 1954, *Pacific Sci.* 8: 368. Substitute name for *Mesocaris* Edmondson, 1935. Gender: feminine.

**Typhlatya** Creaser, 1936 (fig. 8g)

*Typhlatya* Creaser, 1936, Publ. Carnegie Inst. Wash. 457: 128. Type species, by monotypy: *Typhlatya pearsei* Creaser, 1936, Publ. Carnegie Inst. Wash. 457: 128. Gender: feminine.

**Atya** Leach, 1816 (fig. 9)

*Atys* Leach, 1815, Trans. Linn. Soc. Lond. 11: 345. Type species, by monotypy: *Atys scaber* Leach, 1815, Trans. Linn. Soc. Lond. 11: 345. Gender: masculine. Invalid junior homonym of *Atys* de Montfort, 1810, Conch. 2: 342 (Mollusca).

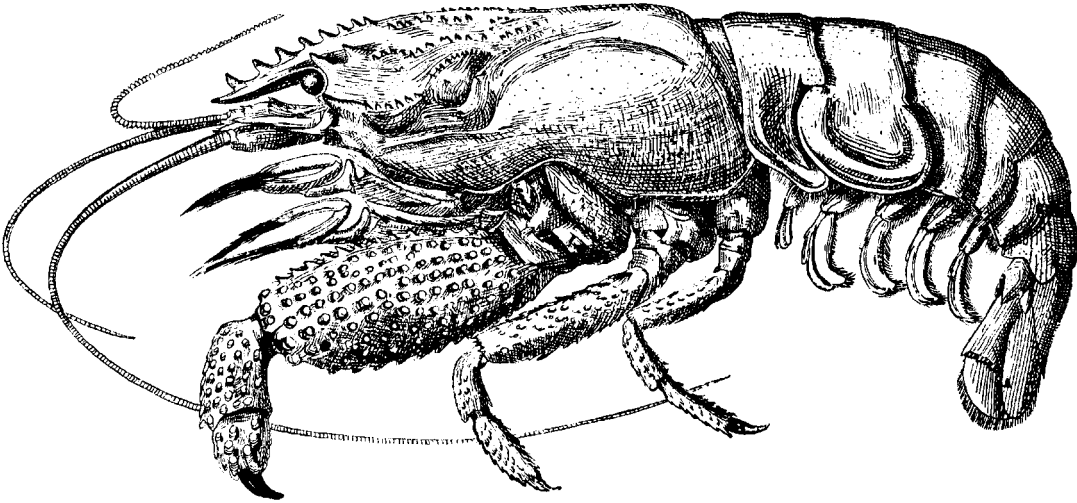


Fig. 9. *Atya crassa* (Smith). After Bouvier, 1925.

*Atya* Leach, 1816, Suppl. 4th-6th eds. Encycl. Brit. 1: 421. Type species, by monotypy: *Atys scaber* Leach, 1815, Trans. Linn. Soc. Lond. 11: 345. Gender: feminine.

*Atia* Latreille, 1817, Cuvier's Règne anim. (ed. 1) 3: 37. Erroneous spelling of *Atya* Leach, 1816.

*Atyoida* Randall, 1839, Journ. Acad. nat. Sci. Phila. 8: 140. Type species, by monotypy: *Atyoida bisulcata* Randall, 1839, Journ. Acad. nat. Sci. Phila. 8: 140. Gender: feminine.

*Evatya* Smith, 1871, Ann. Rep. Peabody Acad. Sci. 1869: 95. Type species, by monotypy: *Evatya crassa* Smith, 1871, Ann. Rep. Peabody Acad. Sci. 1869: 95. Gender: feminine.

- Euatya* Koelbel, 1884, S. B. Akad. Wiss. Wien 90(1): 317, 318, 320. Invalid emendation of *Evatya* Smith, 1871.
- Ortmannia* Rathbun, 1902, Bull. U. S. Fish Comm. 20(2): 120. Type species, by original designation: *Ortmannia henshawii* Rathbun, 1902, Bull. U. S. Fish Comm. 20(2): 120, footnote (= *Atyoida bisulcata* Randall, 1839, Journ. Acad. nat. Sci. Phila. 8: 140). Gender: feminine.
- Pseudatya* J. Roux, 1928, Treubia 10: 209. Type species, by monotypy: *Pseudatya beauforti* J. Roux, 1928, Treubia 10: 209. Gender: feminine.
- Vanderbiltia* Boone, 1935, Bull. Vanderbilt mar. Mus. 6: 159. Type species, by monotypy: *Vanderbiltia rosamondae* Boone, 1935, Bull. Vanderbilt mar. Mus. 6: 160 (= *Atya serrata* Bate, 1888, Rep. Voy. Challenger, Zool. 24: 699). Gender: feminine.
- Orthmannia* Sawaya, 1946, Zoologia, São Paulo 11: 412. Erroneous spelling of *Ortmannia* Rathbun, 1902.

**Caridinides** Calman, 1926 (fig. 10a, b)

- Caridinides* Calman, 1926, Ann. Mag. nat. Hist. (9)17: 242. Type species, by monotypy: *Caridinides wilkinsi* Calman, 1926, Ann. Mag. nat. Hist., (9)17: 242. Gender: masculine.

**Caridina** H. Milne Edwards, 1837 (fig. 10c)

- Caridina* H. Milne Edwards, 1837, Hist. nat. Crust. 2: 362. Type species, by monotypy: *Caridina typus* H. Milne Edwards, 1837, Hist. nat. Crust. 2: 363. Gender: feminine.
- Caradina* Bate, 1863, Proc. zool. Soc. Lond. 1863: 499. Erroneous spelling of *Caridina* H. Milne Edwards, 1837.
- Carinida* Filhol, 1886, Miss. Ile Campbell, Zool. 3(2): 430. Erroneous spelling of *Caridina* H. Milne Edwards, 1837.
- Caridine* Urita, 1921, Zool. Mag. Tokyo 33: 216. Erroneous spelling of *Caridina* H. Milne Edwards, 1837.
- Cardina* Hora, 1933, Curr. Sci. Bangalore 1: 385. Erroneous spelling of *Caridina* H. Milne Edwards, 1837.
- Caradrina* Carvalho, 1936, Mem. Est. Mus. zool. Univ. Coimbra (1)66: 19. Erroneous spelling of *Caridina* H. Milne Edwards, 1837.
- Neocaridina* Kubo, 1938, Journ. Imp. Fish. Inst. Japan 33: 73. Type species, by original designation: *Hippolyte denticulatus* De Haan, 1844, Fauna Japon., Crust. (6/7): pl. 45 fig. 8. Gender: feminine.

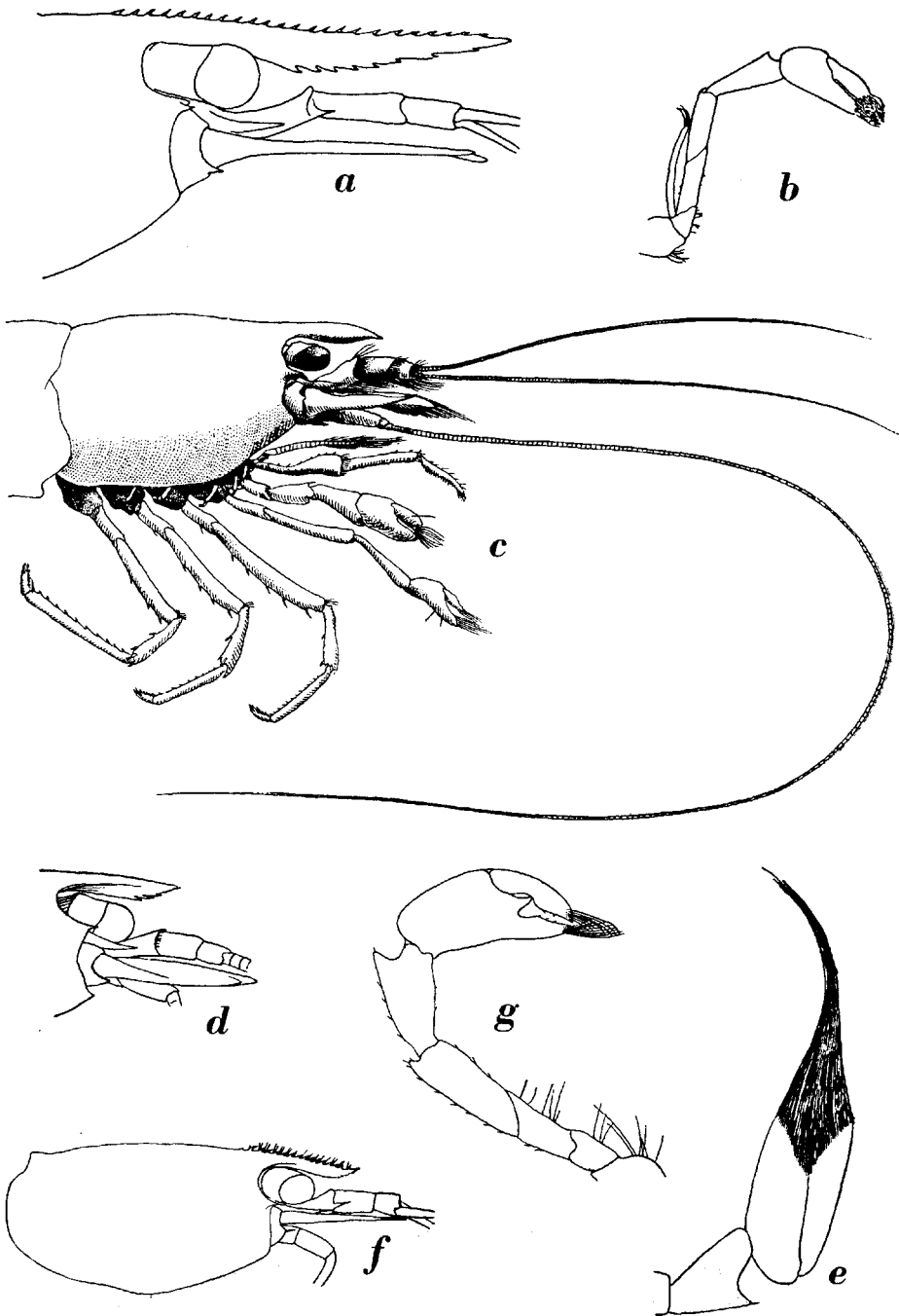


Fig. 10a, b. *Caridimides wilkinsi* Calman. a, anterior part of body; b, first pereiopod. After Calman, 1926.

Fig. 10c. *Caridina acuminata* Stimpson. Anterior part of body. After Balss, 1914.

Fig. 10d, e. *Potimirim mexicana* (De Saussure). d, anterior part of body; e, first chela. After Bouvier, 1925.

Fig. 10f, g. *Caridella cunningtoni* Calman. f, anterior part of body; g, first pereiopod. After Calman, 1906.

**Potimirim** Holthuis, 1954 (fig. 10d, e)

*Potimirim* Holthuis, 1954, Zool. Verh. Leiden 23: 2. Type species, by original designation: *Caridina mexicana* De Saussure, 1857, Rev. Mag. Zool. (2)9: 505. Gender: feminine.

**Caridella** Calman, 1906 (fig. 10f, g)

*Caridella* Calman, 1906, Proc. zool. Soc. Lond. 1906 (1): 198. Type species, by original designation: *Caridella cunningtoni* Calman, 1906, Proc. zool. Soc. Lond. 1906 (1): 199. Gender: feminine.

**Atyella** Calman, 1906 (fig. 11a, b)

*Atyella* Calman, 1906, Proc. zool. Soc. Lond. 1906 (1): 201. Type species, by original designation: *Atyella brevirostris* Calman, 1906, Proc. zool. Soc. Lond. 1906 (1): 201. Gender: feminine.

**Micratya** Bouvier, 1913 (fig. 11c, d)

*Calmania* Bouvier, 1909, C. R. Acad. Sci. Paris 148: 1730. Type species, by monotypy: *Atya Poeyi* Guérin Méneville, 1856, R. de la Sagra's Historia Cuba, Hist. nat. 7: xviii. Gender: feminine. Invalid junior homonym of *Calmania* Laurie, 1906, Rep. Ceylon Pearl Oyster Fish. 5: 406 (Crustacea Brachyura) and *Calmania* Nobili, 1907, Annu. Mus. zool. Univ. Napoli (n. ser.) 2(21): 3 (Crustacea Macrura Palaemonidae).

*Micratya* Bouvier, 1913, Bull. Soc. entom. France 1913: 181. Type species, by monotypy: *Atya Poeyi* Guérin Méneville, 1856, R. de la Sagra's Historia Cuba, Hist. nat. 7: xviii. Gender: feminine.

*Balssiola* Strand, 1922, Arch. Naturgesch. 88 (A4): 142. Substitute name for *Calmania* Bouvier, 1909. Gender: feminine.

**Caridinopsis** Bouvier, 1912 (fig. 11e)

*Caridinopsis* Bouvier, 1912, Bull. Mus. Hist. nat. Paris 18: 300. Type species, by monotypy: *Caridinopsis Chevalieri* Bouvier, 1912, Bull. Mus. Hist. nat. Paris 18: 300. Gender: masculine.

**Limnocaridella** Bouvier, 1913 (fig. 11f)

*Limnocaridella* Bouvier, 1913, Bull. Soc. entom. France 1913: 180. Type species, by monotypy: *Limnocaridina Alberti* Lenz, 1910, Wiss. Ergebn. Deutsch. Zentral-Afr. Exped. 1907-1908 3(3): 12. Gender: feminine.

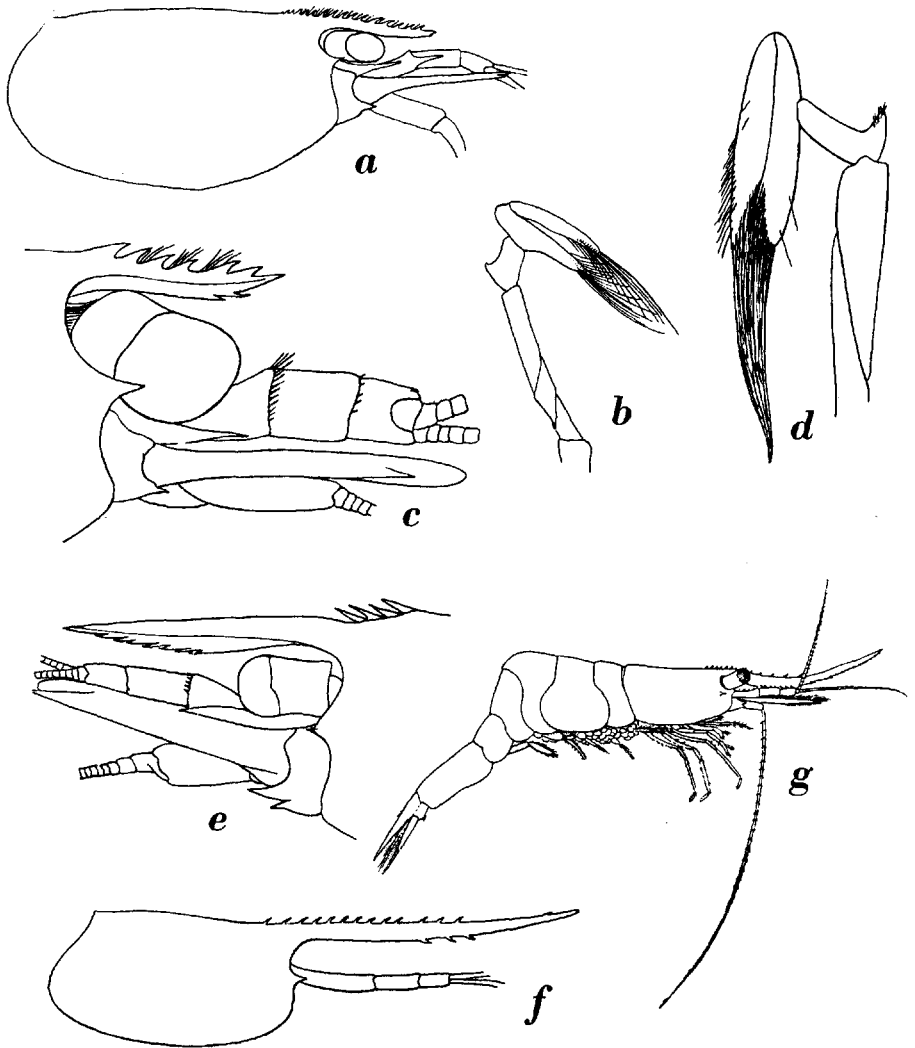


Fig. 11a, b. *Atyella brevisrostris* Calman. a, anterior part of body; b, first pereopod. After Calman, 1906.

Fig. 11c, d. *Micratya poeyi* (Guérin). c, anterior part of body; d, first leg. After Bouvier, 1925.

Fig. 11e. *Caridmopsis chevalieri* Bouvier. Anterior part of body. After Bouvier, 1925.

Fig. 11f. *Limnocaridella alberti* (Lenz), Carapace. After Lenz, 1910.

Fig. 11g. *Limnocaridina tanganyikae* Calman. After Calman, 1899.



**Limnocaridina** Calman, 1899 (fig. 11g)

*Limnocaridina* Calman, 1899, Proc. zool. Soc. Lond. 1899: 704. Type species, by monotypy: *Limnocaridina tanganyikae* Calman, 1899, Proc. zool. Soc. Lond. 1899: 704. Gender: feminine.

Superfamily STYLODACTYLOIDA

Stylodactyloida Borradaile, 1907, Ann. Mag. nat. Hist. (7)19: 467, 471.

This superfamily contains only one family with one genus:

Family STYLODACTYLIDAE

Stylodactylidae Bate, 1888, Rep. Voy. Challenger, Zool. 24: 481, 850.

Stylodactylinae Perrier, 1899, Traité Zool. 3: 1031.

**Stylodactylus** A. Milne Edwards, 1881 (fig. 12)

*Stylodactylus* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 11. Type species, by monotypy: *Stylodactylus serratus* A. Milne Edwards, 1881, Ann. Sci. nat. Zool. (6)11(4): 11. Gender: masculine.

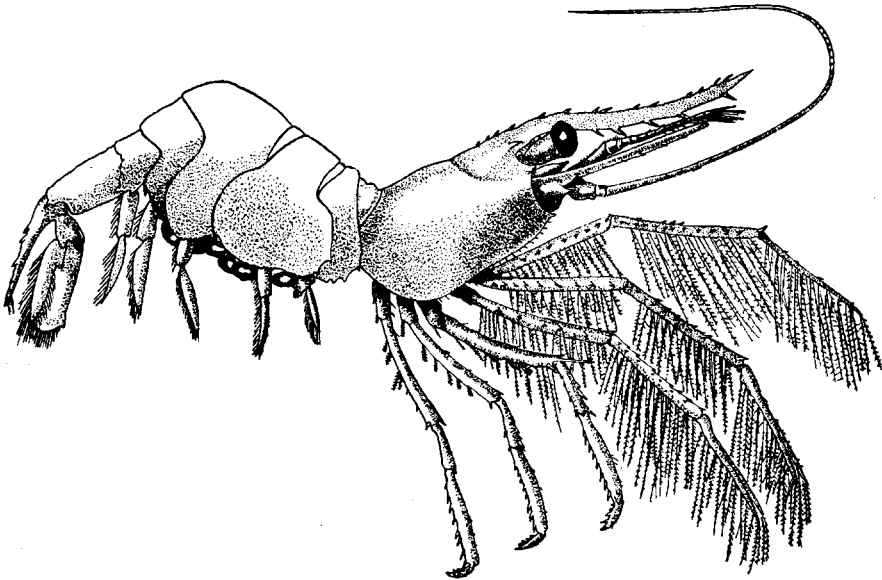


Fig. 12. *Stylodactylus amarynthus* De Man. After De Man, 1920.

## Superfamily PASIPHAEOIDA

Pasiphaeina Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 13, 18.

Pasiphaeoida Alcock, 1901, Descr. Catal. Indian Deep Sea Crust. Macr. Anom.: 55.

Pasiphaeioidea Balss, 1914, Abh. Bayer. Akad. Wiss. (suppl.) 2 (10): 19.

Pasiphaëoidea Balss, 1921, K. Svenska Vetensk. Akad. Handl. 61 (10): 7.

Only one family is included in this superfamily:

## Family PASIPHAEIDAE

Pasiphaeidae Dana, 1852, Proc. Acad. nat. Sci. Phila. 6: 13, 18.

Leptocheilidae Paulson, 1875, Issljed. Rakoobr. Krasn. Morja (Stud. Crust. Red Sea): 99.

Pasiphaeinae Claus, 1876, Grundzüge Zool. (ed. 3): 551.

Pasiphaidae Smith, 1884, Rep. U. S. Fish Comm. 10: 381.

Pasiphaidae Wood Mason & Alcock, 1893, Ann. Mag. nat. Hist. (6) 11: 161.

Pasiphaeiidae Faxon, 1893, Bull. Mus. comp. Zool. Harvard 24: 208.

Pasyphaëinae Perrier, 1899, Traité Zool. 3: 1032.

Pasiphaeidae Balss, 1915, Denkschr. Akad. Wiss. Wien 91: 17.

Pasipheidae De Miranda y Rivera, 1933, Not. Res. Inst. Españ. Oceanogr. (2) 67: 6.

Pasiphaëidae Barnard, 1950, Ann. S. Afr. Mus. 38: 648.

As several of the genera of this family are insufficiently known, their systematic status is quite uncertain. A revision of this group therefore is highly desirable. The following tentative key to the genera should be used with some reserve:

1. Mandible without a palp. Rostrum formed by an erect postfrontal spine *Pasiphaea*  
— Mandibular palp present. Rostrum a normal forwards directed prolongation of the carapace . . . . . 2
2. Fourth pereopod distinctly shorter than either third or fifth leg. . . . . 3  
— Fourth pereopod longer than fifth leg, though sometimes shorter than third. . . . . 7
3. Antennal and branchiostegal spines absent. Dorsal margin of carapace usually without teeth . . . . . 4  
— Antennal and branchiostegal spines present. Dorsal margin of carapace with teeth. . . . . 5
4. Mandibular palp two-jointed . . . . . *Parapasiphaë*  
— Mandibular palp consisting of a single joint. . . . . *Dantecia*
5. Mandibular palp consisting of a single joint. . . . . *Sympasiphaea*  
— Mandibular palp two-jointed . . . . . 6
6. Third maxilliped with one arthrobranch . . . . . *Glyphus*  
— Third maxilliped with two arthrobranches . . . . . *Eupasiphaë*
7. Third and fourth pereopods slender, of about equal length and not shorter than the first. Pleopods with the exopod very long and narrow, the endopod much shorter. Rostrum dorsally with teeth . . . . . *Psathyrocaris*  
— Fourth pereopod shorter than third, both much shorter than first. Pleopods with exo- and endopod short and about equal in length. Rostrum dorsally without teeth. . . . . *Leptocheila*

**Pasiphaea** Savigny, 1816 (fig. 13a)

- Pasiphaea* Savigny, 1816, Mém. Anim. s. Vert. 1:50. Type species, by monotypy: *Alpheus Sivado* Risso, 1816, Hist. nat. Crust. Nice: 93. Gender: feminine.
- Pasiphae* Latreille, 1819, Nouv. Dict. Hist. nat. (ed. 2) 30:73. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Pasiphaë* Burmeister, 1837, Handb. Naturgesch. 2:565. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Pasiphae* Kröyer, 1845, Naturhist. Tidsskr. (n. ser.) 1:453. Invalid emendation of *Pasiphaea* Savigny, 1816.
- Pasyphaea* Veranyi, 1846, Catal. Anim. Golfo Genova: 8. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Pasiphaerea* Grube, 1864, Jber. Schles. Ges. vaterl. Cult. 41:62. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Passive* Lovett, 1884, Proc. Trans. Croydon micr. nat. Hist. Club 1882-1883:131. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Phye* Wood Mason, 1892, Illustr. Zool. Invest. Crust. 1: pl. 3 fig. 5. Type species, by monotypy: *Parapasiphaë Alcocki* Wood Mason & Alcock, 1891, Ann. Mag. nat. Hist. (6)7:196. Gender: feminine.
- Pasiphaeia* Faxon, 1893, Bull. Mus. comp. Zoöl. Harvard 24:208. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Pasiphaeia* Faxon, 1895, Mem. Mus. comp. Zoöl. Harvard 18:173. Invalid emendation of *Pasiphaea* Savigny, 1816.
- Pasiphea* Magri, 1904, Atti Accad. gioen. Sci. nat. Catania (4)17(14):4. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Passiphaea* Björck, 1911, Ark. Zool. 7(15) 1. Erroneous spelling of *Pasiphaea* Savigny, 1816.
- Phasiphae* (Risso MS) Monod, 1931, Arch. Mus. Hist. nat. Paris (6)7:123. Erroneous spelling of *Pasiphaea* Savigny, 1816.

**Parapasiphaë** Smith, 1884 (fig. 13b)

- Parapasiphaë* Smith, 1884, Rep. U. S. Fish Comm. 10:383. Type species, selected by Fowler, 1912, Ann. Rep. New Jersey State Mus. 1911:547; *Parapasiphaë sulcatifrons* Smith, 1884, Rep. U. S. Fish Comm. 10:384. Gender: feminine.
- Orphania* Bate, 1888, Rep. Voy. Challenger, Zool. 24:872. Type species, by monotypy: *Orphania tenuimana* Bate, 1888, Rep. Voy. Challenger, Zool. 24:872. Gender: feminine. Invalid junior homonym of *Orphania* Fischer, 1853, Orthopt. Europ.: 197, 222 (Orthoptera).

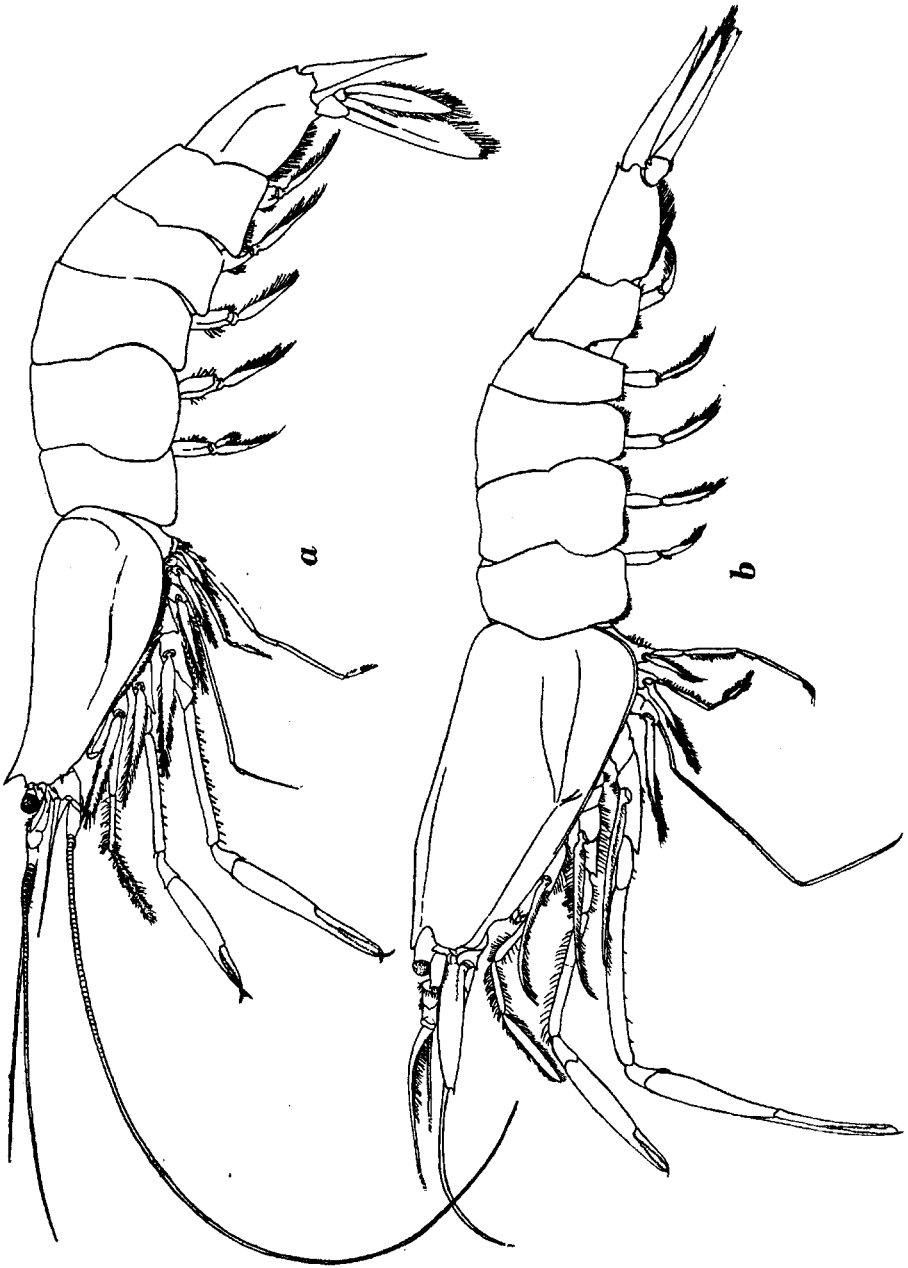


Fig. 13a. *Pasiphaea multidentata* Esmark. After Kemp, 1910.  
Fig. 13b. *Parapaspiphæ sulcatifrons* Smith. After Kemp, 1910.

*Parapasiphaea* Alcock & Anderson, 1894, Journ. Asiat. Soc. Bengal 63(2): 158. Erroneous spelling of *Parapasiphaë* Smith, 1884.

*Parasiphaea* Grieg, 1927, Bergens Mus. Aarb. 1926(7): 47. Erroneous spelling of *Parapasiphaë* Smith, 1884.

**Dantecia** Caullery, 1896 (fig. 14a, b)

*Dantecia* Caullery, 1896, Ann. Univ. Lyon 26: 372. Type species, by monotypy: *Dantecia Caudani* Caullery, 1896, Ann. Univ. Lyon 26: 372. Gender: feminine.

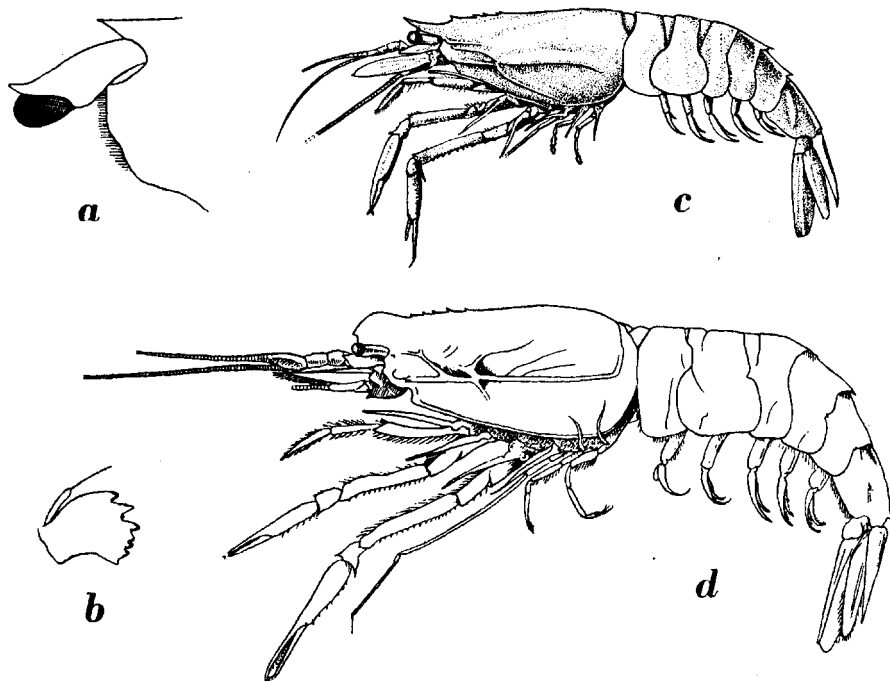


Fig. 14a, b. *Dantecia caudani* Caullery. a, anterior part of carapace; b, mandible. After Caullery, 1896.

Fig. 14c. *Sympasiphaea annectens* Alcock. After Alcock & McArdle, 1901.

Fig. 14d. *Eupasiphae latirostris* (Wood Mason & Alcock). After Wood Mason & Alcock, 1893.

**Sympasiphaea** Alcock, 1901 (fig. 14c)

*Sympasiphaea* Alcock, 1901, Descr. Catal. Indian Deep Sea Crust. Macr. Anom.: 58, 62. Type species, by monotypy: *Sympasiphaea annectens* Alcock, 1901, Descr. Catal. Indian Deep Sea Crust. Macr. Anom.: 63. Gender: feminine.

*Sympasiphaea* Balss, 1925, Wiss. Ergebn. Valdivia Exped. 20(5): 233. Erroneous spelling of *Sympasiphaea* Alcock, 1901.

**Glyphus** Filhol, 1884

*Glyphus* Filhol, 1884, La Nature, Paris 12(1):231, 328. Type species, by monotypy: *Glyphus marsupialis* Filhol, 1884, La Nature, Paris 12(1):231, 328. Gender: masculine.

**Eupasiphaë** Wood Mason & Alcock, 1893 (fig. 14d)

*Eupasiphaë* Wood Mason & Alcock, 1893, Ann. Mag. nat. Hist. (6)11:165.

Type species, by present selection: *Parasiphaë Gilesii* Wood Mason, 1892, Illustr. Zool. Invest. Crust. 1: pl. 3 fig. 8. Gender: feminine.

*Eupasiphaea* Alcock & Anderson, 1894, Journ. Asiat. Soc. Bengal 63(2): 158. Erroneous spelling of *Eupasiphaë* Wood Mason & Alcock, 1893.

**Psathyrocaris** Wood Mason & Alcock, 1893 (fig. 15a)

*Psathyrocaris* Wood Mason & Alcock, 1893, Ann. Mag. nat. Hist. (6)11:

168. Type species, by monotypy: *Psathyrocaris fragilis* Wood Mason & Alcock, 1893, Ann. Mag. nat. Hist. (6)11:168. Gender: feminine.

**Leptochela** Stimpson, 1860 (fig. 15b)

*Leptochela* Stimpson, 1860, Proc. Acad. nat. Sci. Phila. 1860:42. Type

species, by present selection: *Leptochela gracilis* Stimpson, 1860, Proc. Acad. nat. Sci. Phila. 1860:42. Gender: feminine.

## Superfamily BRESILIOIDA nov.

The four families grouped in this superfamily, formerly were placed in three different superfamilies. The Bresiliidae generally were believed to belong to the Pasiphaeoida, the Eugonatonotidae and the Disciadidae were placed in the Oplophoroida, while the Rhynchocinetidae formed part of the Palaemonoida. I am not certain whether the present group is a natural one. The Rhynchocinetidae and the Eugonatonotidae certainly are closely related. They differ from the two other families in having the mandible more Palaemonoid, with a distinct incisor and molar process, by the articulate palp of the first maxilliped, by the second maxilliped having the last joint applied sidewise to the penultimate joint, by the shape of the finger tips of the first pair of legs, by the exopods of the pereciopods which are rudimentary or absent. The Disciadidae in several respects are intermediate between the Bresiliidae and the other two families, e.g., in the shape of the last joint of the second maxilliped.

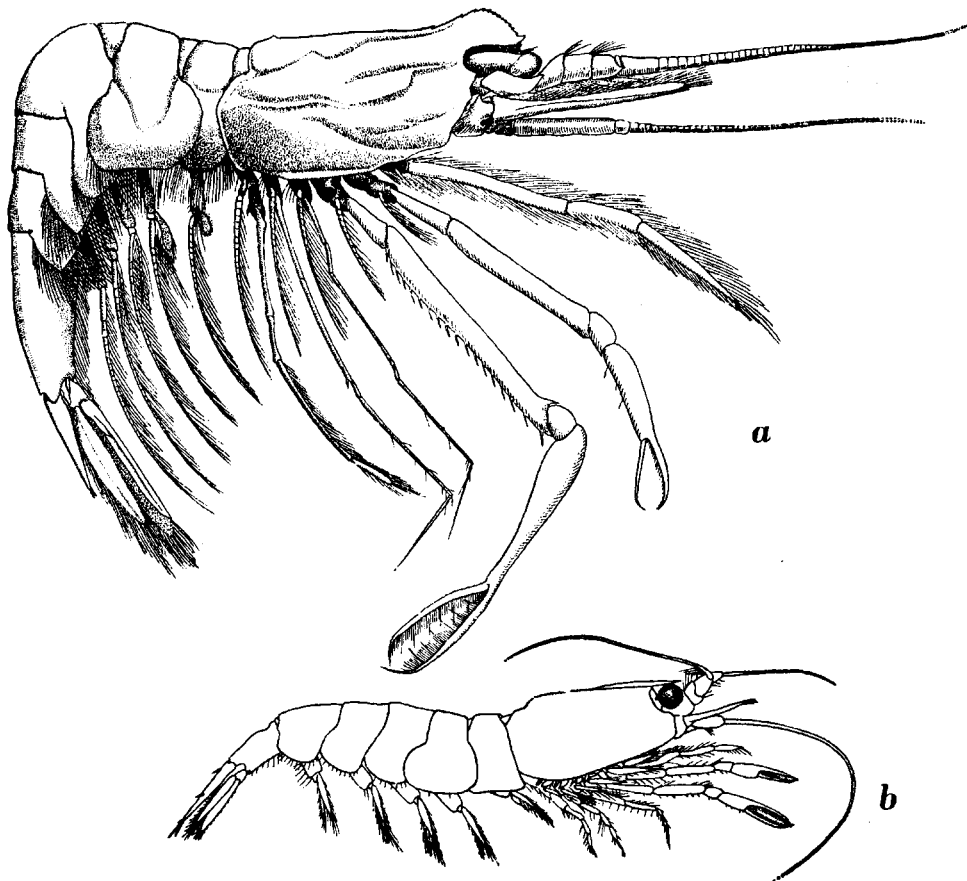


Fig. 15a. *Psathyrocaris infirma* Alcock & Anderson. After Balss, 1925.  
 Fig. 15b. *Leptochela bermudensis* Gurney. After Chace, 1940.

Family BRESILIIDAE

Bresiliidae Calman, 1896, Trans. Roy. Irish Acad. 31: 7.

Bresiliidae Kemp, 1910, Sci. Invest. Fish. Ireland 1908(1): 35

The two genera contained in this family may be separated as follows:

- 1. Exopods present on the first two pairs of pereiopods. Fifth leg with a rudimentary pleurobranch *Bresilia*
- Exopods present on all pereiopods. Fifth leg with a well-developed pleurobranch. *Lucaya*

**Bresilia** Calman, 1896 (fig. 16a)

*Bresilia* Calman, 1896, Trans. Roy. Irish Acad. 31: 7. Type species, by monotypy: *Bresilia atlantica* Calman, 1896, Trans. Roy. Irish Acad. 31: 7.  
 Gender: feminine.