

*Periclimenaeus bermudensis*

- a. anterior region, lateral view
- b. fingers of major second pereopod
- c. minor second pereopod
- (after Holthuis, 1951b)
- d. anterior region, lateral view
- e. chela of first pereopod
- f. first pereopod

*Periclimenaeus perlatus*

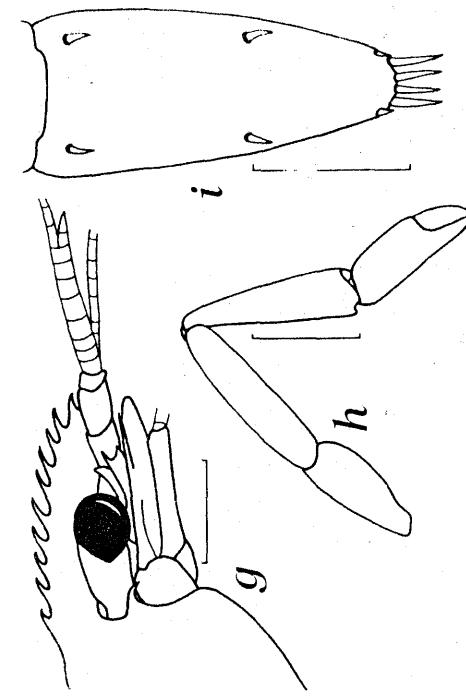
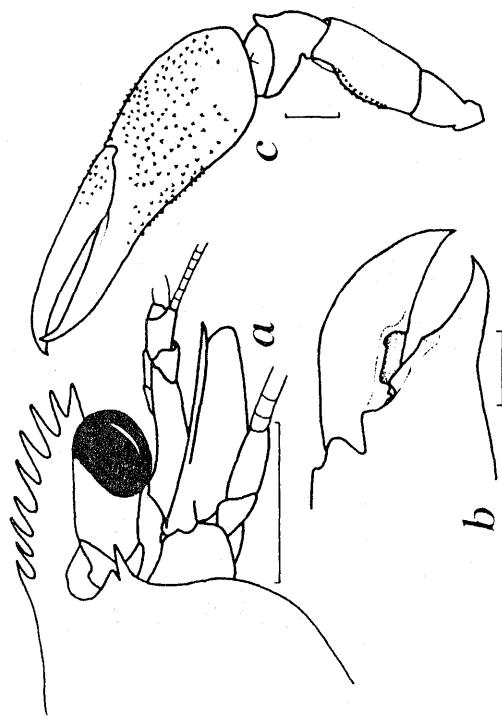
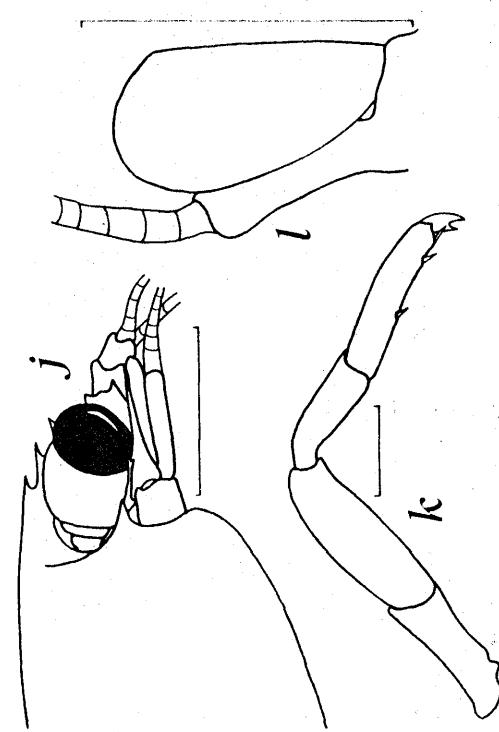
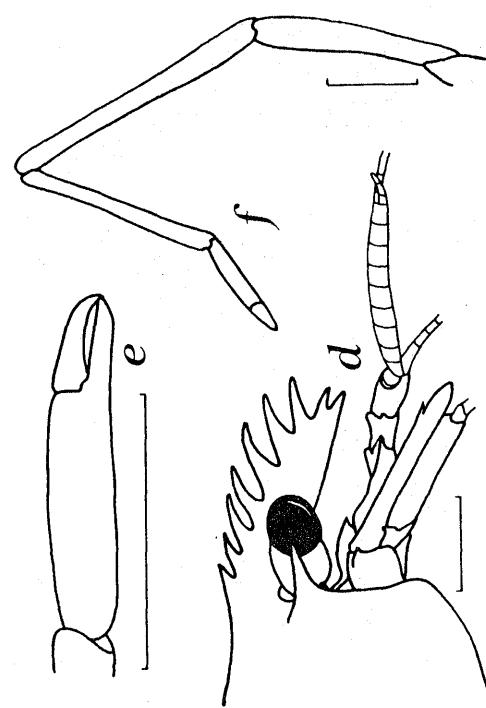
- (after Holthuis, 1951b)
- d. anterior region, lateral view
- e. chela of first pereopod
- f. first pereopod

*Periclimenaeus wilsoni*

- g. anterior region, lateral view
- h. first pereopod
- i. telson
- (after Holthuis, 1951b)
- j. anterior region, lateral view
- k. third pereopod
- l. antenna

*Periclimenaeus schmitti*

- (after Holthuis, 1951b)
- j. anterior region, lateral view
- k. third pereopod
- l. antenna



*Periclimenaus atlanticus*

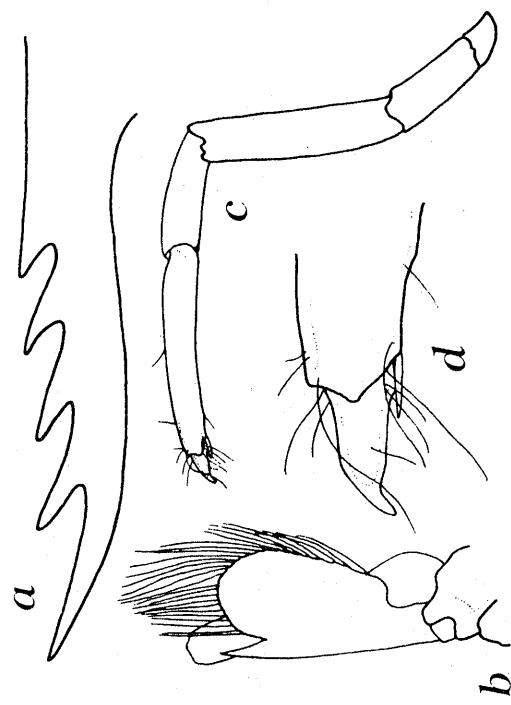
- a. rostrum
- b. scaphocerite
- c. third pereopod
- d. same, dactylus

(after Holthuis, 1951b)

*Periclimenaus maxillidens*

- e. anterior region, lateral view
- f. dactylus of third pereopod
- g. antennule and antenna

(after Holthuis, 1951b)



*Periclimenes longicaudatus*

- a. anterior region, lateral view
- b. third pereopod
- c. antennule
- (after Holthuis, 1951b)
- d. anterior region, lateral view
- e. second pereopod
- f. scaphocerite
- g. antennule

(after Holthuis, 1951b)

*Periclimenes americanus*

- d. anterior region, lateral view
- e. second pereopod
- f. scaphocerite
- g. antennule

(after Holthuis, 1951b)

*Periclimenes magnus*

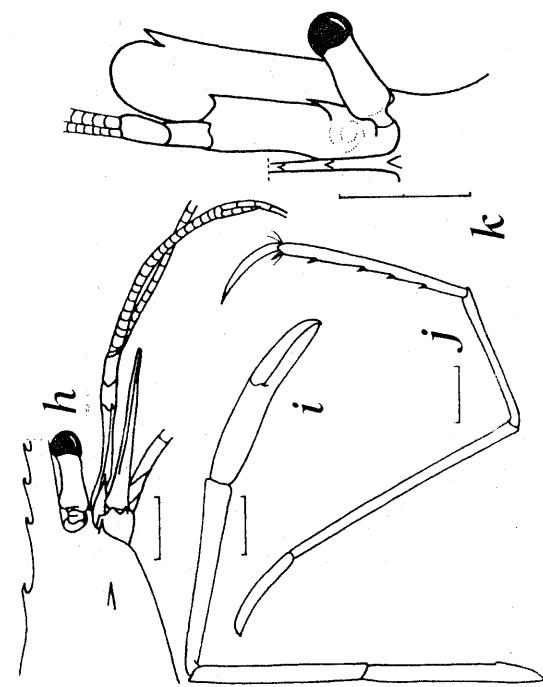
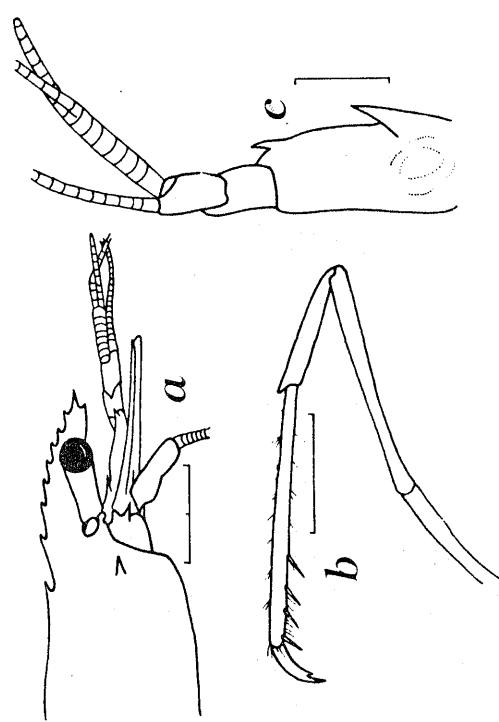
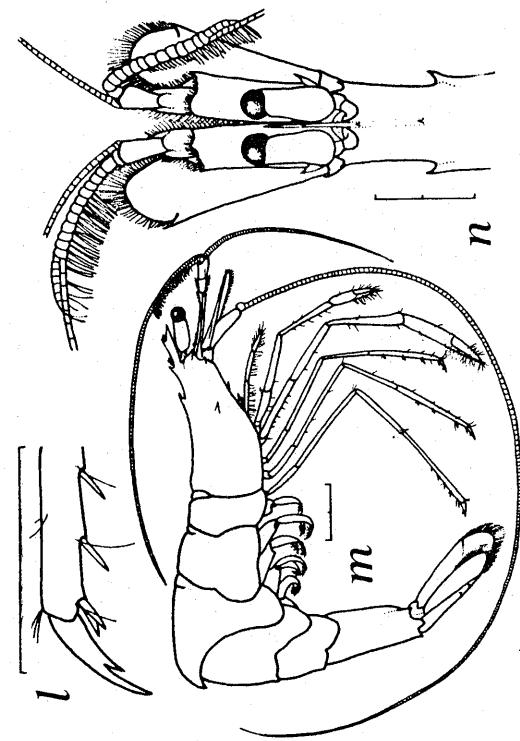
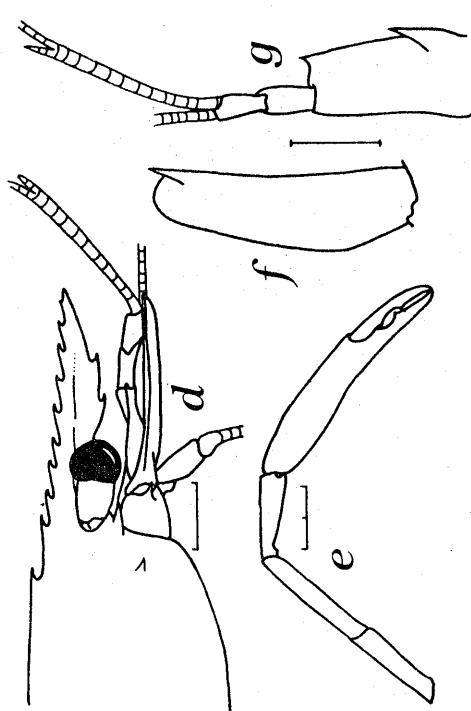
- h. anterior region, lateral view
- i. second pereopod
- j. third pereopod
- k. antennule and scaphocerite

(after Holthuis, 1951b)

*Periclimenes pedersoni*

- male:
- l. dactylus of third pereopod
  - m. lateral view
  - n. anterior region, dorsal view

(after Chace, 1958)



*Periclimenes pandionis*

- a. anterior region, lateral view
  - b. first pereopod
  - c. second pereopod
  - d. scaphocerite
  - e. antennule
- (after Holthuis, 1951b)
- f. anterior region, lateral view
  - g. first pereopod
  - h. scaphocerite
  - i. major second pereopod

(after Holthuis, 1951b)

*Periclimenes harringtoni*

- f. anterior region, lateral view
- g. first pereopod
- h. scaphocerite
- i. major second pereopod

(after Holthuis, 1951b)

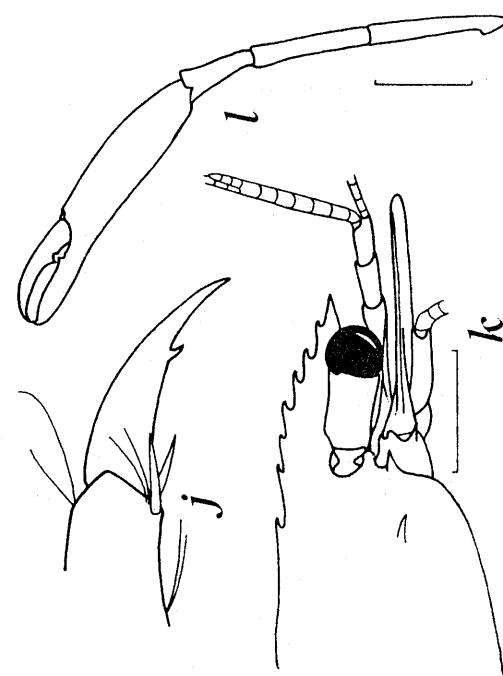
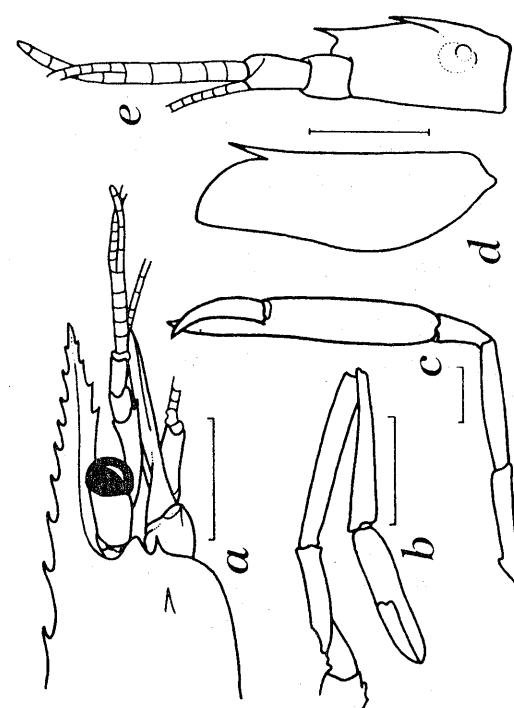
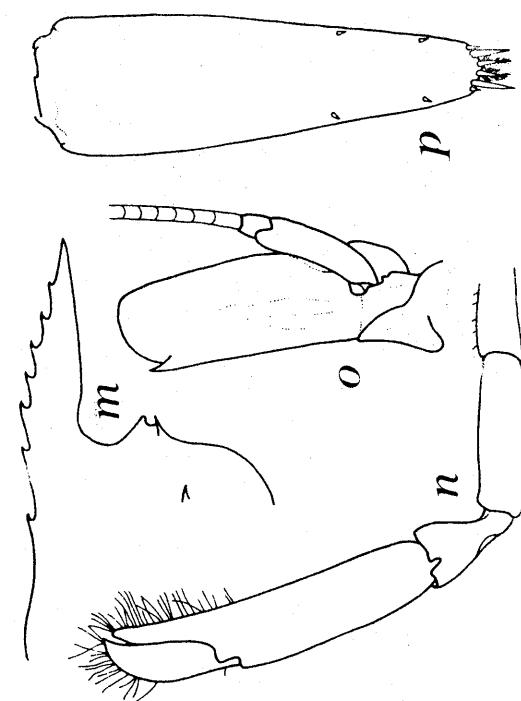
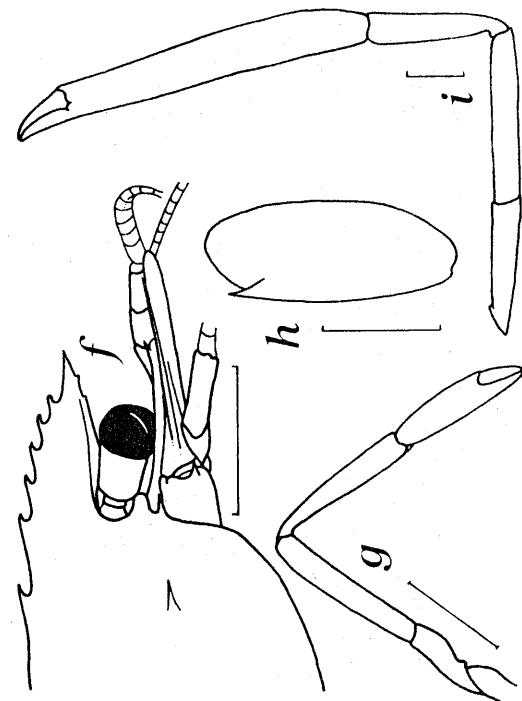
*Periclimenes iridescent*

- j. dactylus of third pereopod
  - k. anterior region, lateral view
  - l. major second pereopod
- (after Holthuis, 1951b)

*Periclimenes rathbunae*

- m. anterior region of carapace
- n. major second pereopod
- o. antenna
- p. telson

(after Schmitt, 1924a)

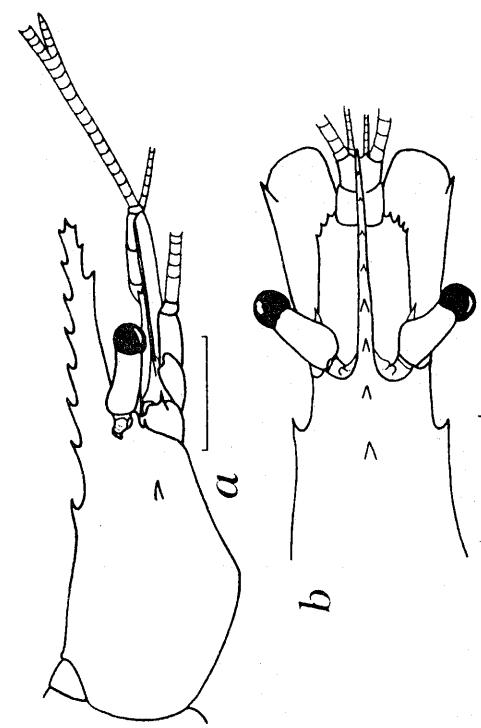
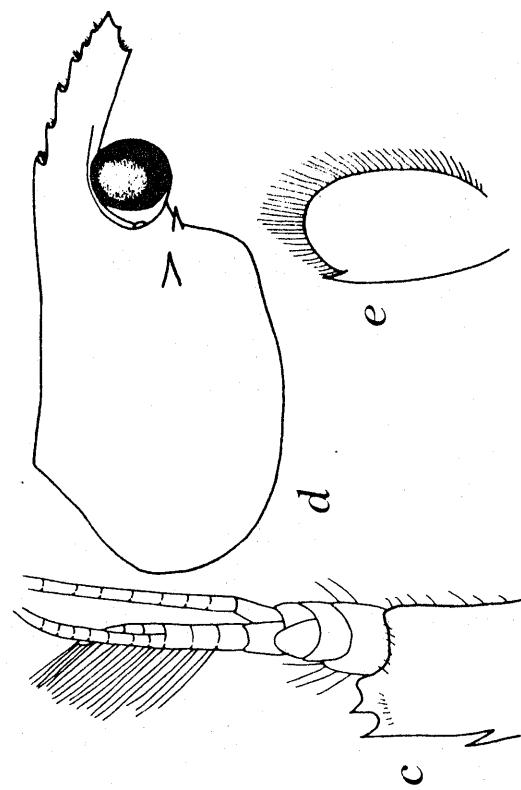


*Periclimenes yucatanicus*

- a. anterior region, lateral view
- b. same, dorsal view  
(after Holthuis, 1951b)

*Periclimenes perryae*

- c. antennule
- d. carapace, lateral view
- e. scaphocerite  
(after Chace, 1942a)



*Pontonia unidens*

- a. fingers of major second pereopod, inner view
- b. chela of major second pereopod, outer view  
(after Kingsley, 1880)

*Pontonia domestica*

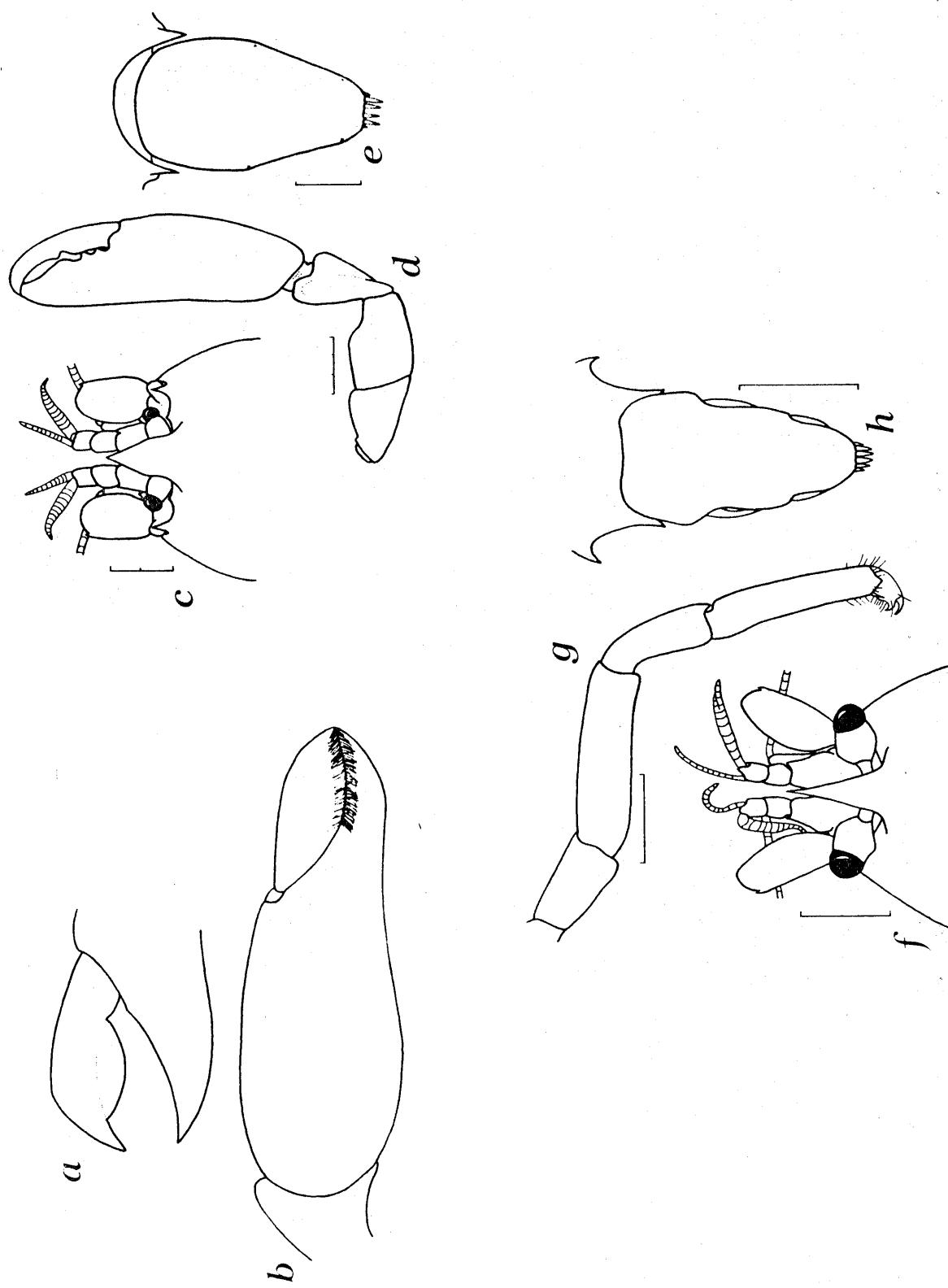
- c. anterior region, dorsal view
- d. minor second pereopod
- e. telson

(after Holthuis, 1951b)

*Pontonia margarita*

- f. anterior region, dorsal view
- g. third pereopod
- h. telson

(after Holthuis, 1951b)



*Typton prionurus*

- a. anterior region, lateral view
- b. major second pereopod
- c. telson and left uropods  
(after Holthuis, 1951b)
- d. anterior region, lateral view
- e. major second pereopod  
(after Holthuis, 1951b)

*Typton tortugae*

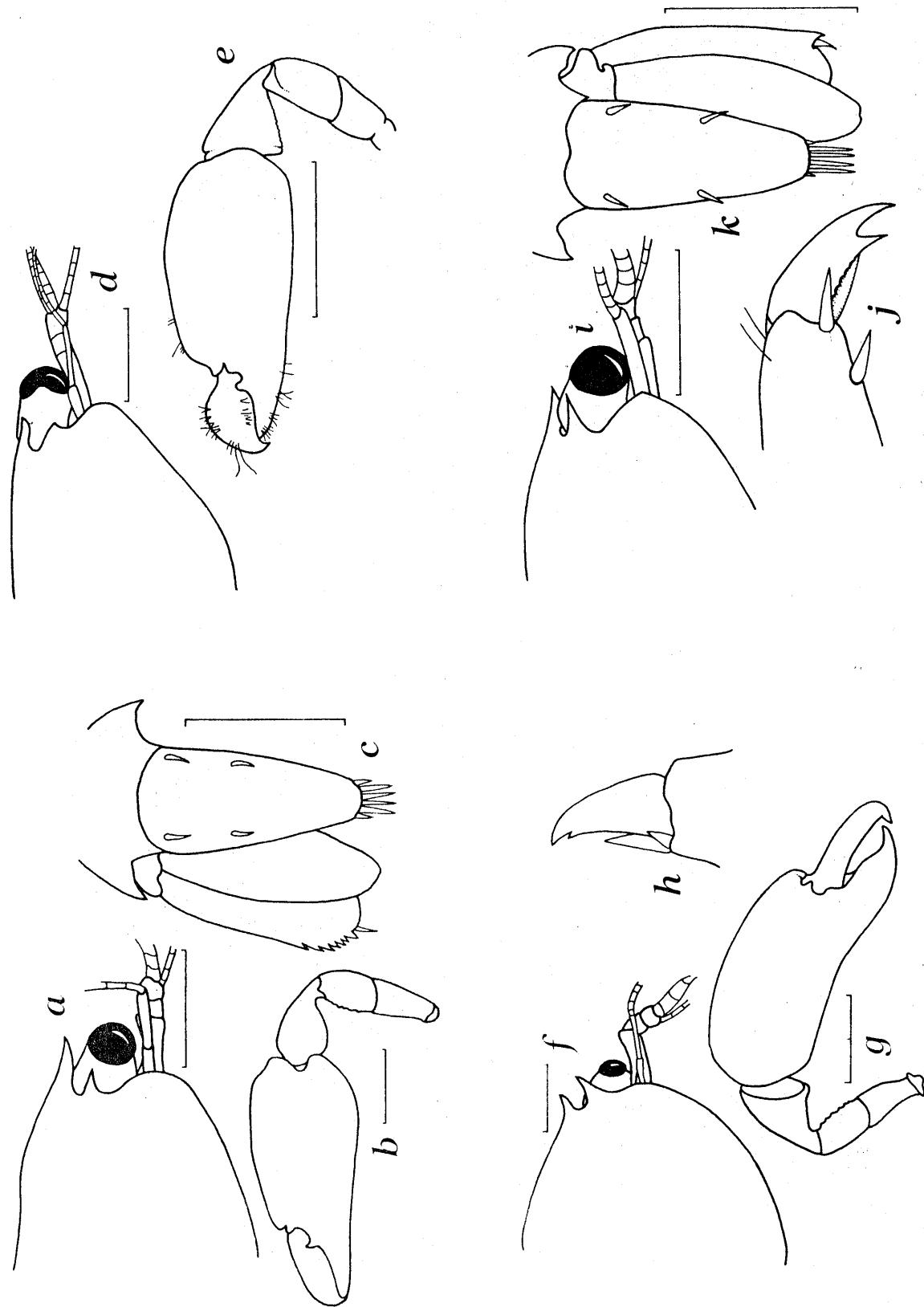
- d. anterior region, lateral view
- e. major second pereopod  
(after Holthuis, 1951b)

*Typton carneus*

- f. anterior region, lateral view
- g. major second pereopod
- h. dactylus of third pereopod  
(after Holthuis, 1951b)
- i. anterior region, lateral view
- j. dactylus of third pereopod
- k. telson and right uropods  
(after Holthuis, 1951b)

*Typton gnathophylloides*

- i. anterior region, lateral view
- j. dactylus of third pereopod
- k. telson and right uropods  
(after Holthuis, 1951b)

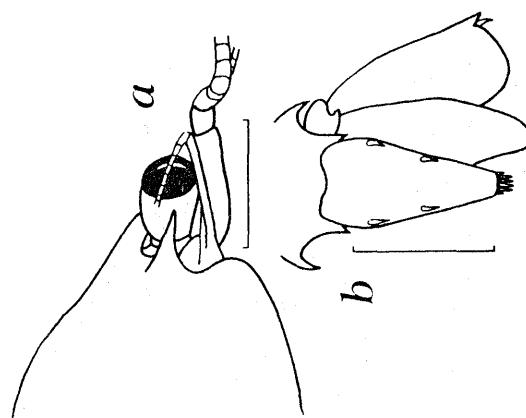
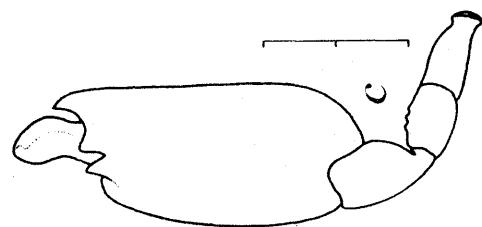
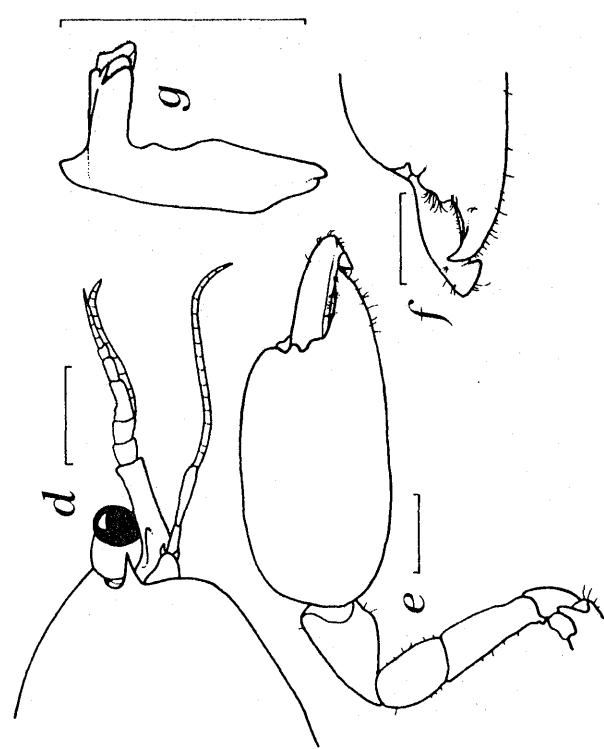


*Typton vulcanus*

- a. anterior region, lateral view
- b. telson and right uropods
- c. major second pereopod  
(after Holthuis, 1951b)

*Typton distinctus*

- holotype ovigerous female:
  - d. anterior region, lateral view
  - e. major second pereopod
  - f. same, fingers
  - g. mandible
- (after Chace, 1972)



*Anchistiooides antiguensis*

- a. anterior region, lateral view
- b. third maxilliped
- c. second pereopod
- d. carapace and rostrum, lateral view
- e. third pereopod
- f. same, dactylus
- g. antennule
- h. telson

(after Holthuis, 1951b)

*Brachycarpus biunguiculatus*

- d. carapace and rostrum, lateral view
- e. third pereopod
- f. same, dactylus
- g. antennule
- h. telson

(after Schmitt, 1939)

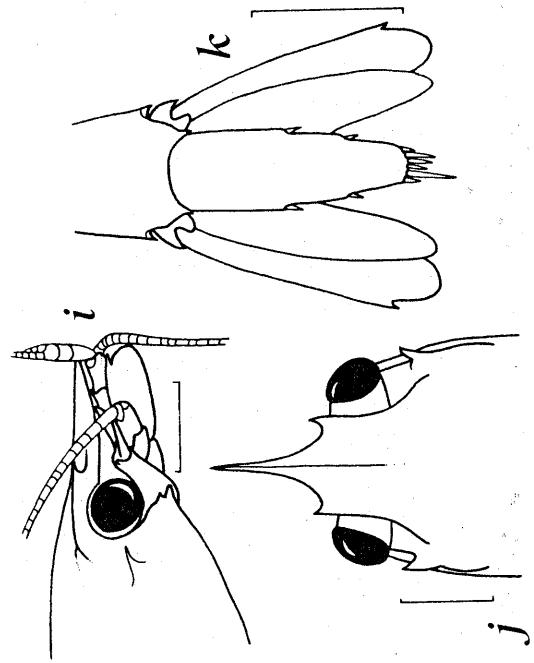
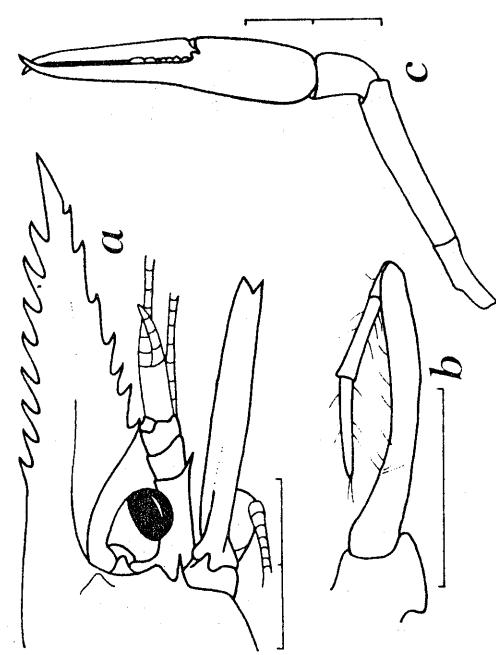
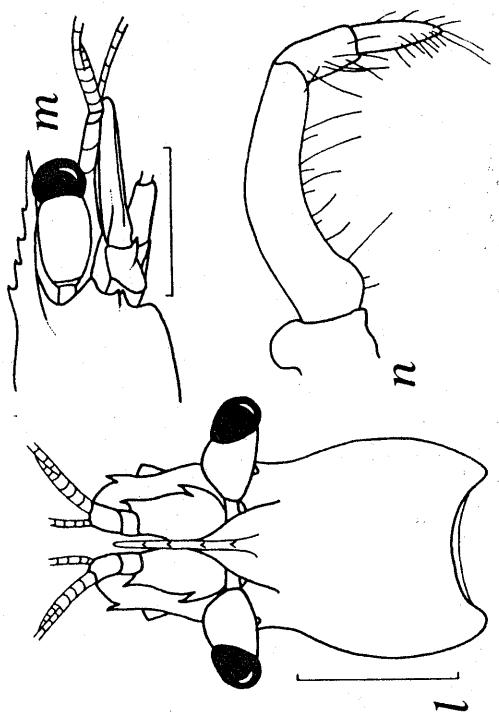
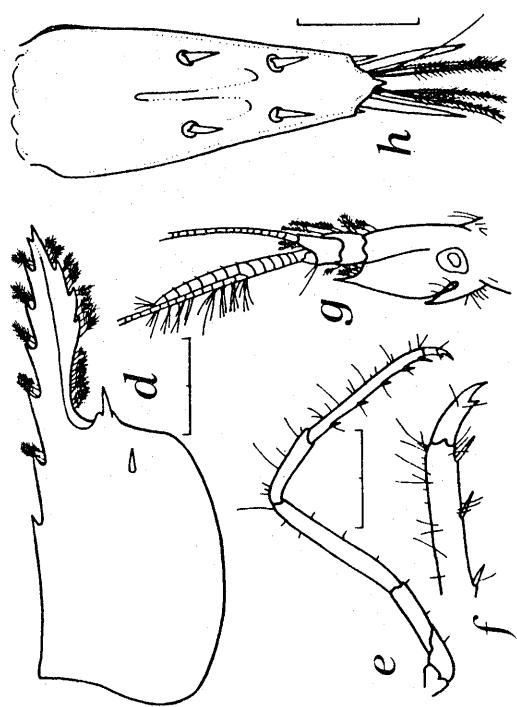
*Lipkebe holthuisi*

ovigerous female:

- i. anterior region, lateral view
- j. same, dorsal view
- k. telson and uropods
- l. anterior region, dorsal view
- m. same, lateral view
- n. third maxilliped

(after Chace, 1969)

*Neopontonides beaufortensis*



*Pontoniopsis paulae*

- a. lateral view
  - b. anterior region, dorsal view
  - c. telson and uropods
- (after Gore, 1981)

*Pseudocoutierea antillensis*

ovigerous female:

- a. lateral view
- b. anterior region, lateral view
- c. abdomen, posterior part
- d. right third maxilliped
- e. anterior region, dorsal view

(after Chace, 1972)

*Tuleariocaris neglecta*

male:

- h. anterior region, dorsal view
- i. second pereopod
- j. same, chela
- k. rostrum and anterior region of carapace

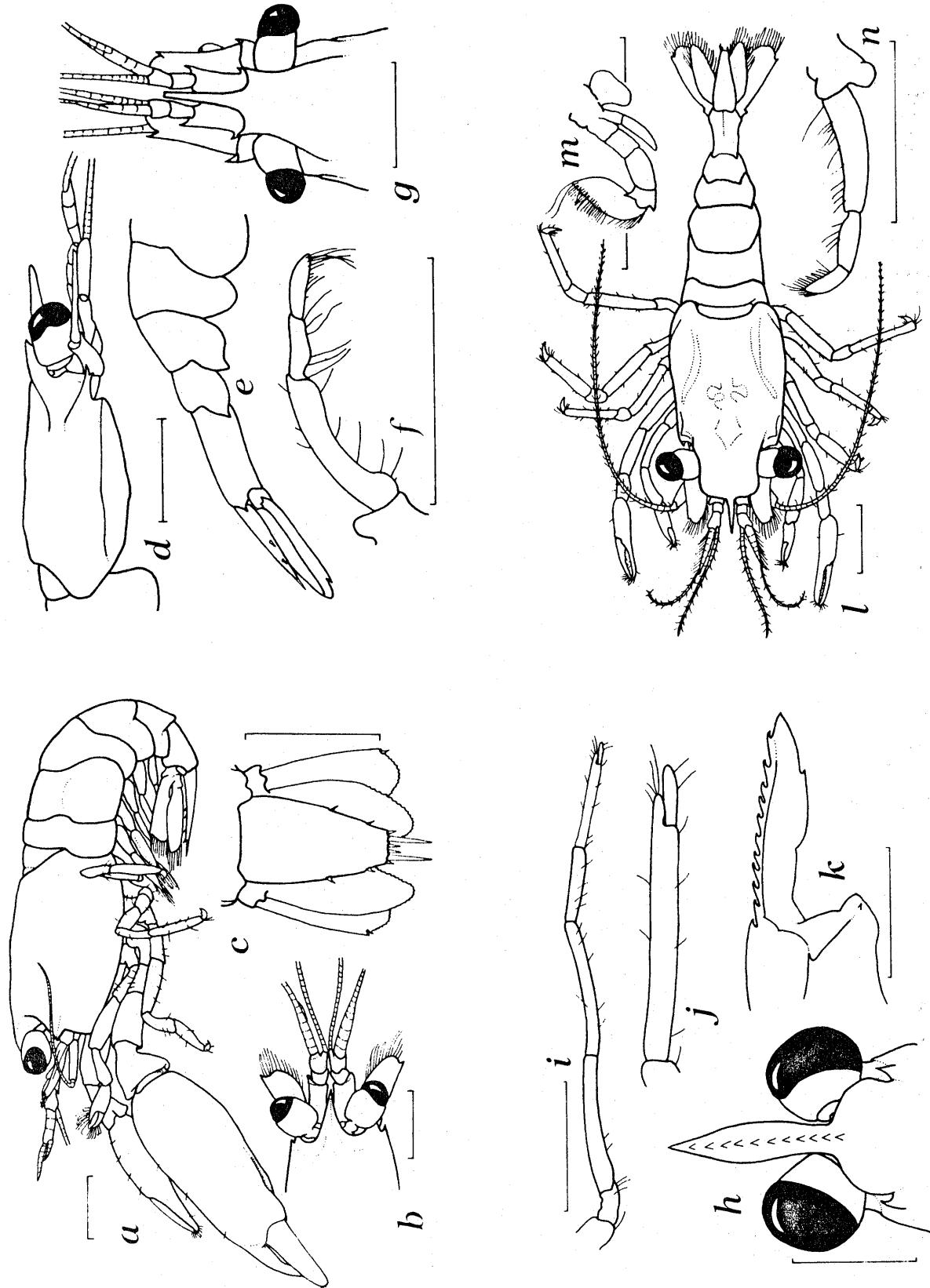
(after Chace, 1969)

*Veleroniopsis kimallynae*

male:

- l. dorsal view
- m. second maxilliped
- n. third maxilliped

(after Gore, 1981)



## Family Alpheidae

Key to genera and species  
[Adapted from Chace, 1972]

1. Movable plate at posterolateral angle of sixth abdominal somite..... 2
- No movable plate at posterolateral angle of sixth abdominal somite..... 3
2. (1) Rostrum lacking; antennular peduncle long and slender, stylocerite closely appressed to basal segment; exopod of uropod distally truncate (telson with convex distal margin; first chelipeds carried with chela flexed against merus, opposable margins of fingers of major chela dentate) ..... *Leptalpheus forceps*  
 Rostral projection present; antennular peduncle short and stout, stylocerite well separated from basal segment; exopod of uropod distally rounded (first chelipeds carried extended) ..... *Alpheopsis*
3. (1) Eyes completely exposed dorsally; movable finger of major first chela without molar-like tooth fitting into socket in immovable finger ..... *Automate*  
 Eyes concealed from all but anteroventral view by deflexed frontal margin of carapace; movable finger of major first chela usually provided with large molar-like tooth fitting into socket in immovable finger ..... 4
4. (3) Posterior margin of carapace without "cardiac notch" at base of branchiostegite; exopod of uropod without transverse suture (rostral projection lacking, front unarmed; antepenultimate segment of third maxilliped normal, not unusually expanded; epipods present on at least 2 anterior pairs of pereopods) ..... *Thunor simus*  
 Posterior margin of carapace with "cardiac notch"; exopod of uropod with transverse suture ..... 5
5. (4) Pereopods without epipods; second pleopod of male without appendix masculina (front tridentate; antepenultimate segment of third maxilliped normal, not unusually expanded; dactyli of 3 posterior pereopods biunguiculate) ..... *Synalpheus*  
 Epipods present on at least 2 anterior pairs of pereopods; second pleopod of male with appendix masculina ..... 6
6. (5) Labrum and mandible not unusually enlarged; antepenultimate segment of third maxilliped not unusually expanded; fourth pereopod with mastigobranch epipod; appendix masculina normal, not reaching distal end of either endopod or exopod of male second pleopod ..... *Alpheus*  
 Labrum greatly swollen and enveloped by expanded incisor process of mandible; antepenultimate segment of third maxilliped broadened to form partial operculum over anterior mouthparts; fourth pereopod without mastigobranch epipod; appendix masculina greatly enlarged and elongate, overreaching distal ends of both endopod and exopod of second pleopod ..... *Metalpheus rostratipes*

**Genus *Alpheopsis* Coutière, 1896**

## Key to species

Anterior region of carapace with rostrum and ocular teeth (chela with longitudinal as well as transverse groove) ..... *A. trispinosus*

Anterior region of carapace without ocular teeth (carpus of second pereopod with first segment about as long as combined lengths of second and third segments) .....  
..... *A. labis*

### Genus *Alpheus* Fabricius, 1798

#### Key to species

[Adapted from Chace, 1972]

1. Frontal region evenly convex dorsally, adrostral depressions lacking; fingers of minor first chela strongly curved in vertical plane (rostrum short, subrectangular, not elevated in midline; ocular hoods subrectangular, frontal margin broadly tridentate; major first chela subcylindrical, without marginal notches on palm; proximal article of carpus of second pereopod longer than second segment; third and fourth pereopods with dactylus biunguiculate, merus without distal tooth on inferior margin, ischium without movable spine on lateral surface) ..... *A. cylindricus*
- Ocular hoods mesially delimited by adrostal depressions or furrows; fingers of minor first chela not noticeably curved in vertical plane ..... 2
2. (1) Rostrum dorsally flat, at least in distal portion; ocular hood armed with spine arising from surface of hood, not from margin, although appearing marginal in *A. malleator* because of receding ventral portion of hood (adrostral furrows sharply defined and partially delimited posteriorly; marginal lobe or projection between rostrum and ocular hood; proximal segment of carpus of second pereopod longer than second segment) ..... 3
- Rostrum either rounded or carinate in dorsal midline, not flat; ocular spine, if present, arising from margin of hood ..... 5
3. (2) Spine on ocular hood arising from mesial slope, overhanging adrostral furrow; meri of third and fourth pereopods armed with distal tooth on inferior margin (fingers of minor chela of male not "balaeniceps"-shaped; third and fourth pereopods with simple dactyli and movable spine on lateral surfaces of ischia. Small tooth or tubercle in midline of carapace in line with posterior limits of adrostral furrows; palm of major first chela with superior and inferior margins entire, not notched, immovable finger notched on opposable margin distal to socket; distolateral spine on exopod of uropod dark-colored in male) ..... *A. armatus*
- Spine on ocular hood arising from anterior slope, overhanging frontal margin; meri of third and fourth pereopods unarmed at distal end of inferior margin (immovable finger of major first chela notched on opposable margin distal to socket; distolateral spine on exopod of uropod dark-colored in male) ..... 4

4. (3) Ventrolateral tooth on basal segment of antennal peduncle not overreaching stylocerite; scaphocerite lacking prominent tooth or lobe near proximal end of outer margin; merus of first pereopod with distal tooth on mesial inferior margin; palm of major first chela with both superior and inferior margins entire, not notched; movable finger of minor first chela laterally and mesially carinate, densely setose, "balaeniceps"-shaped in both males and females; third and fourth pereopods with dactyli simple, ischia with movable spines on lateral surfaces; distolateral spine on exopod of uropod dark-colored in both male and female ..... *A. formosus*
- Ventrolateral tooth on basal segment of antennal peduncle distinctly overreaching stylocerite; scaphocerite with prominent curved tooth or lobate projection near proximal end of outer margin; merus of first pereopod without distal tooth on inferior margin; palm of major first chela notched superiorly; minor first chela not "balaeniceps"-shaped in either male or female; third and fourth pereopods with dactyli biunguiculate, ischia unarmed; distolateral spine on exopod of uropod dark-colored in male only ..... *A. malleator*
5. (2) Ocular hoods spined (adrostral furrows not abruptly delimited posteriorly; scaphocerite without large tooth or lobe near proximal end of lateral margin) ..... 6
- Ocular hoods not spined (third and fourth pereopods with simple dactyli) ..... 10
6. (5) Merus of first pereopod with sharp distal tooth on mesial inferior margin; third and fourth pereopods with dactyli not distinctly biunguiculate (meri of third and fourth pereopods without distal teeth on inferior margins) ..... 7
- Merus of first pereopod without distinct sharp tooth at distal end of inferior margin; third and fourth pereopods with dactyli distinctly biunguiculate ..... 9
7. (6) Third and fourth pereopods with inconspicuous denticles on inferior margins of dactyli, ischia without movable spines on lateral surfaces ..... *A. websteri*
- Third and fourth pereopods without accessory denticle on inferior margins of dactyli, ischia with movable spines on lateral surfaces ..... 8
8. (7) Major first chela twisted and bearing single distinct sharp teeth on distal ends of both lateral and mesial surfaces of palm ..... *A. amblyonyx*
- Major first chela not twisted and not bearing sharp teeth on distal ends of both lateral and mesial surfaces of palm ..... *A. thomasi*
9. (6) Third and fourth pereopods without distal teeth on inferior margins of meri ..... *A. candei*
- Third and fourth pereopods with distal teeth on inferior margins of meri ..... *A. peasei*

10. (5) Meri of third and fourth pereopods with prominent acute teeth at distal ends of inferior margins (lobe on frontal margin between rostrum and ocular hood; major first chela subcylindrical, without superior or inferior notches; merus of first pereopod with tooth at distal end of mesial inferior margin; immovable finger of major first chela with notch in opposable margin distal to socket; proximal segment of carpus of second pereopod shorter than second segment; third and fourth pereopods with movable spines on lateral surfaces of ischia) .... *A. cristulifrons*
- Meri of third and fourth pereopods with distal ends of inferior margins rounded or rectangular, not produced into prominent teeth ..... 11
11. (10) Major first chela notched superiorly ..... 12
- Major first chela with superior and inferior margins entire, not notched (major first cheliped with tooth at distal end of mesial inferior margin of merus; immovable finger of major chela with notch in opposable margin distal to socket; minor first chela of male not "balaeniceps"-shaped; third and fourth pereopods with movable spines on lateral surfaces of ischia) ..... 19
12. (11) Major first chela notched inferiorly (ocular hoods subtriangularly produced anteriorly; inferior margin of major first chela with shallow sinus at base of immovable finger) ..... *A. normanni*
- Major first chela notched inferiorly ..... 13
13. (12) Third and fourth pereopods with movable spines on lateral surfaces of ischia ..... 14
- Third and fourth pereopods without spines on ischia ..... 17
14. (13) Merus of first pereopod unarmed at distal end of mesial inferior margin; dactyli of third and fourth pereopods usually subspatulate ..... 15
- Merus of first pereopod armed with sharp tooth at distal end of mesial inferior margin; dactyli of third and fourth pereopods not subspatulate ..... 16
15. (14) Major chela with inferior margin of immovable finger distinctly truncate distally; minor first chela of male not "balaeniceps"-shaped ..... *A. estuariensis*
- Major chela with inferior margin of immovable finger more evenly rounded distally, not distinctly truncate; minor first chela of male "balaeniceps"-shaped ..... *A. heterochaelis*
16. (14) Adrostral furrows usually abruptly delimited posteriorly; immovable finger of major first chela without V-shaped notch in opposable margin distal to socket ..... *A. armillatus*
- Adrostral furrows not abruptly delimited posteriorly; immovable finger of major first chela with sharply V-shaped notch in opposable margin distal to socket ..... *A. viridari*

17. (13) Minor first chela with fingers slightly, if at all, more than half as long as palm; proximal segment of carpus of second pereopod much shorter than second segment (fingers of minor first chela not "balaeniceps"-shaped in male) ..... *A. schmitti*
- Minor first chela with fingers about as long as palm; proximal segment of carpus of second pereopod longer than second segment ..... 18
18. (17) Movable finger of major first chela regularly and highly arched throughout length of superior margin; fingers of minor first chela "balaeniceps"-shaped in male; second segment of carpus of second pereopod subequal to fifth segment in length ..... *A. bouvieri*
- Movable finger of major first chela not strongly convex in proximal part of superior margin; fingers of minor first chela not "balaeniceps"-shaped in male; second segment of carpus of second pereopod distinctly longer than fifth segment ..... *A. nuttingi*
19. (11) Rostrum dorsally carinate or subcarinate; proximal segment of carpus of second pereopod shorter than second segment; dactyli of third and fourth pereopods subspatulate ..... *A. floridanus*
- Rostrum dorsally convex, not subcarinate; proximal segment of carpus of second pereopod longer than second segment; dactyli of third and fourth pereopods not subspatulate ..... *A. paracrinitus*

**Genus *Automate* De Man, 1888**

Key to species  
[Adapted from Chace, 1972]

1. Median frontal projection broadly rounded or subtriangular; propodi of third and fourth pereopods armed with series of stout movable spines on inferior margin (first segment of carpus of second pereopod at least half as long as second segment; dactyli of third and fourth pereopods slender, not subspatulate) ..... *A. gardineri*
- Median frontal projection reduced to acute tooth or lacking; propodi of third and fourth pereopods setose, without stout spines ..... 2
2. (1) Median frontal projection a small acute tooth; first segment of carpus of second pereopod much less than half as long as second segment; dactyli of third and fourth pereopods broad, subspatulate ..... *A. evermanni*
- Frontal margin transverse, without median projection; first segment of carpus of second pereopod at least half as long as second segment; dactyli of third and fourth pereopods slender, not subspatulate ..... *A. rectifrons*

### Genus *Synalpheus* Bate, 1888

#### Key to species

[Adapted from Chace, 1972, and Dardeau, 1984]

1. Stylocerite not overreaching basal segment of antennular peduncle (except in *S. macclelloni* and *S. paraneptunus*); movable finger of minor first-chela with prominent fringe of long, distally curved hairs on superior surface (reduced to single longitudinal row in *S. paraneptunus*) ..... 2
- Stylocerite distinctly overreaching basal segment of antennular peduncle; movable finger of minor first chela with scattered tufts of straight hairs but without prominent fringe on superior surface (scaphocerite with well-developed blade, lateral spine considerably exceeding that of basicerite in length) ..... 14
2. (1) Both pairs of dorsal spines of telson arising in posterior of segment (ocular hoods blunt, broader than long) ..... *S. heardi*  
Anterior or both pairs of dorsal spines of telson arising in anterior of segment.... 3
3. (2) Both pairs of dorsal spines of telson arising in anterior of segment (carapace not distinctly produced at anteroventral angle and not carinate in dorsal midline posterior to base of rostrum; cardiac notch not well marked; ocular teeth acute, as broad as long but not much broader than rostrum; basicerite not produced dorsally; major first chela twisted, immovable finger short, not reaching nearly as far distally as does movable finger; palm of major first chela armed with sharp distal spine; movable finger of minor first chela strongly tridentate in lateral view) ..... *S. pectiniger*  
Posterior pair of dorsal spines of telson arising in posterior of segment..... 4
4. (3) Carpus of second pereopod composed of 4 segments..... 5  
Carpus of second pereopod composed of 5 segments..... 6
5. (4) Basicerite with strong dorsal spine..... *S. rathbunae*  
Basicerite unarmed dorsally..... *S. agelas*
6. (4) Exopod of uropod with 1 fixed tooth on outer margin, sometimes at distolateral angle just lateral to movable spine, sometimes distinctly removed from distolateral angle (basicerite not produced dorsally) ..... 7  
Exopod of uropod with 2 or more fixed teeth on outer margin at, and proximal to, distolateral angle ..... 10
7. (6) Scaphocerite with well-developed blade (fingers of minor first chela not bidentate distally) ..... 8  
Scaphocerite without blade (ocular teeth distinctly broader than rostrum; stylocerite not reaching as far as distal end of basal antennular segment) ..... 9

8. (7) Ocular teeth slender, not much broader than rostrum; first abdominal pleuron of male without hooklike tooth; stylocerite slightly overreaching distal end of basal antennal segment; major first chela not noticeably twisted, armed with stout spine at distal end of palm ..... *S. mcclendoni*
- Ocular teeth stout, distinctly broader than rostrum; first abdominal pleuron of male armed with hooklike tooth; stylocerite not reaching as far as distal end of basal antennal segment; major first chela twisted, palm terminating distally in spine-tipped lobe ..... *S. sanctithomae*
9. (7) Lateral spine of basicerite not reaching tip of scaphocerite (ocular teeth at least as long as broad; dorsal spines of telson arising from dorsal surface; major first chela not strongly twisted, palm sharply spinous distally; fingers of minor first chela subequally bidentate distally; third pereopod without flanges on merus and carpus) ..... *S. brooksi*
- Lateral spine of basicerite reaching nearly to, or beyond, tip of scaphocerite (fingers of minor first chela bidentate distally; ocular teeth with lateral margins straight or slightly concave; telson with lateral margins nearly straight; antennular peduncle stout, overreaching scaphocerite by about half of distal segment, stylocerite broad) ..... *S. bousfieldi*
10. (6) Lateral spine of basicerite reaching nearly to, or beyond, tip of scaphocerite (fingers of minor first chela subequally bidentate distally) ..... 11
- Lateral spine of basicerite falling considerably short of tip of scaphocerite (palm of major first chela terminating distally in tubercle armed distally or distoventrally with small, sharp tooth) ..... 12
11. (10) Ocular teeth subacute, only slightly broader than rostrum; palm of major first chela terminating distally in acute projection ..... *S. herricki*
- Ocular teeth rounded, much broader than rostrum; palm of major first chela terminating distally in tubercle armed distoventrally with small, sharp tooth ..... *S. pandionis*
12. (10) Basicerite rounded or obtuse dorsally (movable finger of major first chela barely overreaching normal immovable finger) ..... *S. longicarpus*
- Basicerite rectangular or acute dorsally ..... 13
13. (12) Movable finger of minor first chela broadly tridentate distally in extensor aspect; exopod of uropod armed with 3 or 4 fixed teeth and 1 or 2 movable spines at distal end of outer margin ..... *S. paraneptunus*
- Movable finger of minor first chela simple or bidentate distally; exopod of uropod armed with 8-17 fixed teeth on outer margin (scaphocerite with blade; distal tubercle on palm of major first chela armed distally) ..... *S. goodei*

14. (1) Ocular teeth triangular, not much broader than rostrum, not tapering to slender, sharp tips ..... 15  
Ocular teeth elongate, much broader than rostrum, tapering to slender, sharp tips. 17
15. (14) Rostrum with well-developed ventral process preventing corneas of eyes from touching; palm of major first chela unarmed distally; merus of third pereopod short and broad, less than two and one half times as long as broad .... *S. curacaoensis*  
Ventral process of rostrum vestigial or lacking, not preventing corneas of eyes from touching; palm of major first chela with distal tooth or spine; merus of third pereopod about four times as long as broad ..... 16
16. (15) Lateral surface of palm of major chela with 2 broad and sinuous lateral lobes, in addition to sharp superior tooth ..... *S. minus*  
Lateral surface of palm of major chela with narrow, prominent unarmed projection between superior tooth and 2 broad lateral lobes ..... *S. brevicarpus*
17. (14) Dactyli of 3 posterior pairs of pereopods with distal tooth on inferior margin distinctly divergent from axis of segment and much broader than superior tooth, inferior margin with prominence proximal to distal tooth (basicerite strongly spinous dorsally) ..... 18  
Dactyli of 3 posterior pairs of pereopods with terminal teeth subparallel, no prominence on inferior margin proximal to distal tooth ..... 19
18. (17) Proximal prominence on inferior margin of dactyli of 3 posterior pairs of pereopods low and obtuse ..... *S. fritzmuelleri*  
Proximal prominence on inferior margin of dactyli of 3 posterior pairs of pereopods large and sharp ..... *S. hemphilli*
19. (17) Basicerite unarmed dorsally; distal spine on palm of major first chela straight.....  
..... *S. townsendi*  
Basicerite armed dorsally with strong spine (palm of major first chela armed distally with curved spine; merus of third pereopod unarmed; dactyli of 3 posterior pairs of pereopods with distal tooth on inferior margin narrower than superior tooth) ..... *S. apioceros*

*Alpheopsis trispinosus*

male:

- a. anterior region, dorsal view
- b. left major chela, outer view
- c. telson and uropods, dorsal view

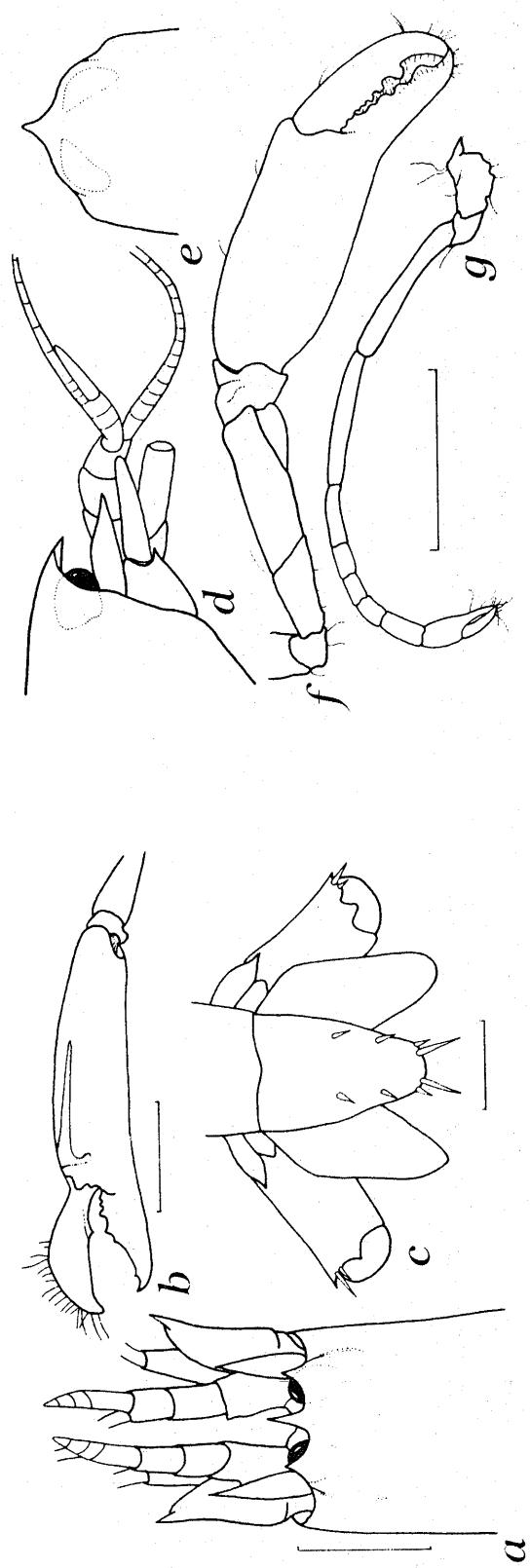
(after Gore, 1981)

*Alpheopsis labis*

female:

- d. anterior region, lateral view
- e. anterior part of carapace, dorsal view
- f. right first pereopod
- g. left second pereopod

(after Chace, 1972)



*Alpheus cylindricus*

male:

- a. anterior region, dorsal view
  - b. major chela of first pereopod, outer view
  - c. minor chela of first pereopod, outer view
- (after Crosnier and Forest, 1966)

*Alpheus armatus*

- male:
  - d. anterior region, dorsal view
  - e. major first pereopod, outer view
  - f. third pereopod

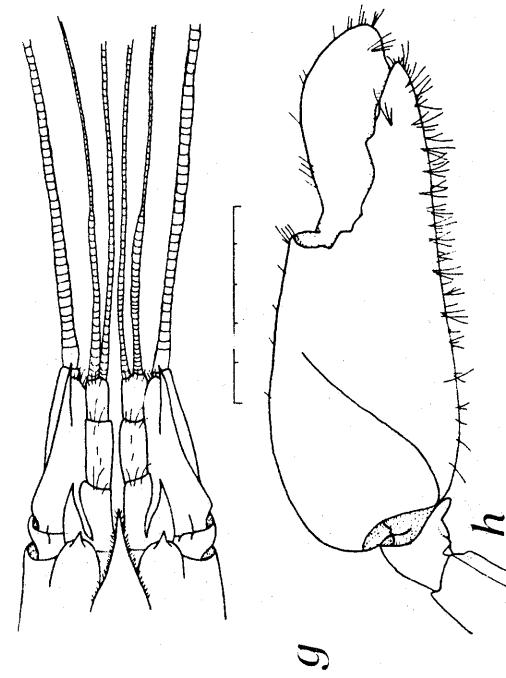
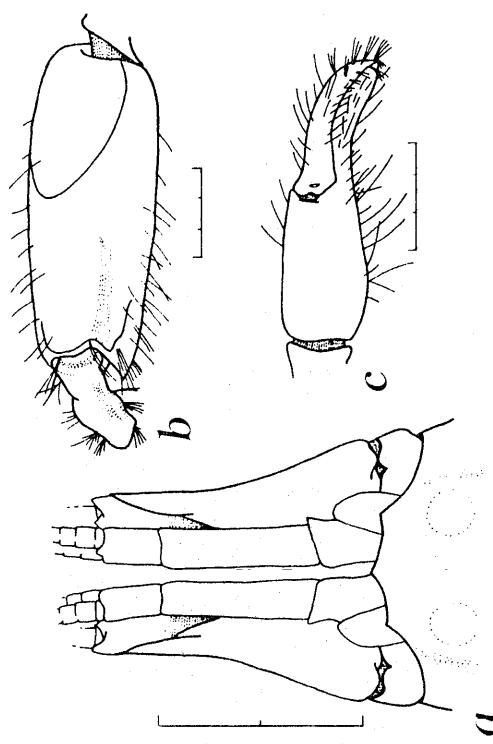
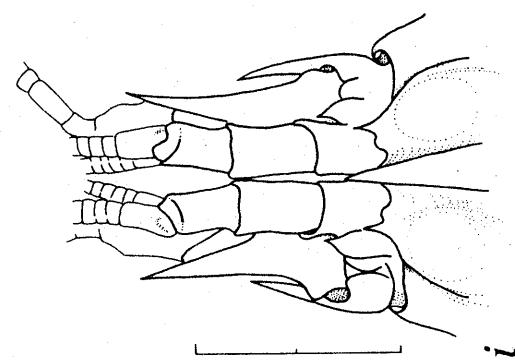
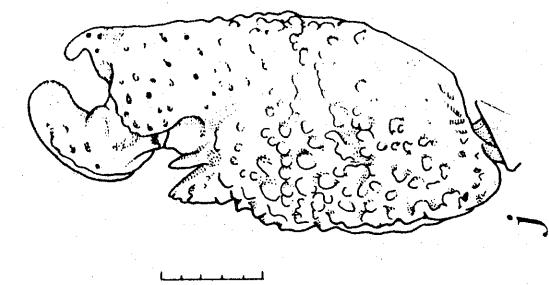
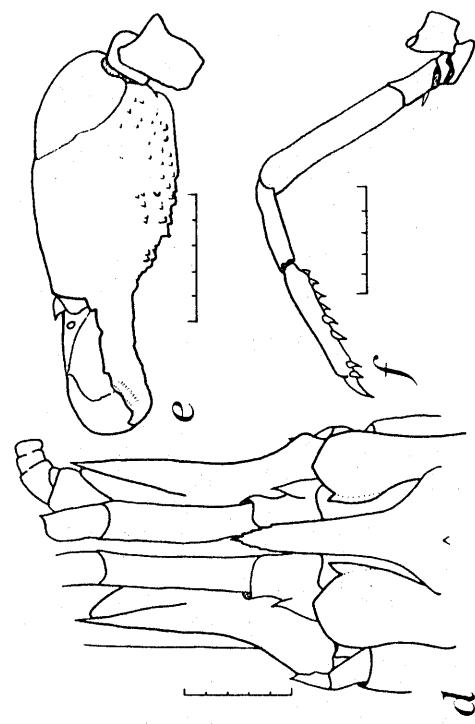
(after Hendrix, 1971)

*Alpheus formosus*

- g. anterior region, dorsal view
  - h. major first pereopod, outer view
- (after Williams, 1965a)

*Alpheus malleator*

- ovigerous female:
    - i. anterior region, dorsal view
    - j. major chela of first pereopod, outer view
- (after Crosnier and Forest, 1966)



*Alpheus websteri*

a. lateral view

(after Rankin, 1898, as *A. nigro-spinatus*)*Alpheus amblyonyx*

ovigerous female:

b. anterior region, lateral view

c. major first pereopod

d. right third pereopod

(after Chace, 1972)

*Alpheus thomasi*

e. anterior region, dorsal view (female)

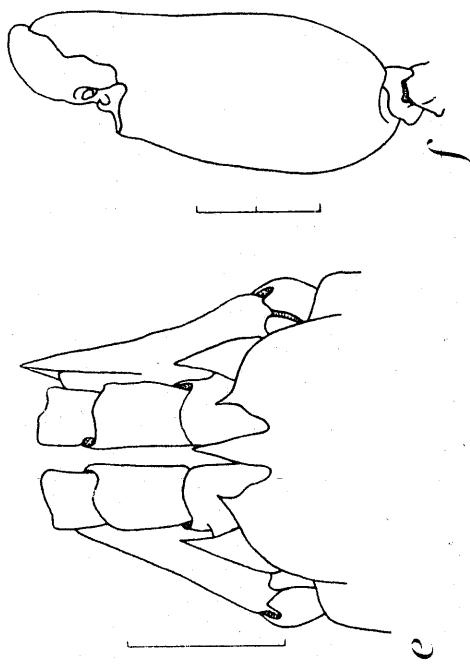
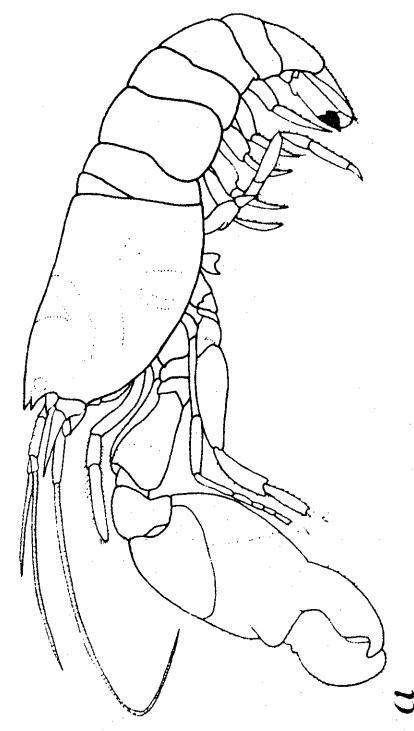
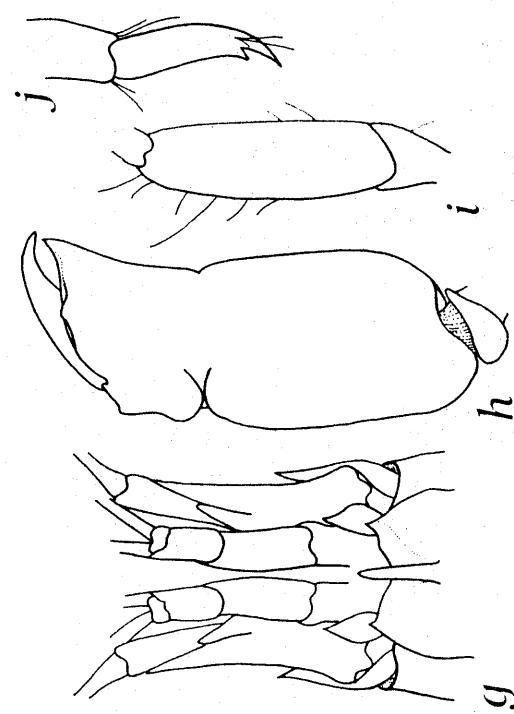
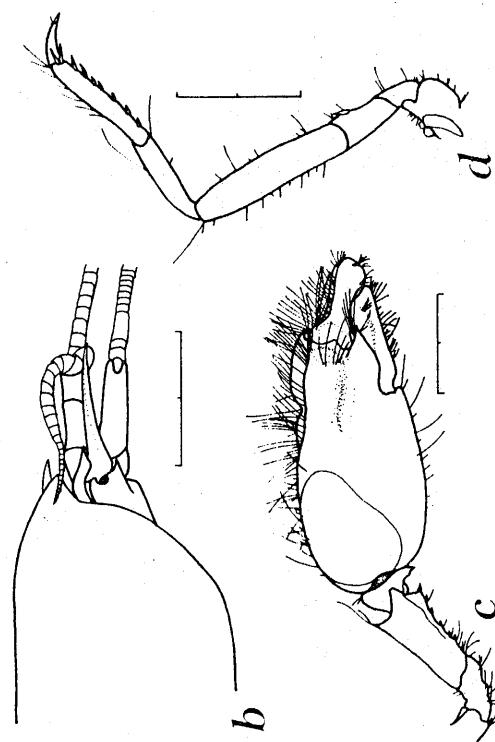
f. major chela of first pereopod, outer view  
(male)

(after Hendrix and Gore, 1973)

*Alpheus canlei*

g. anterior region, dorsal view

h. major chela of first pereopod, inner view  
i. merus of third pereopodj. dactylus of fifth pereopod  
(after Coutière, 1910)



*Alpheus peasei*

- a. anterior region, dorsal view
  - b. right third pereopod
  - c. left major first pereopod
- (after Hendrix, 1971)

*Alpheus cristulifrons*

male:

- d. anterior region, dorsal view
- e. third pereopod

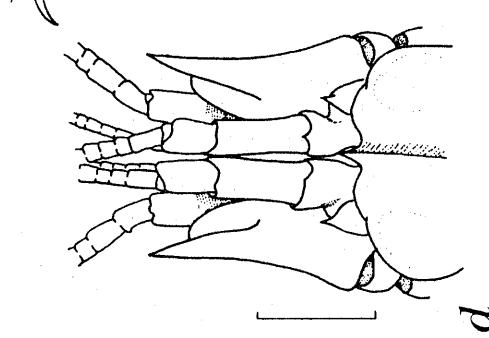
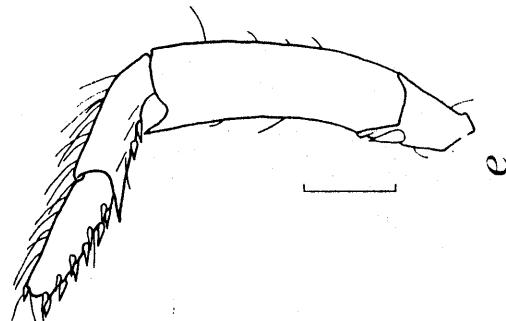
(after Crosnier and Forest, 1966)

*Alpheus normanni*

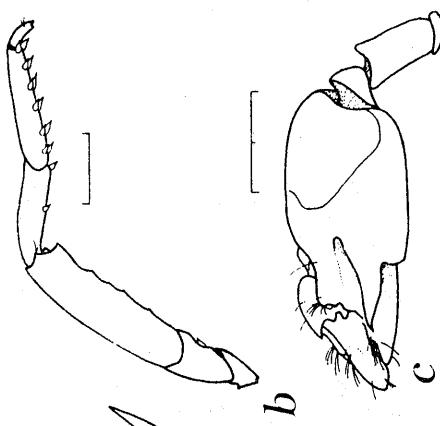
- f. anterior region, dorsal view
  - g. major first pereopod, outer view
- (after Williams, 1965a)

*Alpheus estuariensis*

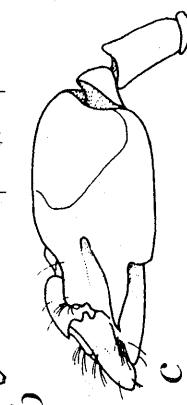
- h. third pereopod (ovigerous female)
  - i. anterior region, dorsal view (ovigerous female)
  - j. major first pereopod, outer view (male)
- (after Christoffersen, 1984)



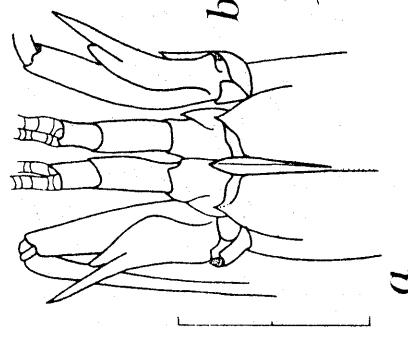
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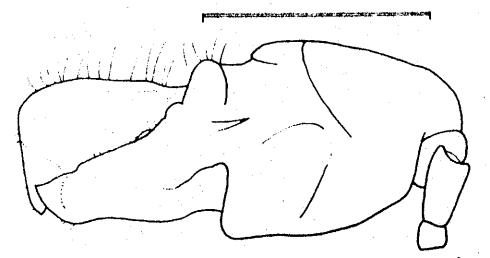
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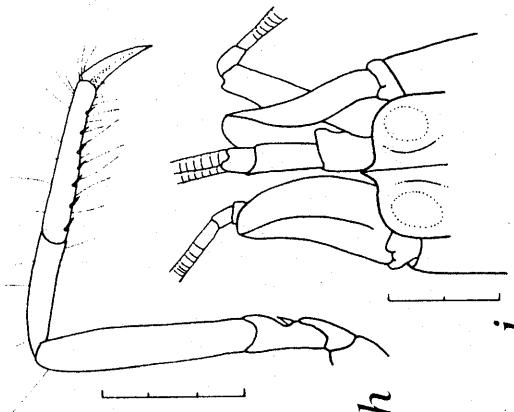
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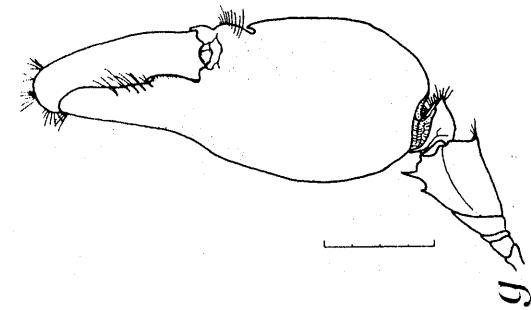
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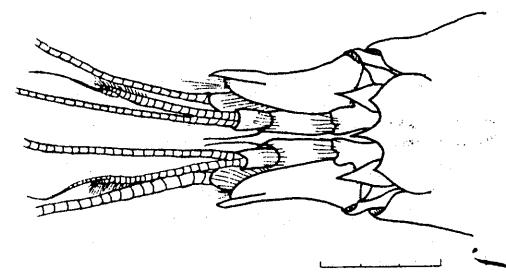
j



i



g



f

*Alpheus heterochaelis*

male:

- a. anterior region, dorsal view
- b. minor chela of first pereopod
- c. major first pereopod, inner view  
(after Christoffersen, 1984)

*Alpheus armillatus*

male:

- d. anterior region, dorsal view
- e. major first pereopod, inner view
- f. minor first pereopod, inner view (male)  
(after Hendrix, 1971)

*Alpheus viridari*

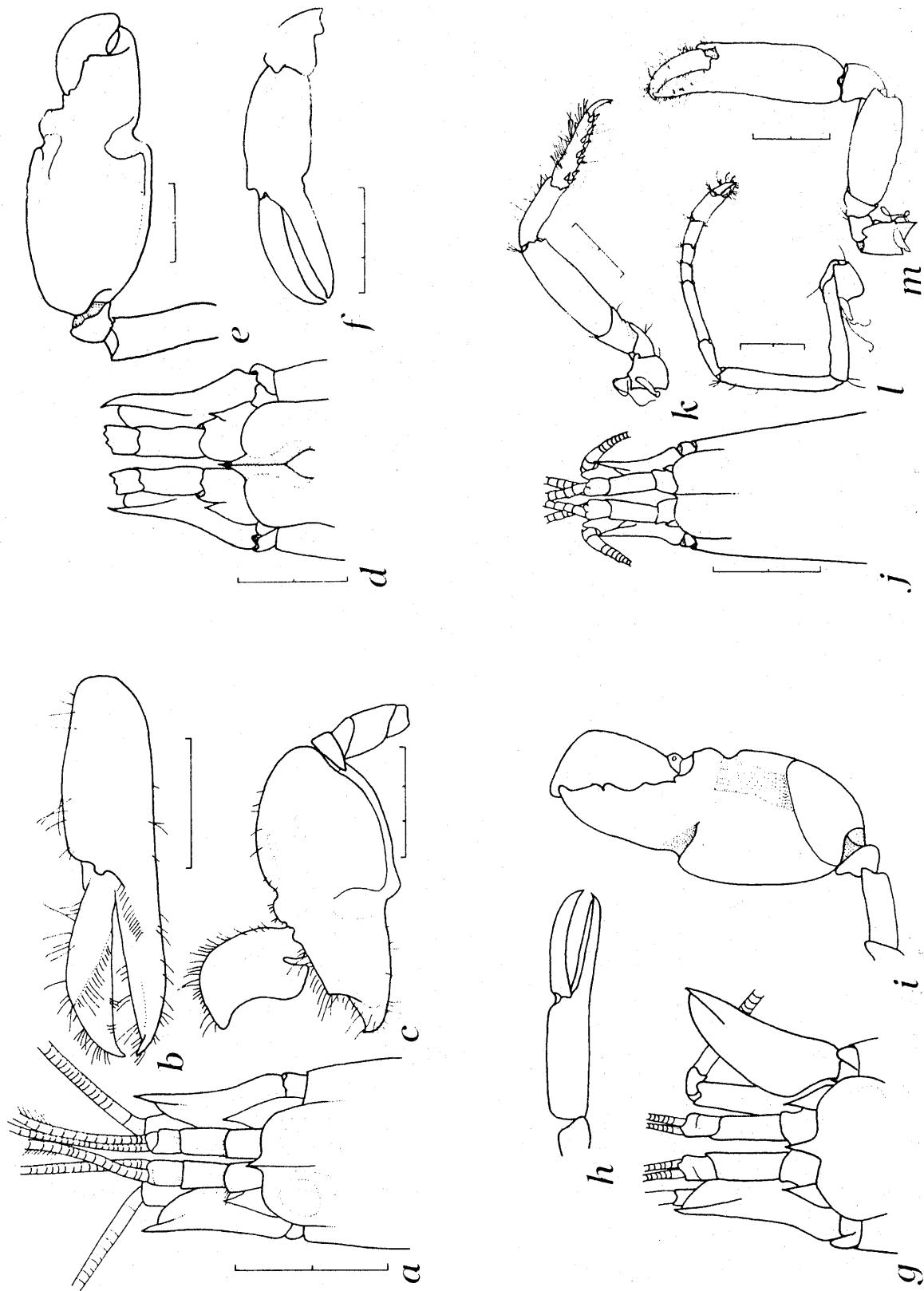
male:

- g. anterior region, dorsal view
- h. minor first pereopod, outer view
- i. major first pereopod, outer view  
(after Armstrong, 1949)

*Alpheus schmitti*

male:

- j. anterior region, dorsal view
- k. right third pereopod
- l. right second pereopod
- m. minor first pereopod, outer view  
(after Chace, 1972)



*Alpheus bouvieri*

- a. anterior region, dorsal view (female)
  - b. second pereopod (female)
  - c. minor chela of first pereopod, outer view (male)
  - d. major chela of first pereopod, inner view (female)
- (after Crosnier and Forest, 1966)
- e. anterior region, dorsal view
  - f. second pereopod
  - g. minor chela of first pereopod, inner view
  - h. major first pereopod, inner view

(after Hendrix, 1971)

*Alpheus nuttingi*

- e. anterior region, dorsal view
- f. second pereopod
- g. minor chela of first pereopod, inner view
- h. major first pereopod, inner view

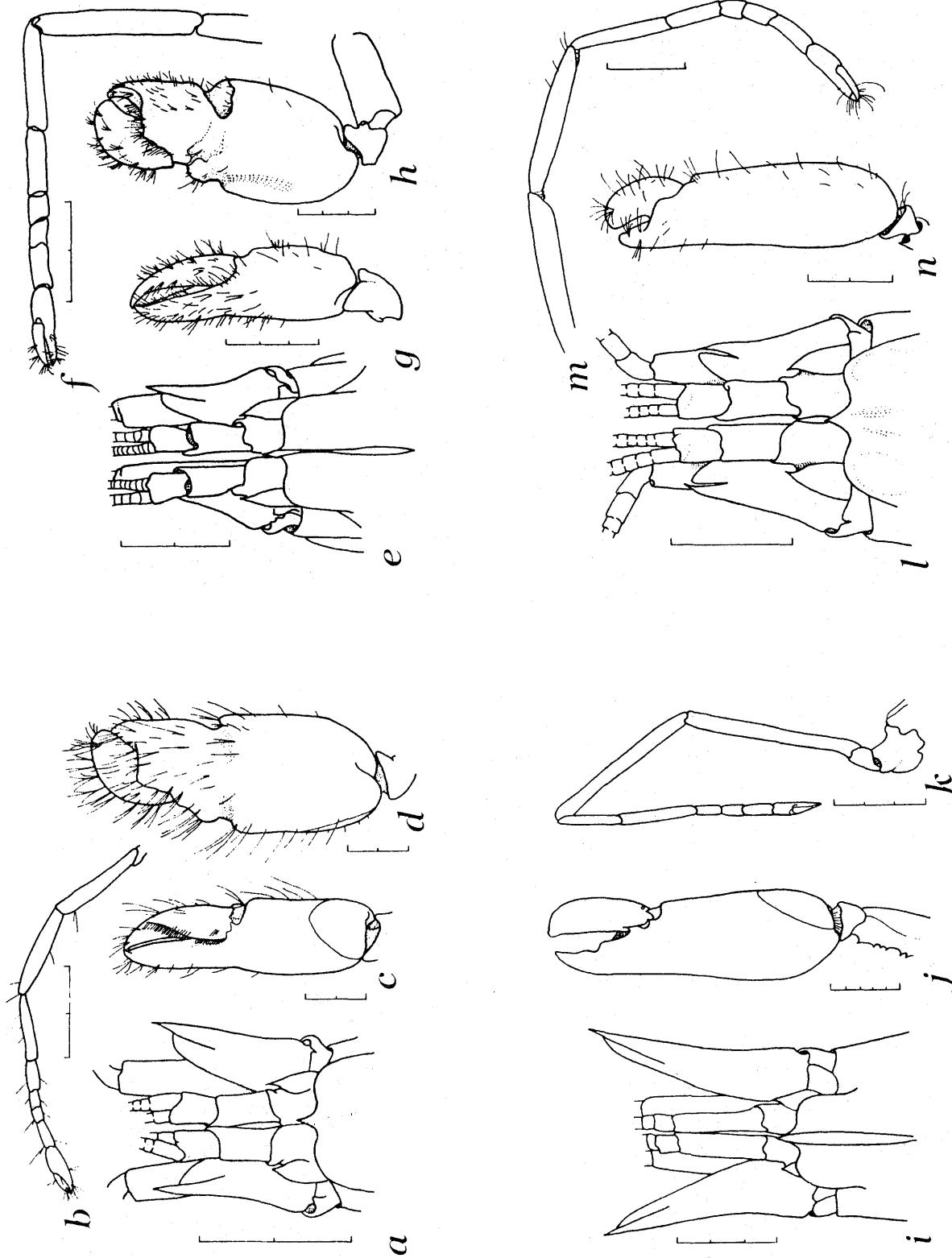
(after Hendrix, 1971)

*Alpheus floridanus*

- i. anterior region, dorsal view
  - j. major first pereopod, outer view
  - k. second pereopod
- (after Hendrix, 1971)

*Alpheus paracrinitus*

- female:
- l. anterior region, dorsal view
  - m. second pereopod
  - n. major first pereopod, inner view
- (after Crosnier and Forest, 1966)



*Automate gardineri*

- a. anterior region, dorsal view (female)
- b. left first pereopod (ovigerous female)
- c. left second pereopod (ovigerous female)
- d. left third pereopod (ovigerous female)  
(after Chace, 1972)

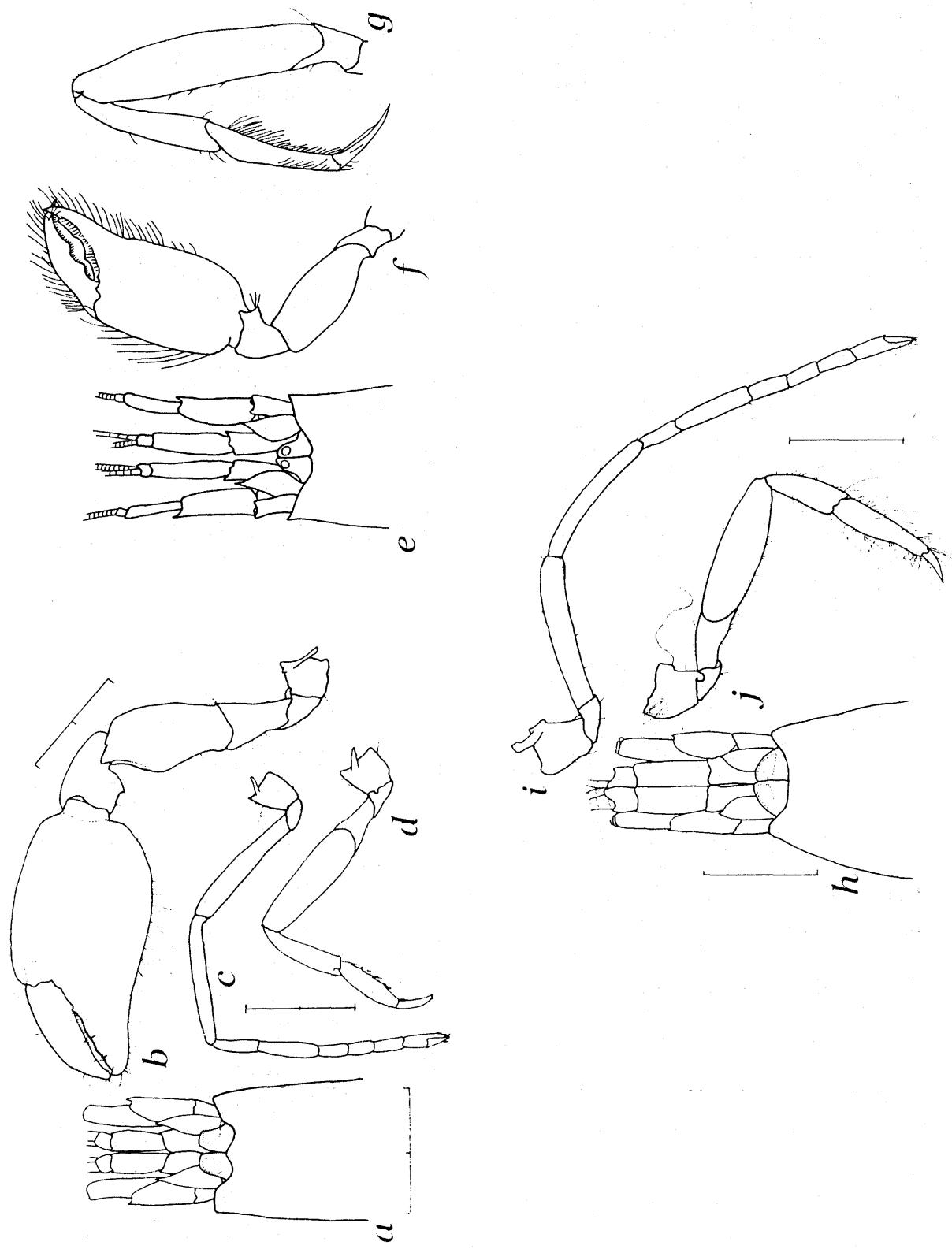
*Automate evermanni*

- e. anterior region, dorsal view
- f. first pereopod
- g. third pereopod  
(e, f, after Rathbun, 1901; g, after Holthuis, 1951a)

*Automate rectifrons*

female:

- h. anterior region, dorsal view
- i. right second pereopod
- j. right third pereopod  
(after Chace, 1972)



*Synalpheus heardi*

male:

- a. anterior region, dorsal view
- b. right minor first pereopod
- c. telson and uropods
- d. major first pereopod, outer view  
(after Dardeau, 1984)

*Synalpheus pectiniger*

male:

- e. anterior region, dorsal view (male)
- f. telson and left uropods
- g. fingers of minor first pereopod (male)  
(after Coutière, 1909)

*Synalpheus rathbunae*

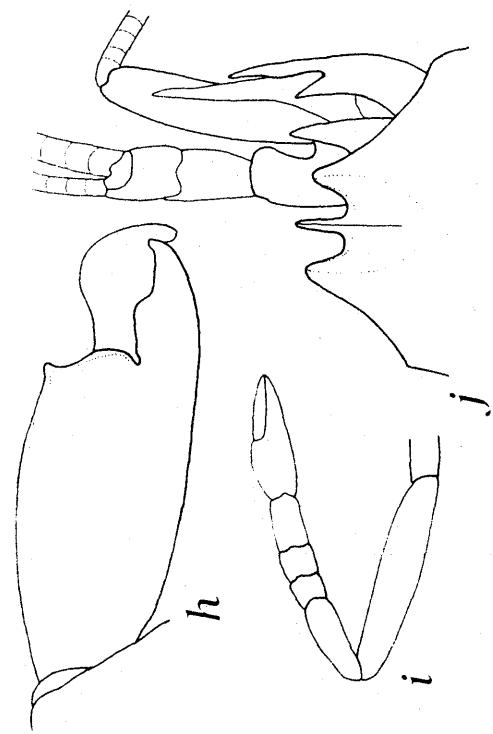
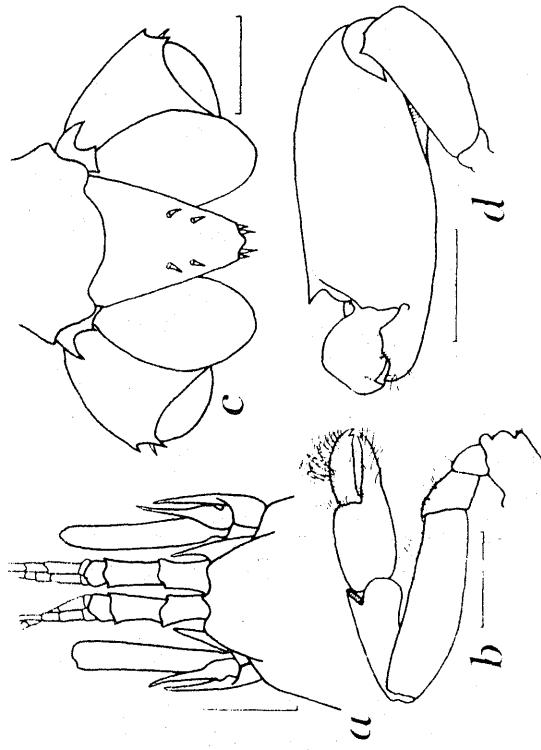
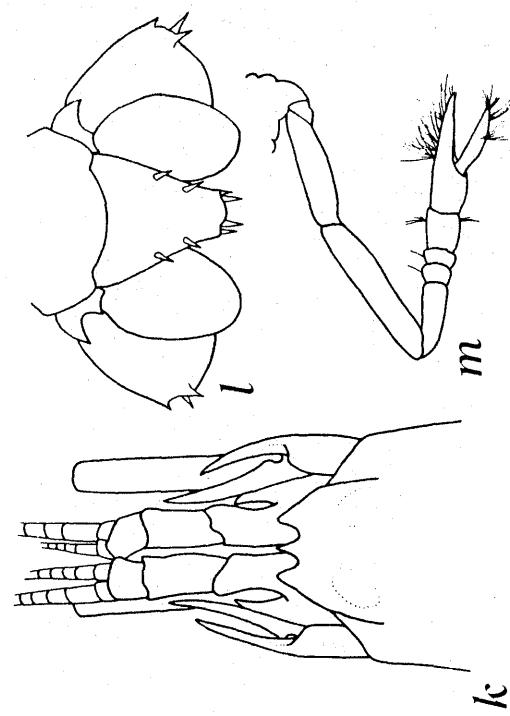
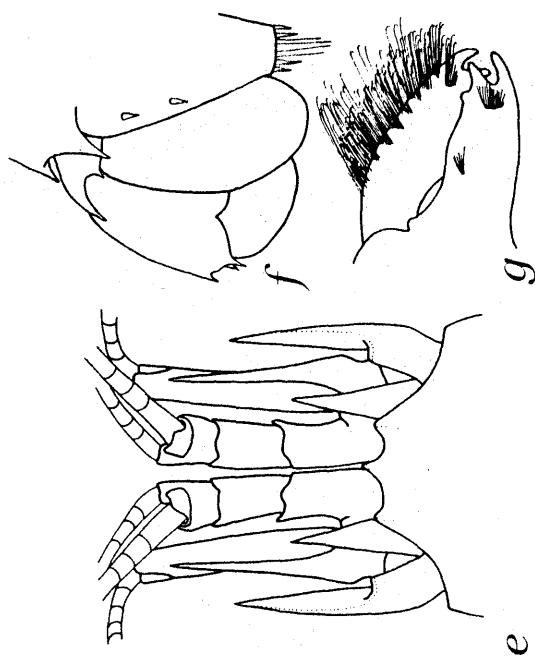
male:

- h. major chela of first pereopod
- i. second pereopod
- j. anterior region, dorsal view  
(after Coutière, 1909)

*Synalpheus agelas*

male:

- k. anterior region, dorsal view
- l. telson and uropods
- m. left second pereopod  
(after Dardeau, 1984)



*Synalpheus mcclendoni*

male:

- a. anterior region, dorsal view
- b. abdomen
- c. fingers of left first pereopod  
(after Chace, 1972)

*Synalpheus sanctithomae*

male:

- d. anterior region, dorsal view
- e. major chela of first pereopod (male)  
(after Coutière, 1909)

*Synalpheus brooksi*

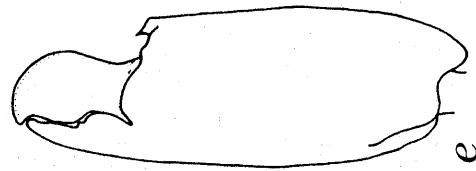
f. anterior region, dorsal view (male)

- g. fingers of minor first pereopod  
(after Coutière, 1909)

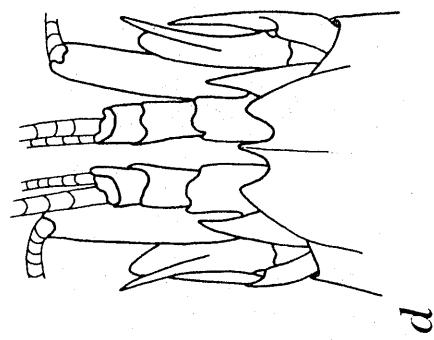
*Synalpheus bousfieldi*

ovigerous female:

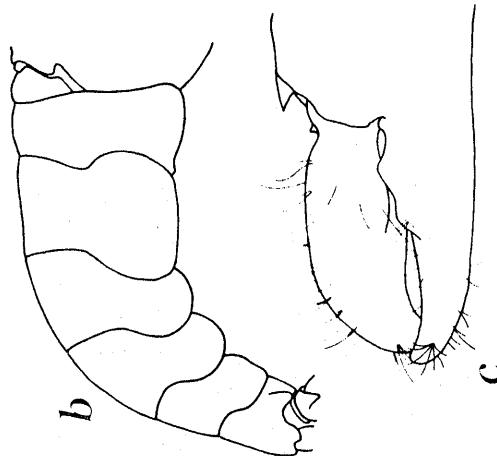
- h. anterior region, dorsal view
- i. telson and uropods
- j. right first pereopod  
(after Chace, 1972)



e

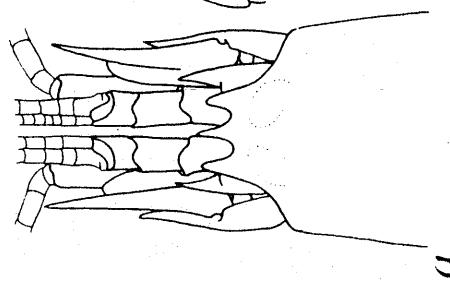


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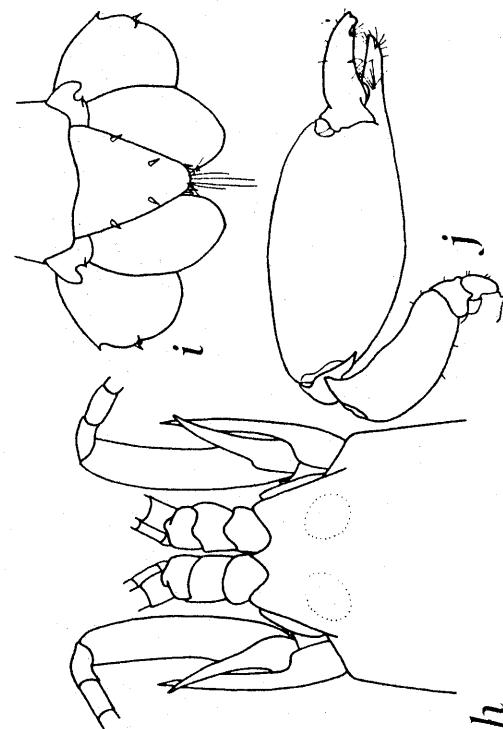


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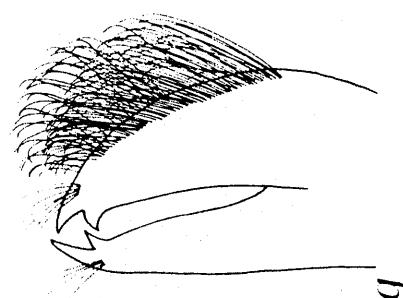
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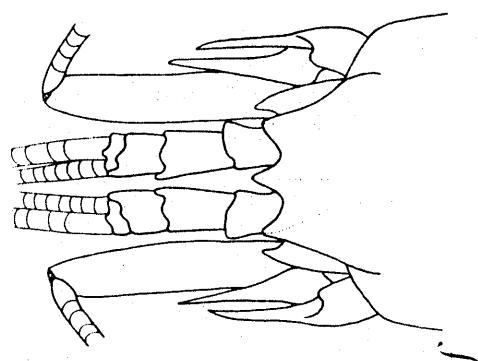
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f

*Synalpheus herricki*

- a. anterior region, dorsal view
- b. left uropodal exopod
- c. major first pereopod  
(after Coutière, 1909)
- d. anterior region, dorsal view
- e. major first pereopod

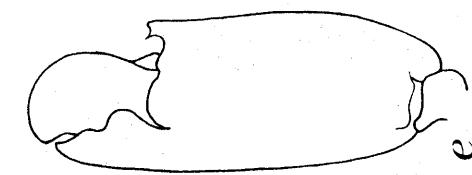
*Synalpheus pandionis*

- f. anterior region, dorsal view (male)
- g. major first pereopod  
(after Coutière, 1909)
- h. anterior region, dorsal view (male)
- i. finger of minor first pereopod
- j. right uropodal exopod (male)  
(after Coutière, 1909)

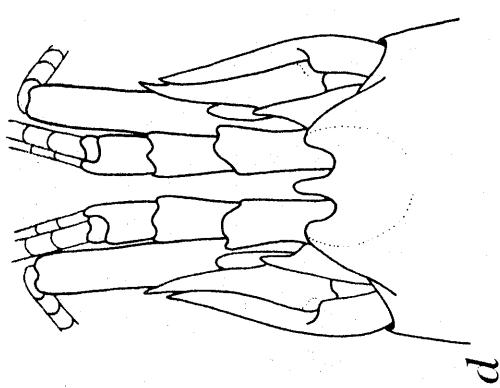
*Synalpheus longicarpus*

- f. anterior region, dorsal view (male)
- g. major first pereopod  
(after Coutière, 1909)
- h. anterior region, dorsal view (male)
- i. finger of minor first pereopod
- j. right uropodal exopod (male)  
(after Coutière, 1909)

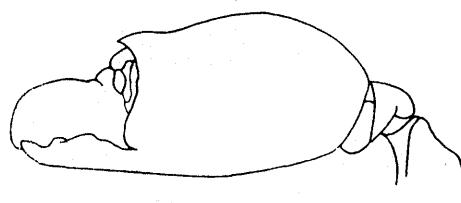
*Synalpheus paraneptunus*



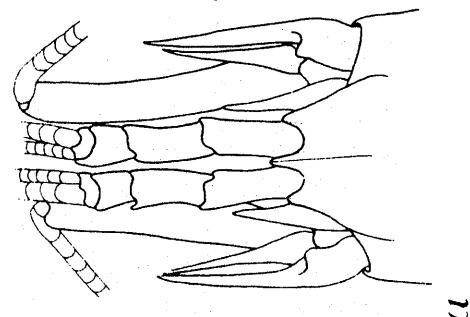
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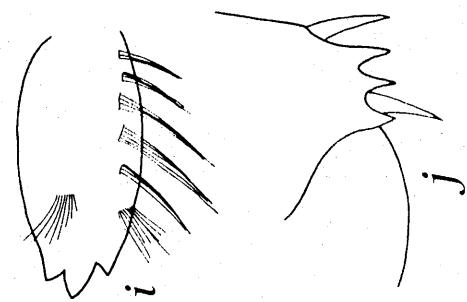
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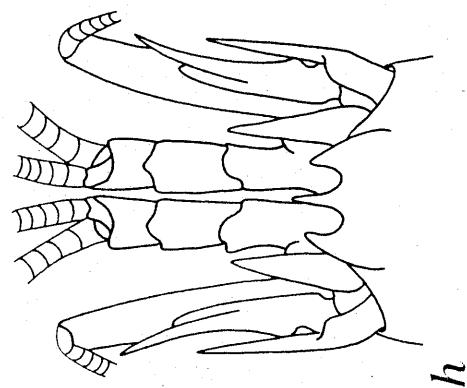
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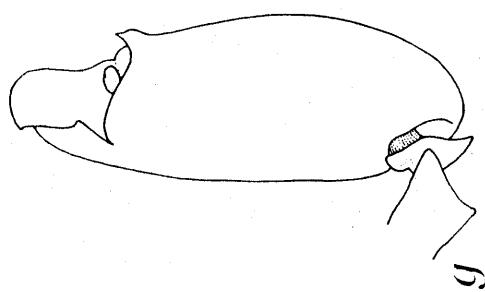
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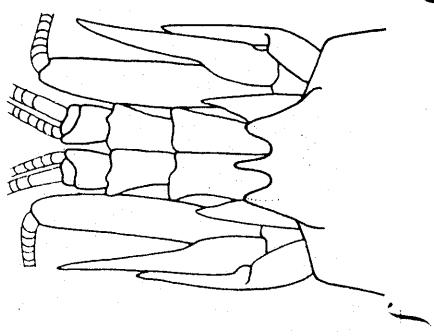
j



h



g



f

*Synalpheus goodei*

- a. anterior region, dorsal view (male)
  - b. left uropodal exopod (male)
  - c. major first pereopod
- (after Coutière, 1909)

*Synalpheus curacaoensis*

- d. anterior region, dorsal view
- e. right third pereopod
- f. chela of right first pereopod

(after Schmitt, 1924a)

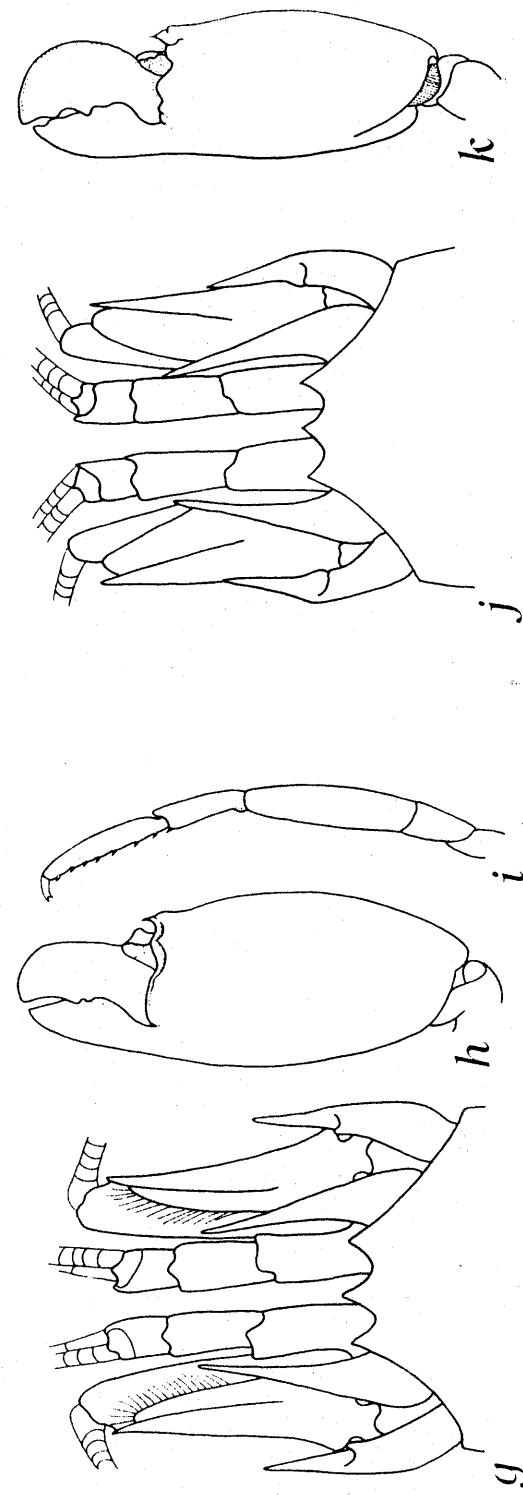
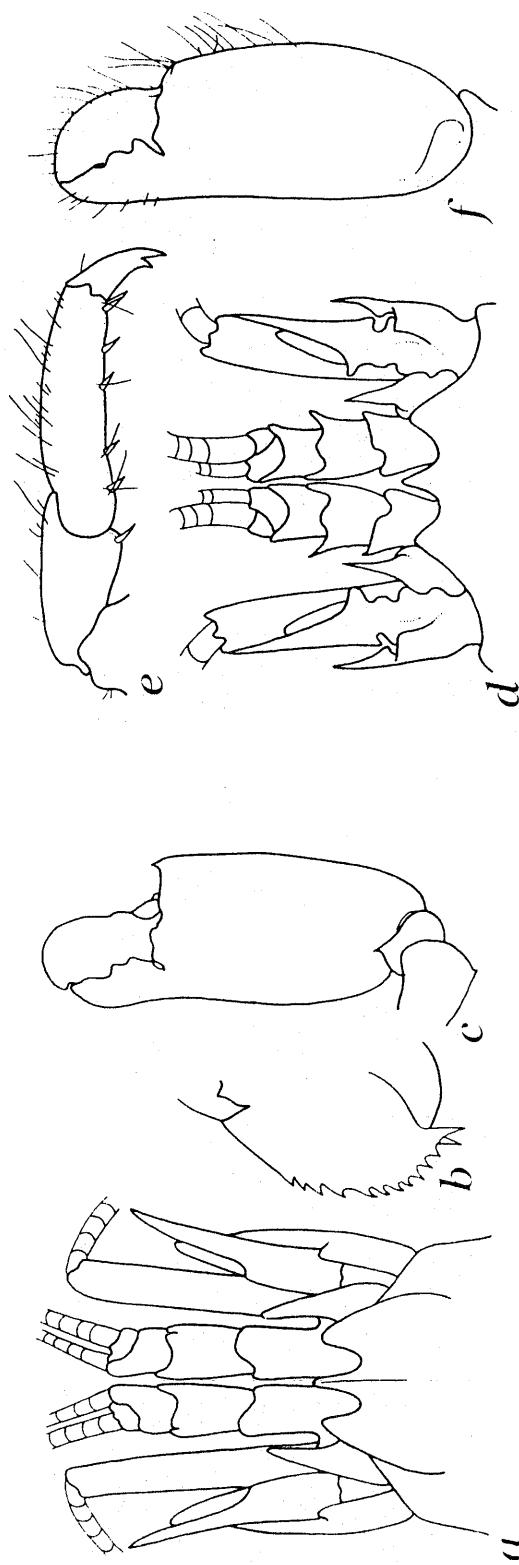
*Synalpheus minus*

- g. anterior region, dorsal view
  - h. major first pereopod
  - i. third pereopod
- (after Coutière, 1909)

*Synalpheus brevicarpus*

- j. anterior region, dorsal view
- k. major first pereopod

(after Coutière, 1909)



*Synalpheus fritzmuelleri*

- a. anterior region, dorsal view
- b. dactylus of third pereopod
- c. major chela of first pereopod  
(after Coutière, 1909)
- d. third pereopod
- e. dactylus of third pereopod

*Synalpheus hemphilli*

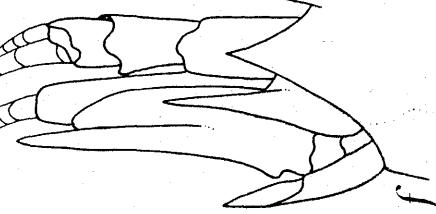
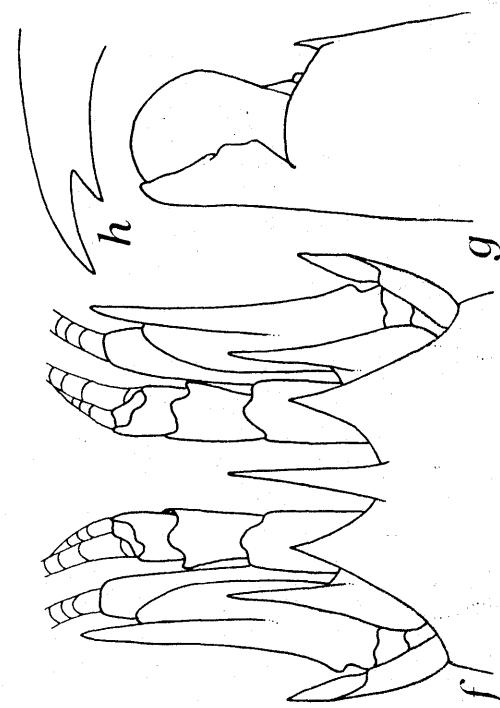
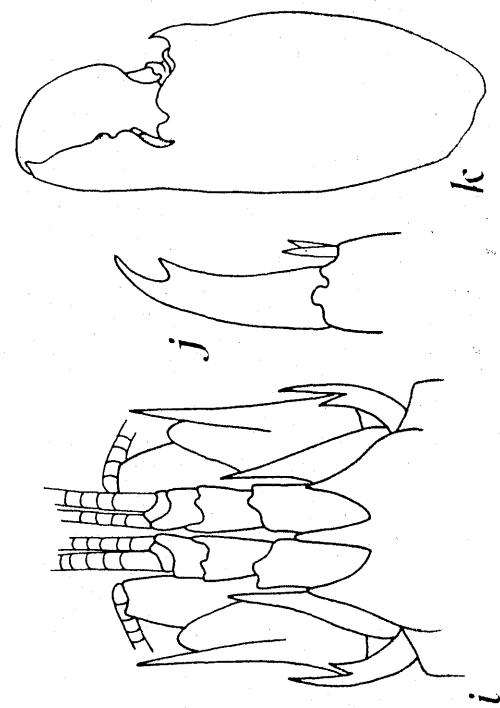
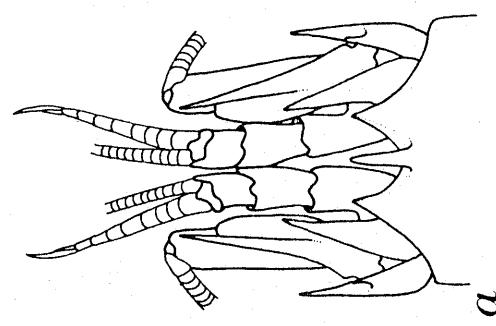
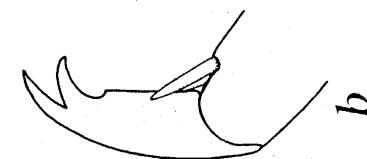
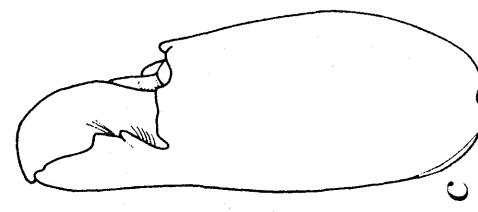
- i. anterior region, dorsal view
- j. dactylus of third pereopod
- k. major chela of first pereopod  
(after Coutière, 1909)

*Synalpheus townsendi*

- f. anterior region, dorsal view
- g. major chela of first pereopod
- h. dactylus of third pereopod  
(after Coutière, 1909)

*Synalpheus apioceros*

- i. anterior region, dorsal view
- j. dactylus of third pereopod
- k. major chela of first pereopod  
(after Coutière, 1909)



j

e

d

c

b

a

g

f

k

*Lepthalpheus forceps*

female:

- a. anterior region, dorsal view
- b. major first pereopod

(after Williams, 1965b)

*Metalpheus rostratus*

male:

- c. anterior region, dorsal view
- d. major first pereopod, outer view
- e. mandible, inner view
- f. same, outer view

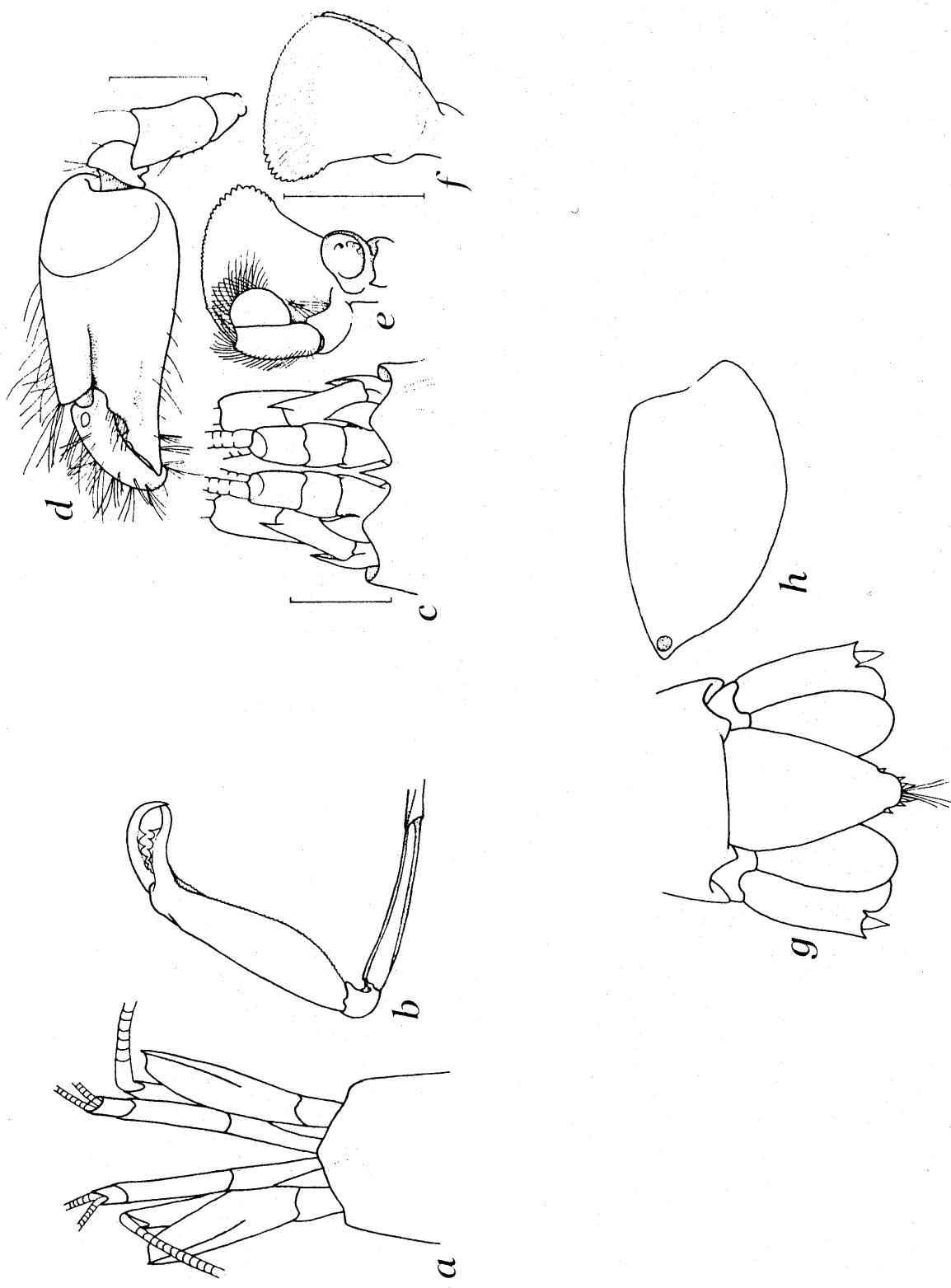
(after Crosnier and Forest, 1966)

*Thunor simus*

g. telson and uropods (male)

h. carapace, lateral view

(g, after Chace, 1972; h, after Armstrong, 1949)



## Family Hippolytidae

### Key to genera and species

[Adapted from Holthuis, 1955, and Chace, 1972]

1. Arthrobranchs present at bases of first four pairs of pereopods..... *Merhippolyte americana*
- Bases of pereopods without arthrobranchs..... 2
2. (1) Carpus of second pereopod subdivided into more than 7 segments, multiarticulate... 3  
Carpus of second pereopod subdivided into no more than 7 segments..... 5
3. (2) Dactyli of third, fourth, and fifth pereopods simple, spines on inferior margin inconspicuous ..... *Exhippolysmata oplophoroides*  
Dactyli of third, fourth, and fifth pereopods appearing biungulate because of series of prominent spines on inferior margin ..... 4
4. (3) Supraorbital spines present on carapace..... *Bythocaris nana*  
Supraorbital spines absent..... *Lysmata*
5. (2) Third segment of antennular peduncle bearing subtriangular movable plate overhanging base of flagellum dorsally; carpus of second pereopod composed of 6 or 7 segments ..... *Thor*  
Antennular peduncle without movable plate overhanging base of flagellum; carpus of second pereopod composed of 2 or 3 segments ..... 6
6. (5) Rostrum with deep ventral blade projecting posteroventrally at posterior end between bases of antennules ..... 7  
Ventral lobe of rostrum, if present, not projecting posteroventrally near base..... 8
7. (6) Lateral surface of carapace smooth, not spinose; mandible without palp; carpus of second pereopod composed of 3 segments ..... *Latreutes*  
Lateral surface of carapace bearing numerous appressed spines; mandible with 2-segmented palp; carpus of second pereopod composed of 2 segments ..... *Trachycaris restrictus*
8. (6) Supraorbital tooth present; third maxilliped with exopod..... *Hippolyte*  
Supraorbital tooth absent; third maxilliped without exopod..... *Tozeuma*

**Genus *Hippolyte* Leach, 1814**

Key to species  
[Adapted from Chace, 1972]

1. Lateral spine on carapace branchiostegal, overreaching anterior margin; tergum of fifth abdominal somite armed with pair of strong posterior spines; telson with both pairs of dorsolateral spines situated in posterior third of segment; scaphocerite with blade and distolateral spine about equally advanced; dactyli of 3 posterior pairs of pereopods terminating in 2 strong distal spines (rostrum usually with single, inconspicuous tooth on dorsal and ventral margins; basal segment of antennular peduncle armed with prominent distolateral spine) ..... *H. coerulescens*  
Lateral spine on carapace hepatic, not nearly reaching anterior margin in adults; tergum of fifth abdominal somite unarmed; telson with anterior pair of distolateral spines situated near midlength of segment; scaphocerite with blade reaching far beyond distolateral spine; dactyli of 3 posterior pairs of pereopods terminating in either 1 or 3 strong distal spines ..... 2
2. (1) Rostrum usually unarmed dorsally (rarely with 1 or 2 prominent dorsal teeth); dactyli of 3 posterior pairs of pereopods terminating in single distal spine (basal segment of antennular peduncle unarmed distally) ..... *H. nicholsoni*  
Rostrum usually armed with 2-4 strong teeth on dorsal margin; dactyli of 3 posterior pairs of pereopods terminating in 3 strong distal spines ..... 3
3. (2) Rostrum usually armed with 3 or 4 strong teeth on dorsal margin and with strong lateral carina in proximal third of length; basal segment of antennular peduncle armed with 1-3 strong distolateral spines ..... *H. curacaoensis*  
Rostrum usually armed with 2 (rarely 1 or 3) strong teeth in proximal half of dorsal margin and without distinct lateral carina; basal segment of antennular peduncle unarmed distally ..... 4
4. (3) Rostrum not overreaching antennular peduncle in adult females, barely overreaching basal antennular segment in males ..... *H. pleuracanthus*  
Rostrum distinctly overreaching antennular peduncle in adult females, extending nearly as far as distal margin of second antennular segment in males ..... *H. zostericola*

**Genus *Latreutes* Stimpson, 1860**

Key to species  
[Adapted from Williams, 1984]

Carapace and rostrum unarmed dorsally except for single, small, median spine on gastric region; rostrum an elongate blade nearly as long as carapace ... *L. fucorum*

Carapace strongly humped and armed dorsally with 5 or 6 spiniform teeth; rostrum deep ovoid blade, shorter than carapace ..... *L. parvulus*

**Genus *Lysmata* Riso 1816**

## Key to species

[Adapted from Chace, 1972]

1. Scaphocerite overreaching antennular peduncle slightly, if at all (rostrum with 4-6 ventral teeth; antennal tooth distinct from depressed and obscure ventral angle of orbit; carapace with pterygostomian tooth on anteroventral margin; stylocerite falling far short of distal margin of basal antennular segment; distal tooth of scaphocerite distinctly overreaching distal margin of blade; exopod of third maxilliped reaching at least to midlength of antepenultimate segment; carpus of second pereopod composed of 17-23 segments) ..... *L. amboinensis*  
Scaphocerite distinctly overreaching antennular peduncle (exopod of third maxilliped reaching to, or beyond, midlength of antepenultimate segment) ..... 2
2. (1) Antennal tooth fused with ventral angle of orbit; stylocerite reaching beyond distal margin of basal segment of antennular peduncle; accessory branch of dorsolateral antennular flagellum well developed (2 to 4 teeth of dorsal rostral series situated on carapace posterior to level of orbital margin; carapace with pterygostomian tooth on anteroventral margin; scaphocerite more than four times as long as wide, distal tooth distinctly overreaching distal margin of blade; carpus of second pereopod composed of 28-30 segments) ..... *L. intermedia*  
Antennal tooth distinct from depressed and obscure ventral angle of orbit; stylocerite falling far short of distal margin of basal antennular segment; accessory branch of dorsolateral antennular flagellum vestigial or absent ..... 3
3. (2) Rostrum usually reaching as far as, or beyond, distal end of antennular peduncle; scaphocerite five times as long as wide ..... *L. rathbunae*  
Rostrum reaching not much, if at all, beyond second segment of antennular peduncle; scaphocerite less than four times as long as wide ..... *L. wurdemanni*

### Genus *Thor* Kingsley, 1878

#### Key to species

[Adapted from Chace, 1972]

1. No vestige of supraorbital tooth; anterolateral margin of carapace faintly angular, with microscopic branchiostegal tooth; distal margin of telson armed typically with 4 pairs of spines; endopod of first pleopod of functional males with mesial margin sparsely setose; appendix masculina (not including setae) of functional males falling short of distal end of endopod of second pleopod; associated with sea anemones (merus of first pereopod unarmed in distal half of inferior margin; eggs not very large, increasing in major diameter during development from 0.48 to 0.70 mm) .... *T. amboinensis*
  
- Supraorbital tooth represented by obtuse prominence; anterolateral margin of carapace rounded, unarmed; distal margin of telson armed with 3 pairs of spines; endopod of first pleopod of functional males with mesial margin densely setose; appendix masculina (not including setae) of functional males reaching nearly to, or beyond, distal end of endopod of second pleopod; not usually associated with sea anemones ..... 2
  
2. (1) Merus of first pereopod armed with 1 or 2 spines in distal half of inferior margin (dactyli of fourth and fifth pereopods commonly armed with 5--not usually 4 or 6--spinules on inferior margin proximal to distal pair of spines; eggs not very large, increasing in major diameter during development from 0.36 to 0.74 mm) .... *T. dobkini*
  
- Merus of first pereopod unarmed in distal half of inferior margin ..... 3
  
3. (2) Dactyli of fourth and fifth pereopods commonly armed with 4 or 5 (rarely 3 or 6) spinules on inferior margin proximal to distal pair of spines; eggs large and few, increasing in major diameter during development from 0.66 to 1.40 mm ..... *T. floridanus*
  
- Dactyli of fourth and fifth pereopods commonly armed with 3 (sometimes 2 or 4) spinules on inferior margin proximal to distal pair of spines; eggs not very large, increasing in major diameter during development from 0.36 to 0.73 mm ..... *T. manningi*

**Genus *Tozeuma* Stimpson, 1960**

Key to species  
[Adapted from Chace, 1972]

1. Third abdominal somite bearing long rodlike dorsal projection recurved posteriorly and bidentate distally; third maxilliped with each of 2 distal segments short, slightly longer than broad, distal segment tapering throughout to narrow truncate tip; carpus of second pereopod with proximal segment subequal in length to combined lengths of 2 distal segments; dactyli of 3 posterior pereopods without accessory spinules on inferior margin (rostrum unarmed dorsally) ..... *T. cornutum*
  
- Third abdominal somite not surmounted by recurved projection in adults; third maxilliped with each of 2 distal segments elongate, at least twice as long as broad, distal segment with subparallel margins nearly to distal extremity; carpus of second pereopod with proximal segment slightly more than four-fifths as long as combined lengths of 2 distal segments; dactyli of 3 posterior pereopods with row of accessory spinules on inferior margin ..... 2
  
2. (1) Rostrum unarmed dorsally..... *T. carolinense*  
Rostrum armed with series of teeth both dorsally and ventrally..... *T. serratum*

*Hippolyte coerulescens*

female:

- a. anterior region, lateral view
- b. right antenna
- c. abdomen

(after Chace, 1972)

*Hippolyte nicholsoni*

ovigerous female:

- d. anterior region, lateral view
- e. orbital region
- f. abdomen
- g. left third pereopod
- h. same, dactylus

(after Chace, 1972)

*Hippolyte curacaoensis*

female:

- i. anterior region, lateral view
- j. right antennule
- k. abdomen

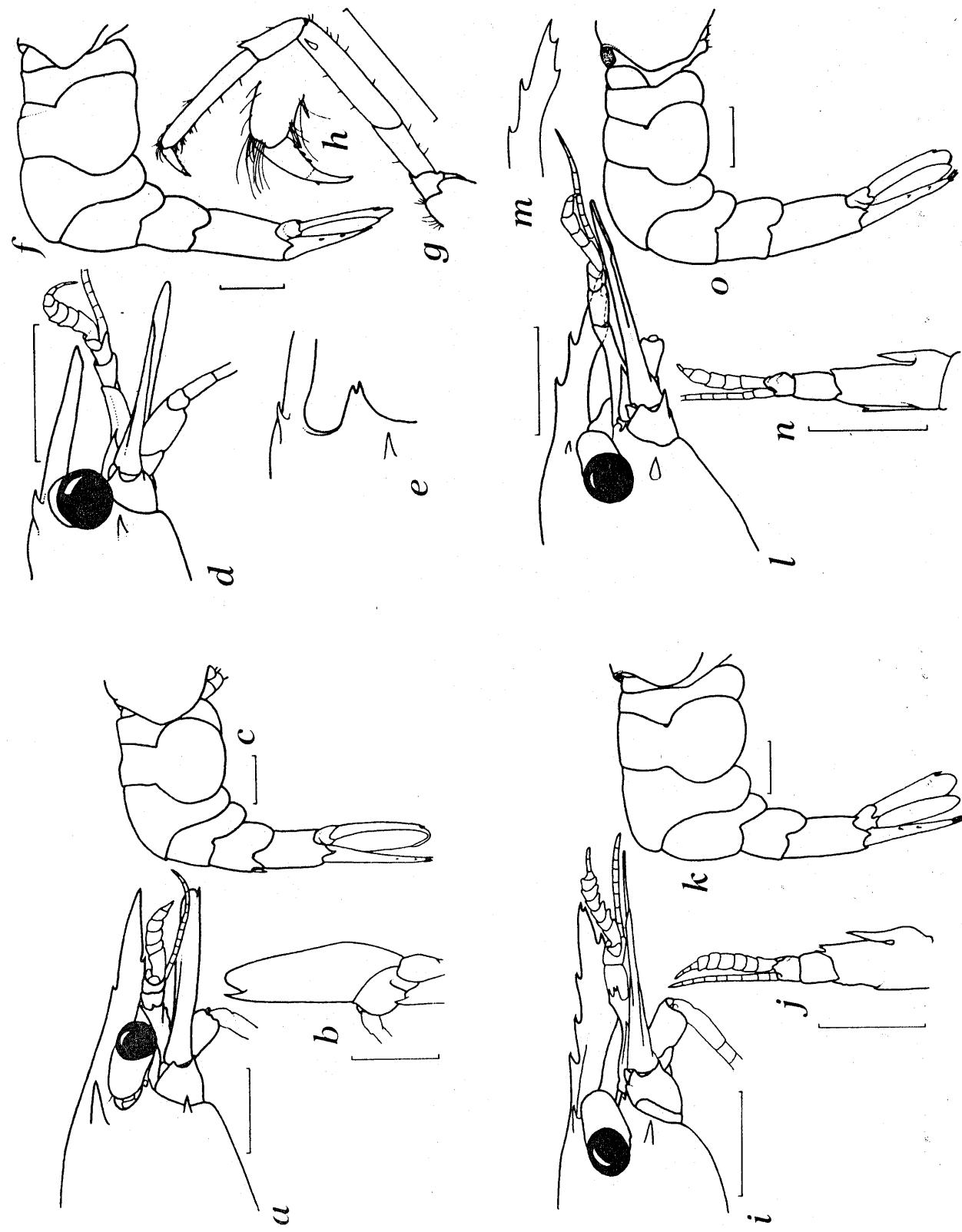
(after Chace, 1972)

*Hippolyte pleuracanthus*

female:

- l. anterior region, lateral view
- m. rostrum
- n. right antennule
- o. abdomen

(after Chace, 1972)

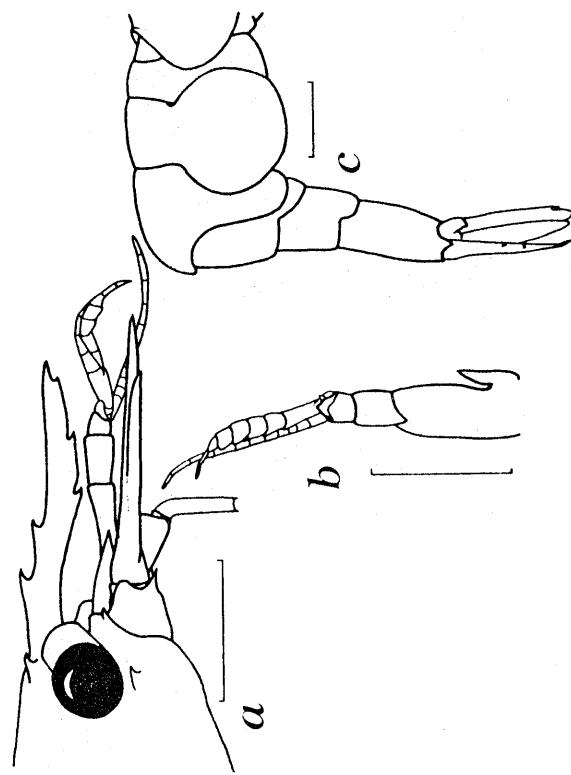


*Hippolyte zostericola*

ovigerous female:

- a. anterior region, lateral view
- b. right antennule
- c. abdomen

(after Chace, 1972)

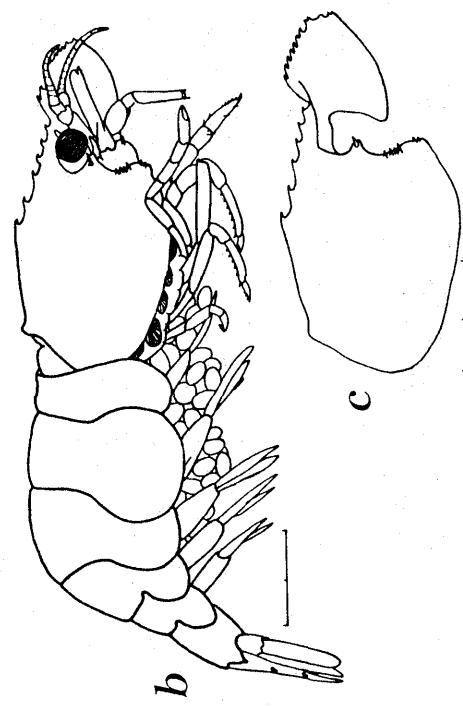
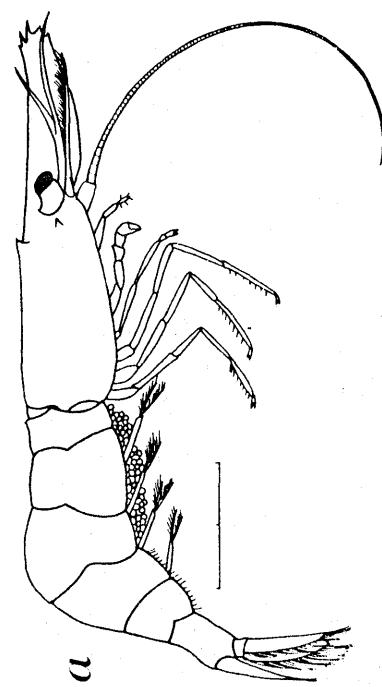
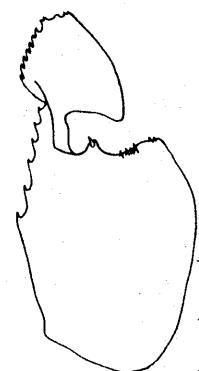


*Latreutes fucorum*

a. lateral view (ovigerous female)  
(after Bate, 1888, as *L. ensiferus*)

*Latreutes parvulus*

- ovigerous female:  
b. lateral view  
c. carapace, lateral view  
(after Holthuis, 1951a)

*b**a**c*

*Lysmata amboinensis*

- a. lateral view
  - b. anterior region, dorsal view
  - c. carapace, lateral view
  - d. second pereopod
- (after Limbaugh et al., 1961)
- e. orbital region
  - f. right antenna
- (after Chace, 1970)

*Lysmata intermedia*

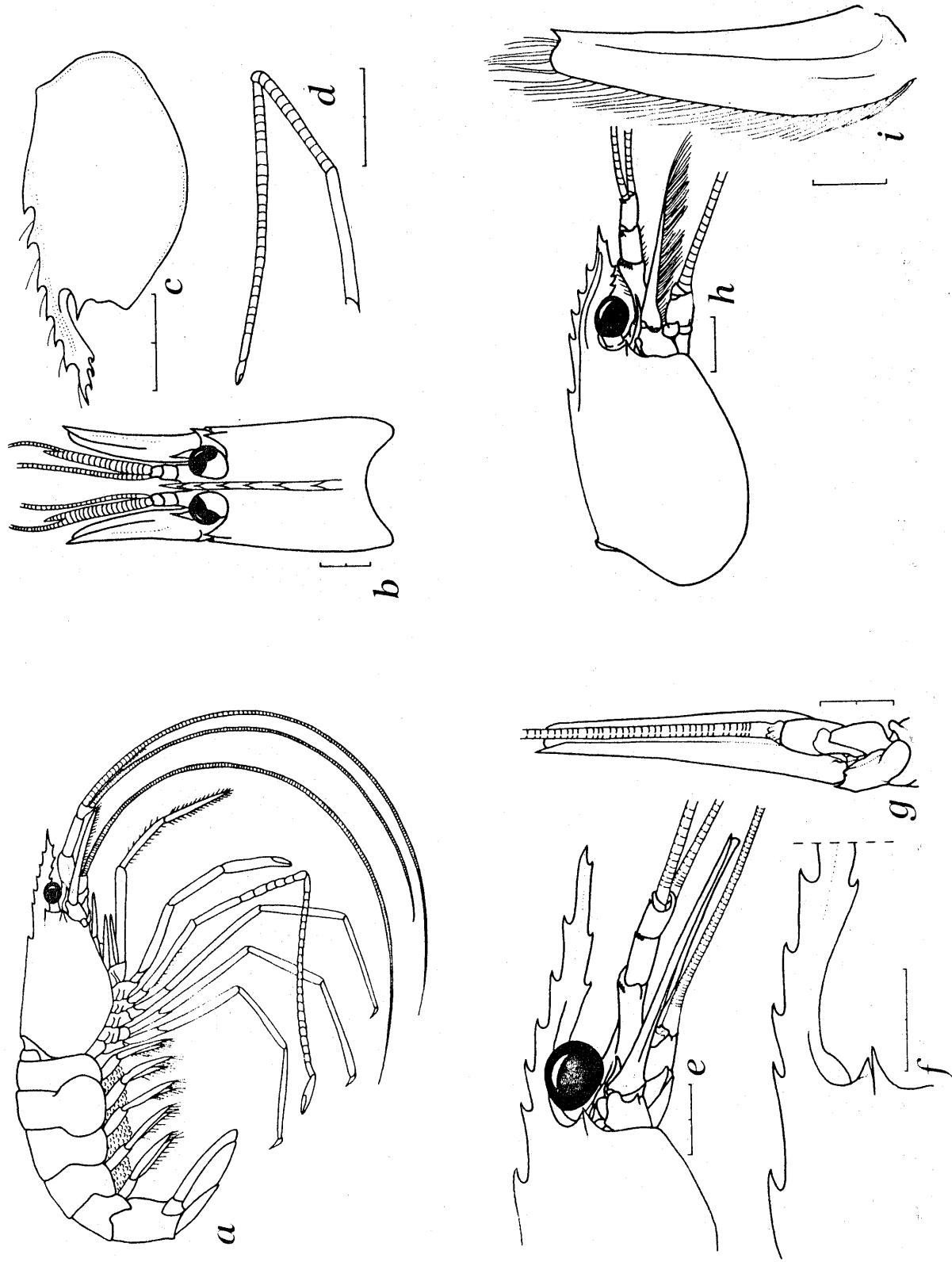
- a. lateral view
  - b. anterior region, dorsal view
  - c. carapace, lateral view
  - d. second pereopod
- (after Sivertsen, 1933)

*Lysmata rathbunae*

- male:
- h. anterior region, lateral view
  - i. antennal scale
- (after Williams, 1965a)
- j. right antenna
- (after Chace, 1970)

*Lysmata wurdemanni*

- h. anterior region, lateral view
  - i. antennal scale
- (after Williams, 1965a)



*Thor amboinensis*

male:

- a. rostrum
- b. anterior region, lateral view
- c. telson and uropods
- d. posterior end of telson

(after Chace, 1972)

*Thor dobbinsi*

male:

- e. anterior region, lateral view
- f. rostrum
- g. right first pereopod

(after Chace, 1972)

*Thor floridanus*

male:

- h. anterior region, lateral view
- i. rostrum
- j. right first pereopod

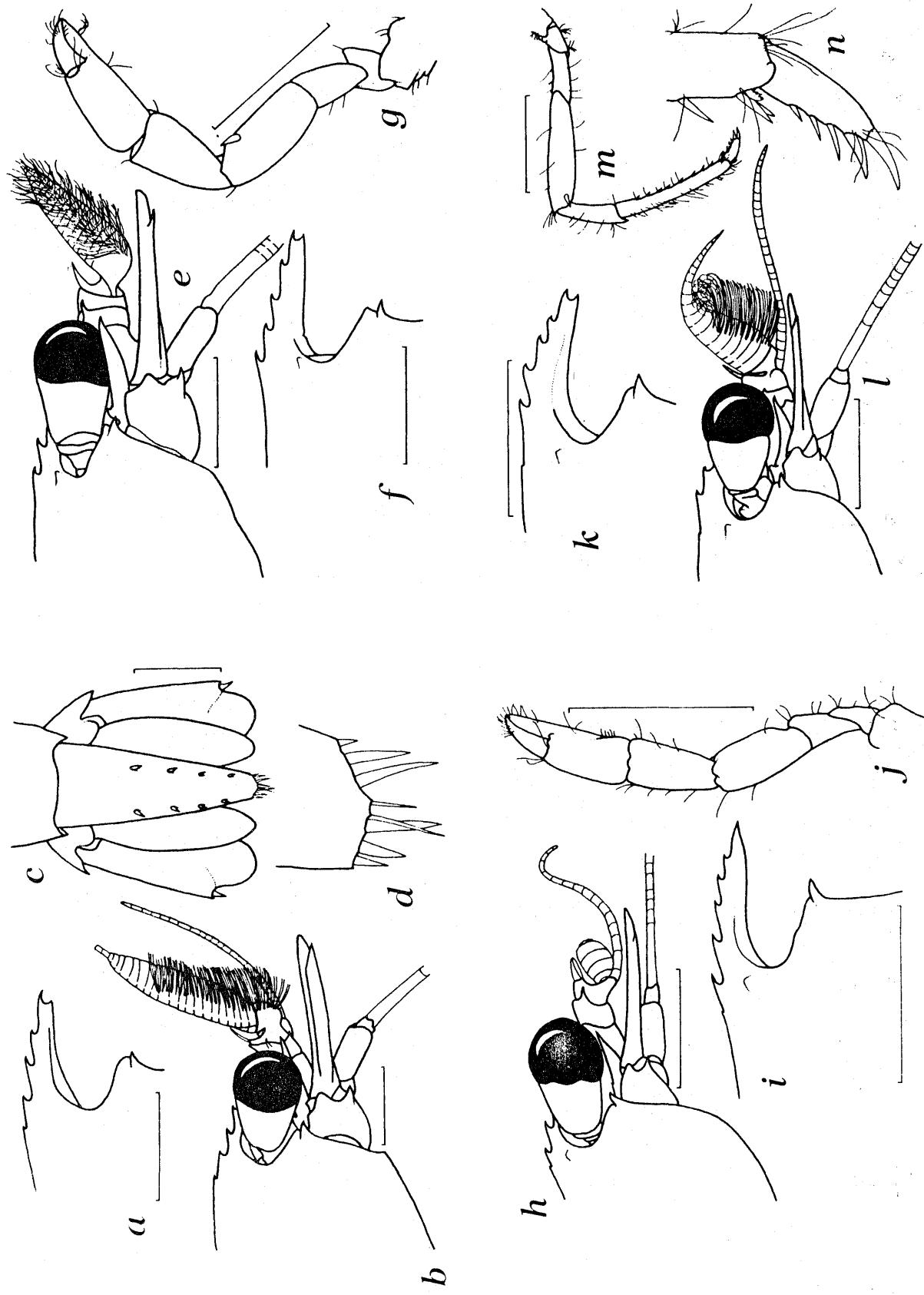
(after Chace, 1972)

*Thor manningi*

male:

- k. rostrum
- l. anterior region, lateral view
- m. fourth pereopod
- n. same, dactylus

(after Chace, 1972)



*Tozeuma cornutum*

a. lateral view

(after A. Milne Edwards, 1881)

*Tozeuma carolinense*

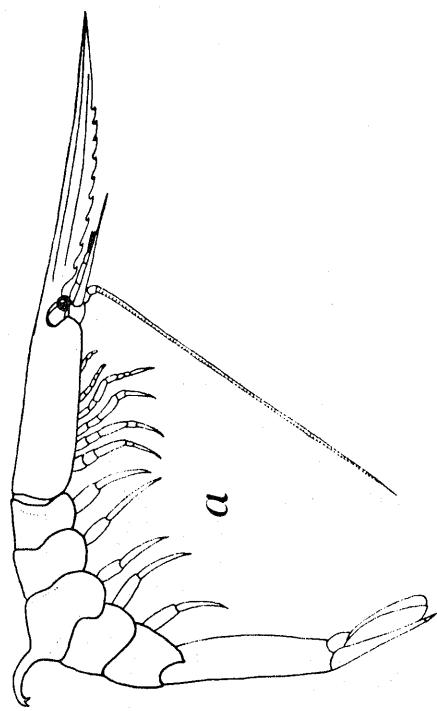
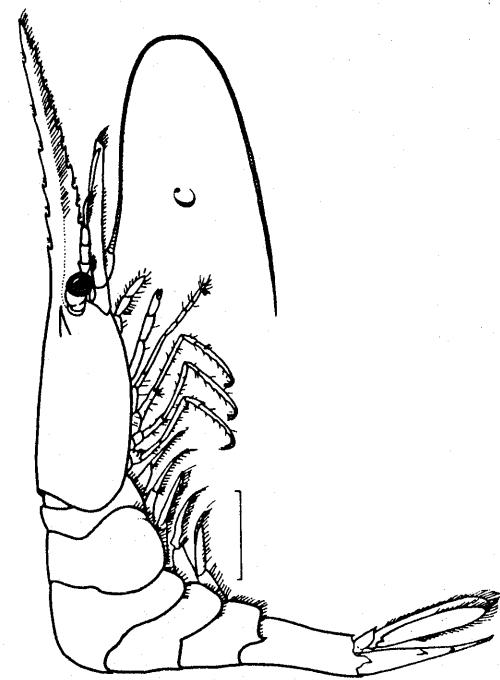
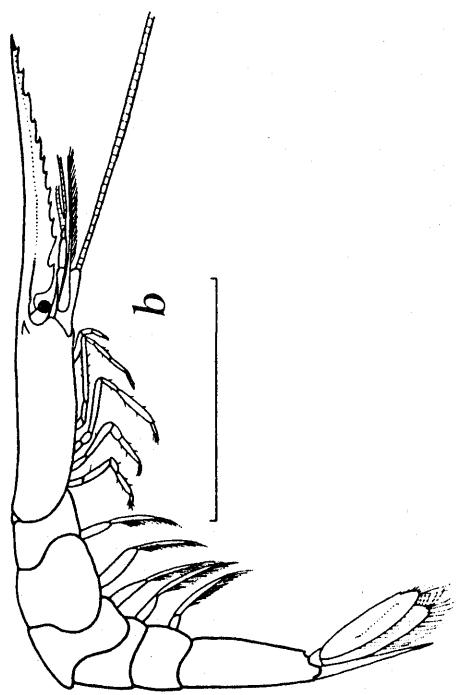
b. lateral view (female)

(after Williams, 1965a)

*Tozeuma serratum*

c. lateral view (female)

(after Williams, 1984)



*Bythocaris nana*

- a. anterior region, dorsal view
  - b. carapace, lateral view
  - c. second pereopod
  - d. third pereopod
  - e. same, dactylus
- (from Abele's personal drawing)

*Exhippolysmata oplophoroidea*

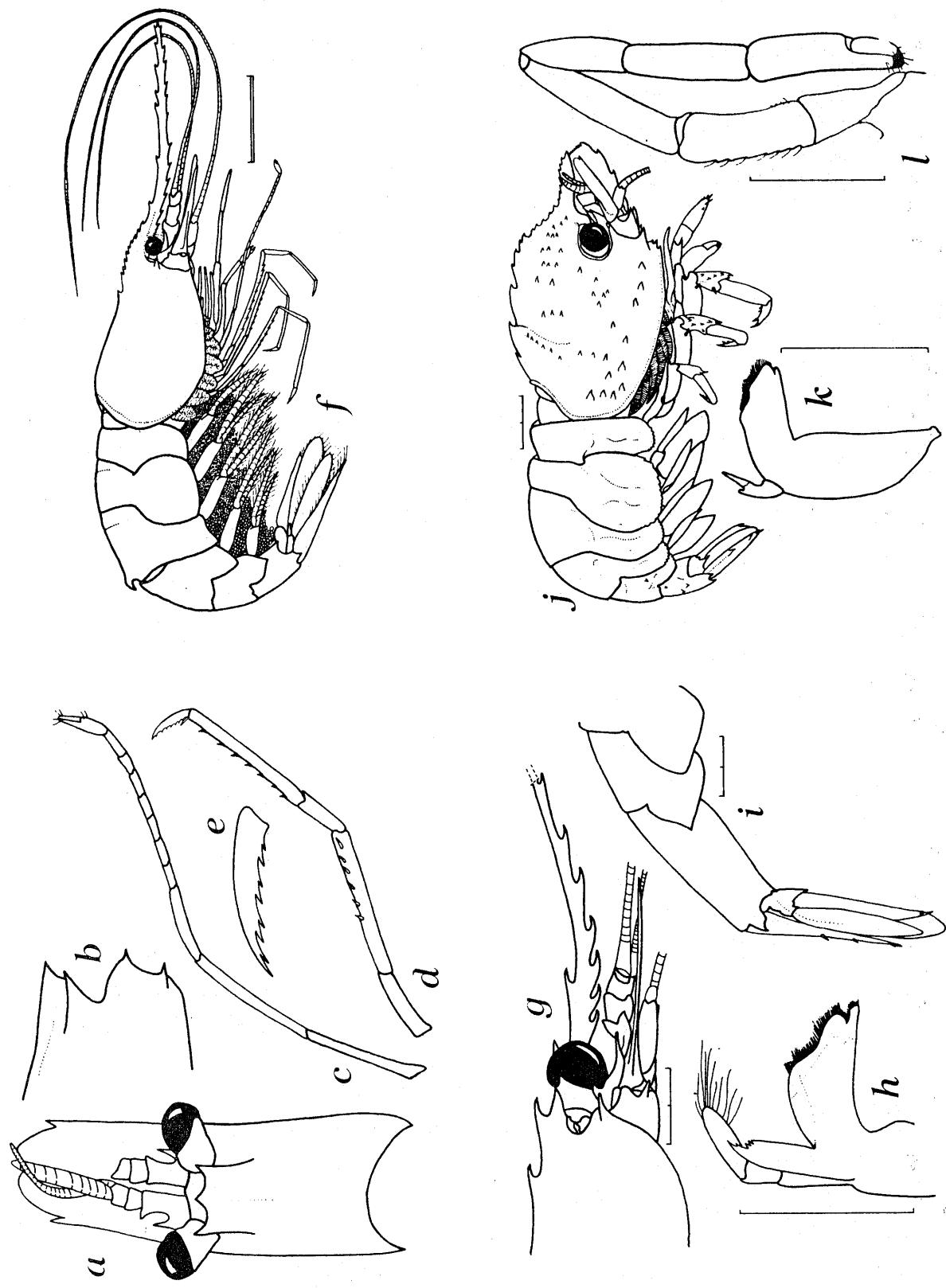
- f. lateral view (ovigerous female)
- (after Pérez Farfante, 1978)

*Merhippolyte americana*

- g. anterior region, lateral view
  - h. mandible
  - i. posterior part of abdomen
- (after Holthuis, 1961)

*Trachycaris restrictus*

- j. lateral view
  - k. mandible
  - l. second pereopod
- (after Holthuis, 1949b)





**Family Ogyrididae****Genus *Ogyrides* Stebbing, 1914**

Key to species

[Adapted from Williams, 1984]

- Single movable spine behind rostrum on middorsal line..... *O. hayi*  
Postrostral crest with 3 to 14 small, fixed spines..... *O. alphaerostris*

*Ogyrides hayi*

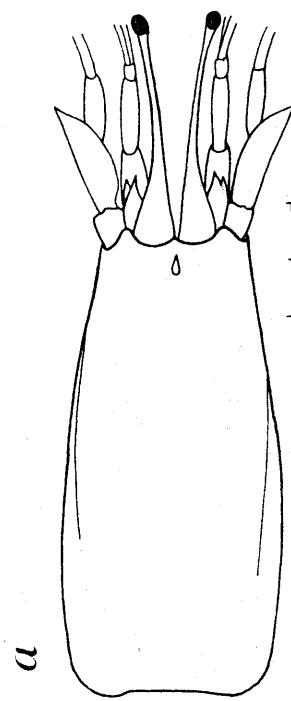
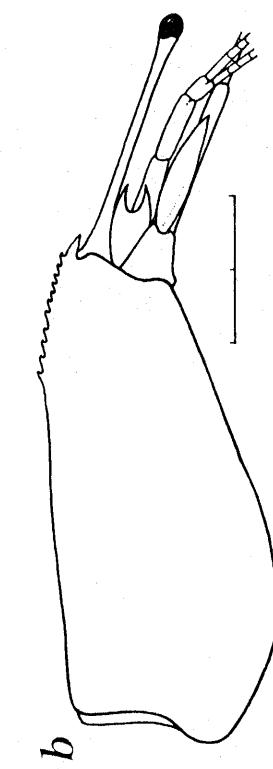
a. carapace and anterior appendages, dorsal view

(after Williams, 1984)

*Ogyrides alphaerostris*

b. carapace and anterior appendages, lateral view

(after Williams, 1984)



**Family Processidae**

Key to genera and species  
[Adapted from Chace, 1972]

1. First pereopods similar, both chelate (first pereopods without exopods; second pereopods equal) ..... *Ambidexter symmetricus*
- First pereopods dissimilar, one (usually right) chelate, other with simple unopposed dactylus ..... 2
2. (I) First pereopod with exopod..... *Nikoides schmitti*
- First pereopod without exopod..... *Processa*

**Genus *Processa* Leach, 1815**

## Key to species

[Adapted from Chace, 1972]

1. Pleuron of fifth abdominal somite with sharp tooth near posteroventral angle (antennal spine present) ..... 2
- Pleuron of fifth abdominal somite with posteroventral margin entire, without projecting tooth ..... 3
2. (1) Eye twice as wide as scaphocerite; third pereopod overreaching scaphocerite by length of dactylus and propodus only ..... *P. fimbriata*  
Eye less than one and one-half times as wide as scaphocerite; third pereopod overreaching scaphocerite by length of dactylus, propodus, and most of carpus ..... *P. riveroi*
3. (1) Antennal spine lacking ..... 4  
Antennal spine present ..... 5
4. (3) Ventral margin of rostrum only slightly concave in distal half; second pereopods unequal, right with 19-29 carpal segments, left with 13-15 ..... *P. bermudensis*  
Ventral margin of rostrum markedly concave in distal half; second pereopods equal, with 10-14 carpal segments ..... *P. vicina*
5. (3) Second pereopods equal, with 10 carpal segments; merocarpal articulation of right not extending beyond scaphocerite ..... *P. hemphilli*  
Second pereopods very unequal, merocarpal articulation of right extending considerably beyond scaphocerite ..... 6
6. (5) Posterior lobe of sixth abdominal somite, dorsal to uropodal articulation, armed with sharp tooth ..... *P. profunda*  
Posterior lobe of sixth abdominal somite unarmed ..... *P. guyanae*

*Processa fimbriata*

male:

- a. anterior region, lateral view
- b. margin of fifth abdominal pleuron
- c. rostrum

(after Manning and Chace, 1971)

*Processa riveroi*

ovigerous female:

- d. anterior region, lateral view
- e. rostrum
- f. right third pereopod

(after Manning and Chace, 1971)

*Processa bermudensis*

male:

- g. anterior region, lateral view
- h. rostrum
- i. left second pereopod
- j. right second pereopod

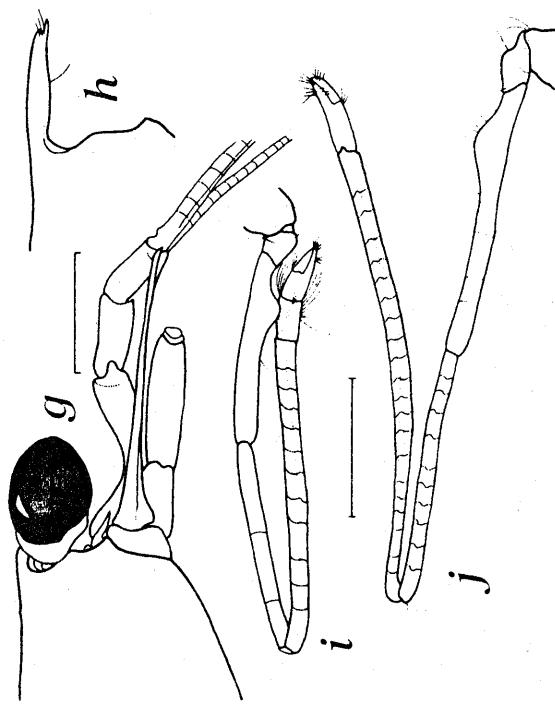
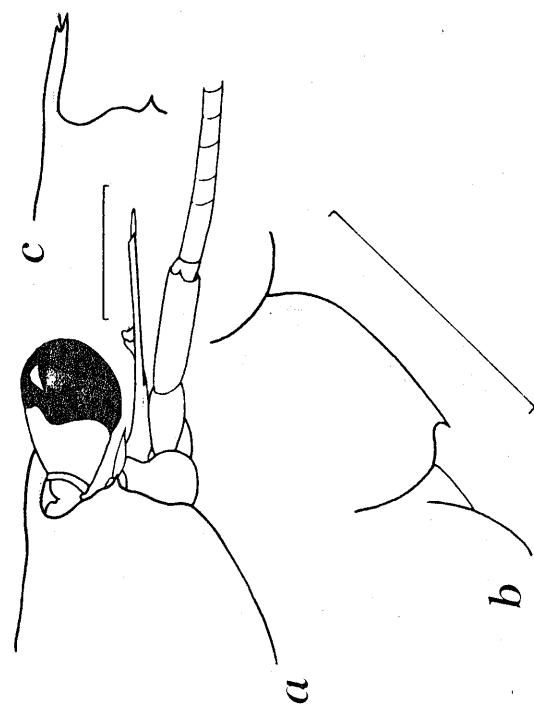
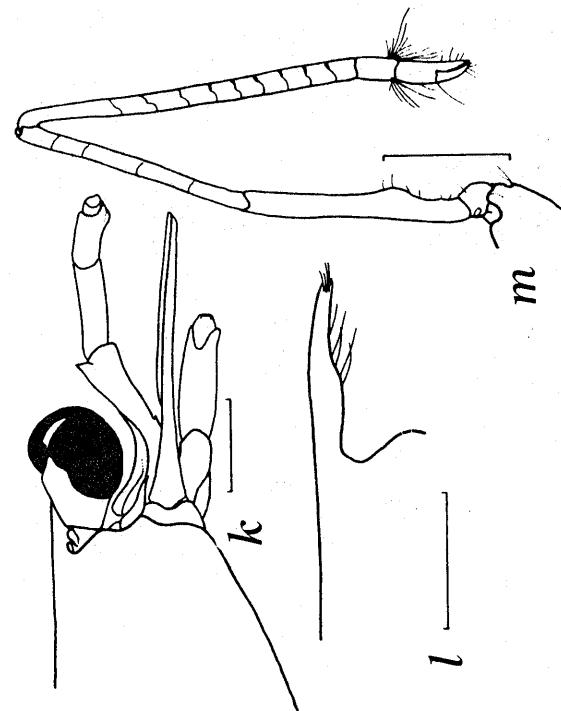
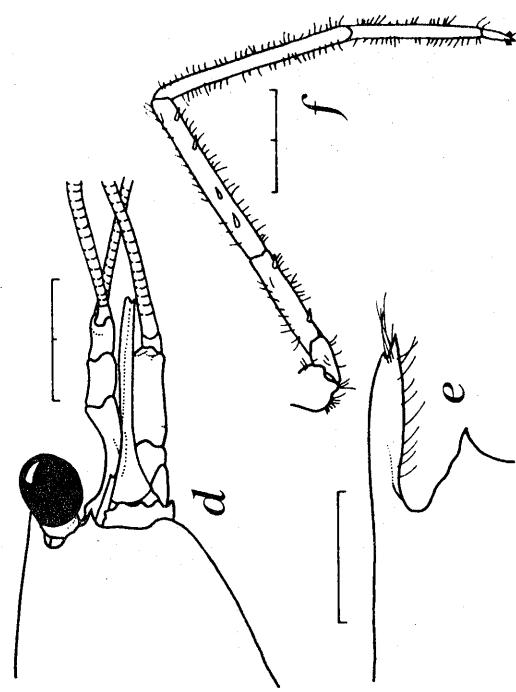
(after Manning and Chace, 1971)

*Processa vicina*

male:

- k. anterior region, lateral view
- l. rostrum
- m. right second pereopod

(after Manning and Chace, 1971)



*Processa hemphilli*

female:

- a. anterior region, lateral view
- b. rostrum
- c. right second pereopod

(after Manning and Chace, 1971)

*Processa profunda*

male:

- d. anterior region, lateral view
- e. abdomen

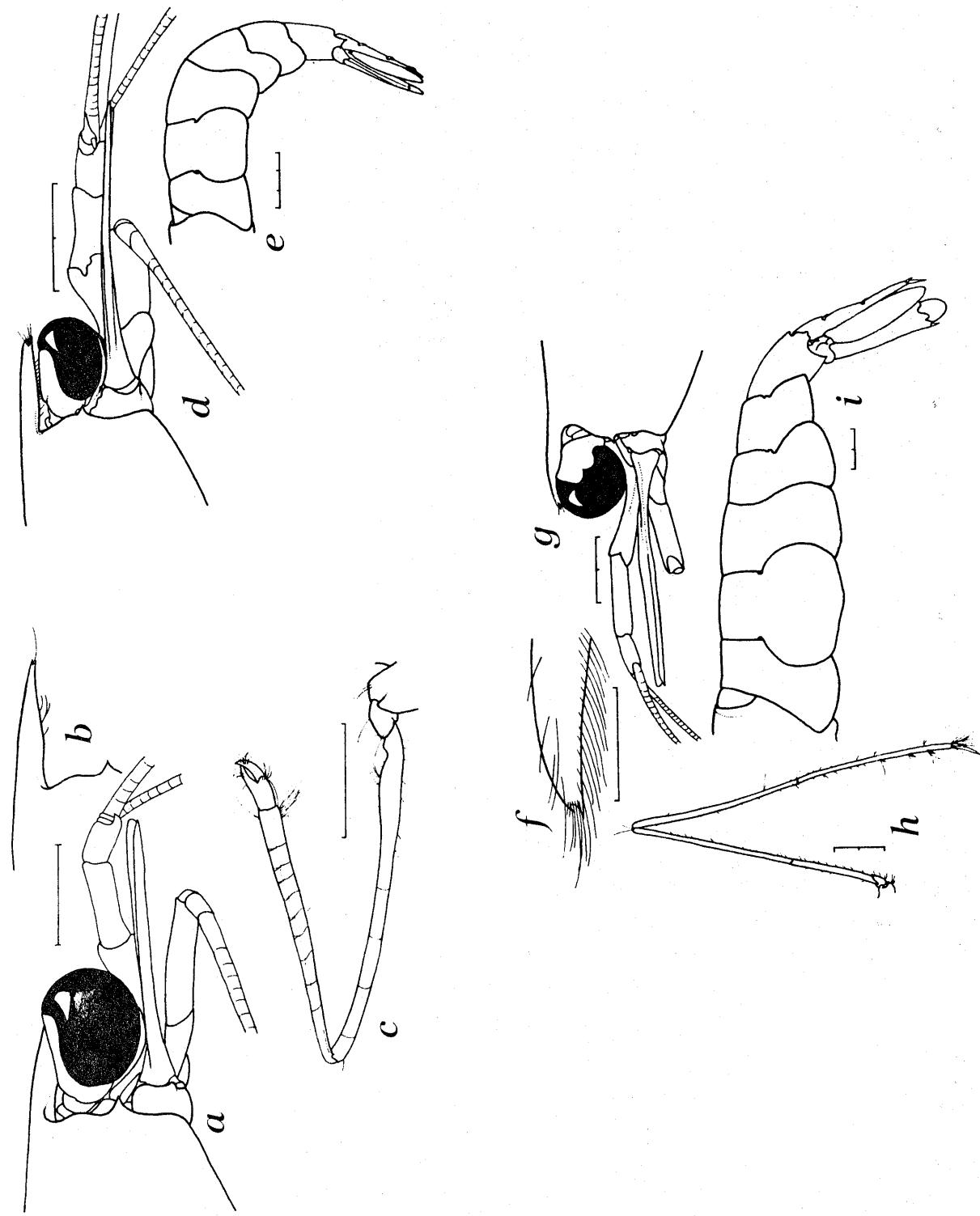
(after Manning and Chace, 1971)

*Processa guyanae*

ovigerous female:

- f. distal portion of rostrum
- g. anterior region, lateral view
- h. right fifth pereopod
- i. abdomen

(after Manning and Chace, 1971, as *P. tenuipes*)



*Ambidexter symmetricus*

male:

- a. anterior region, lateral view
- b. left first pereopod
- c. right first pereopod
- d. rostrum

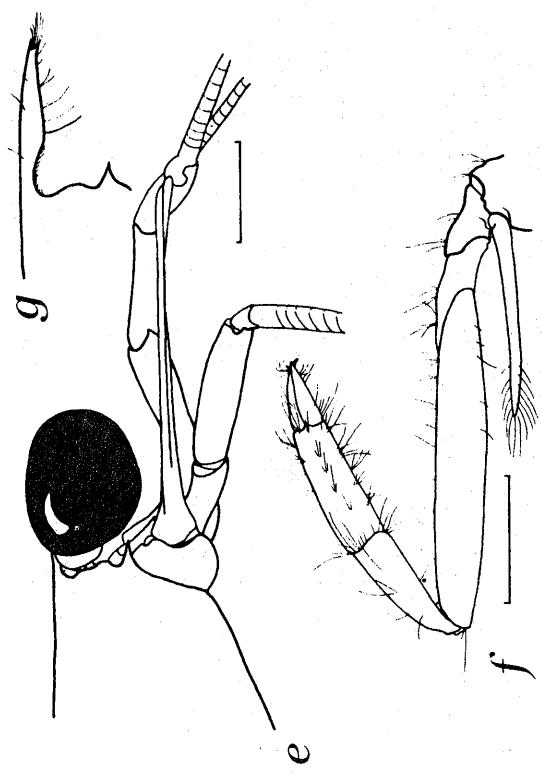
(after Manning and Chace, 1971)

*Nikoides schmitti*

male:

- e. anterior region, lateral view
- f. right first pereopod
- g. rostrum

(after Manning and Chace, 1971)



**Family Pandalidae**

Key to genera and species  
[Based on Chace, 1985]

1. Rostrum movably connected with carapace..... *Pantomus parvulus*
- Rostrum not movable..... 2
2. (1) Abdomen with third abdominal somite unarmed or with fixed postero-medial tooth; second maxilliped with terminal segment broader than long, applied as strip to distal margin of penultimate segment; appendix masculina on second pleopod of male rather broad and profusely spinose ..... *Plesionika*  
Abdomen with third somite bearing slender, basally articulated postero-medial spine or stout seta (sometimes lost); second maxilliped with terminal segment longer than broad, not applied as strip to distal margin of penultimate segment; appendix masculina on second pleopod of male slender and sparsely spinose ..... *Stylopandalus richardi*

**Genus *Plesionika* Bate, 1888**

Key to species  
[Based on Pequegnat, 1970]

1. Epipods on at least first two pereopods..... 2
- No epipods on any of pereopods..... 6
- 2 (1). Rostrum toothed dorsally for entire length..... 3
- Rostrum smooth dorsally for most of its length..... 5
3. (2) Rostrum more than twice carapace length (rostrum with about 28 dorsal teeth, more widely spaced proximally than distally, and about 40 ventral teeth; carpi of last three pereopods less than twice length of propodi (epipods minute) ..... *P. edwardsii*
- Rostrum less than twice carapace length..... 4
4. (3) Rostrum short, reaching no further than distal end of scaphocerite (rostrum with 13-17 dorsal teeth and 3-8 small ventral teeth) ..... *P. acanthonotus*
- Rostrum longer, reaching past scaphocerite (rostrum about equal in length to carapace, with 8-10 dorsal teeth, 2-4 of which are movable spines behind orbit and separated from remaining rostral teeth) ..... *P. tenuipes*
5. (2) Third abdominal somite with dorsal spine; 4-6 dorsal rostral teeth (2 or 3 behind orbit) plus one subapical tooth ..... *P. ensis*
- Third abdominal somite not armed; 6-9 dorsal rostral teeth (3 or 4 behind orbit), no subapical tooth ..... *P. martia*
6. (1) Ultimate segment of third maxilliped distinctly shorter than penultimate..... *P. escatilis*
- Ultimate segment of third maxilliped subequal to penultimate..... *P. longicauda*

*Plesionika edwardsii*

a. lateral view

(after Pérez Farfante, 1978)

*Plesionika acanthonotus*

b. anterior region, lateral view

(after Holthuis, 1951a)

*Plesionika tenuipes*

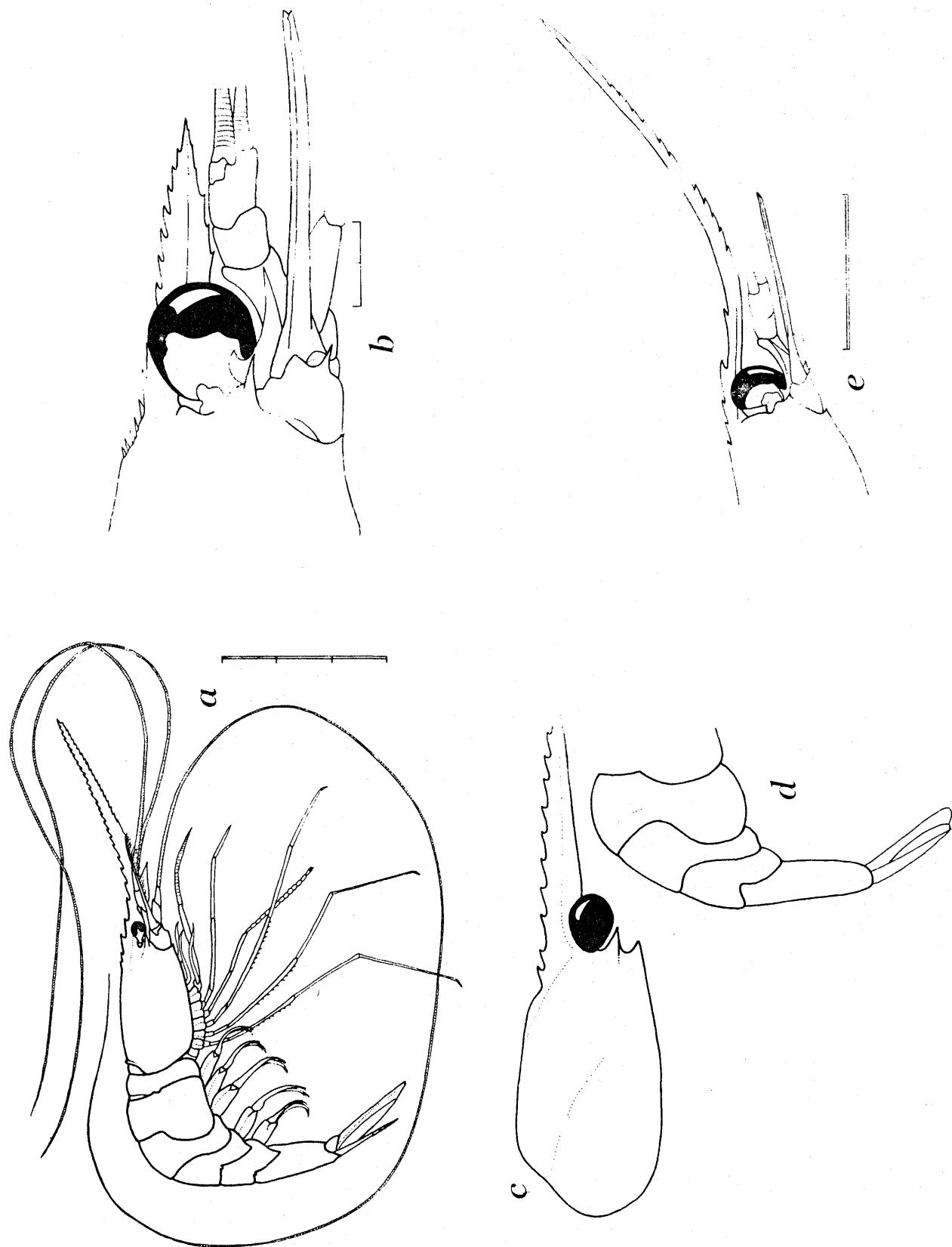
c. carapace and rostrum, lateral view

(after Thompson, 1963)

*Plesionika ensis*

e. anterior region, lateral view

(after Holthuis, 1951a)



*Plesionika maria*

a. anterior region, lateral view

b. posterior part of abdomen

(after Holthuis, 1951a)

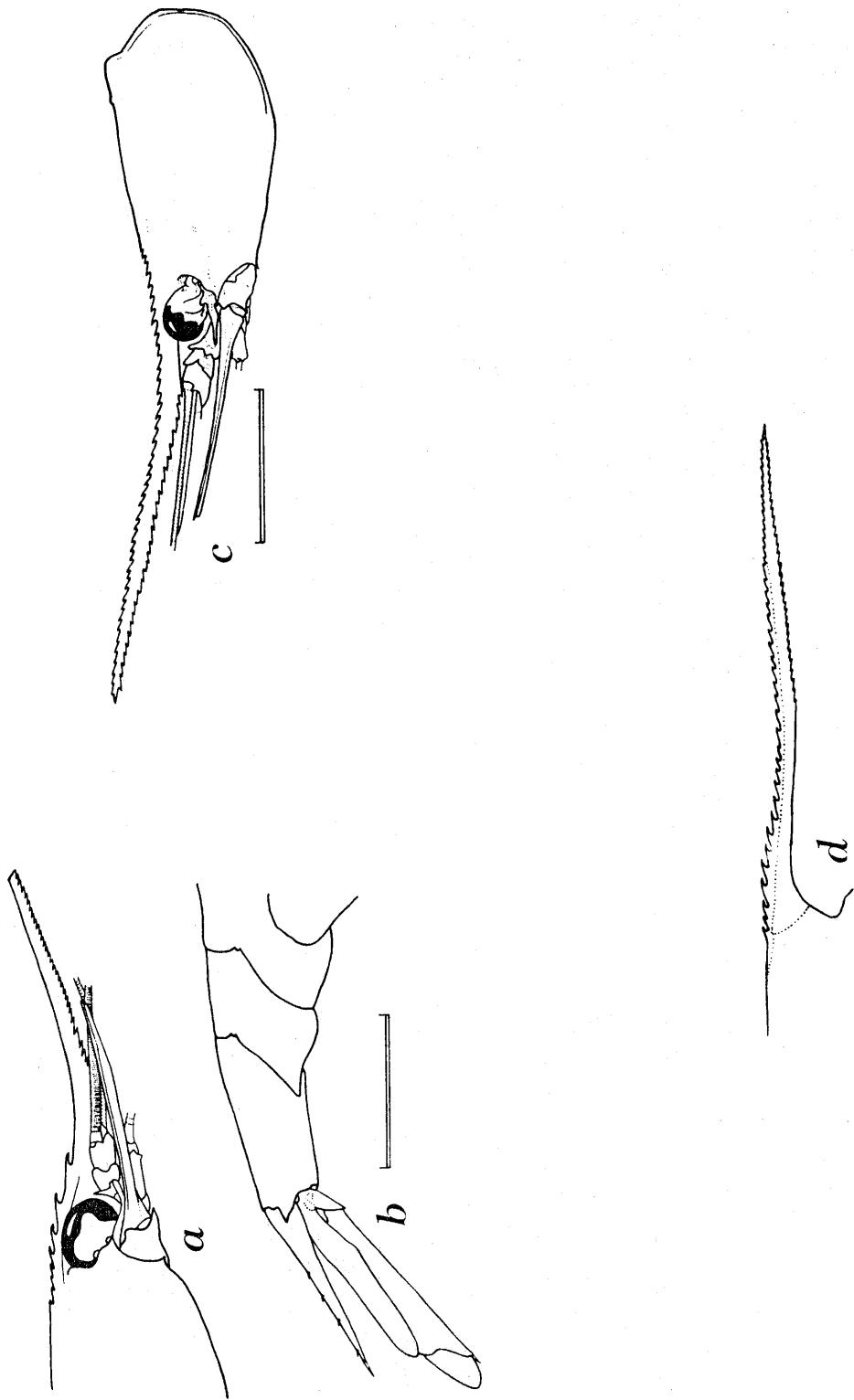
*Plesionika escatilis*

c. anterior region, lateral view (female)

(after Crosnier and Forest, 1973, as *P. nivalis*)*Plesionika longicauda*

d. rostrum

(after Rathbun, 1901)



*Pantomus parvulus*

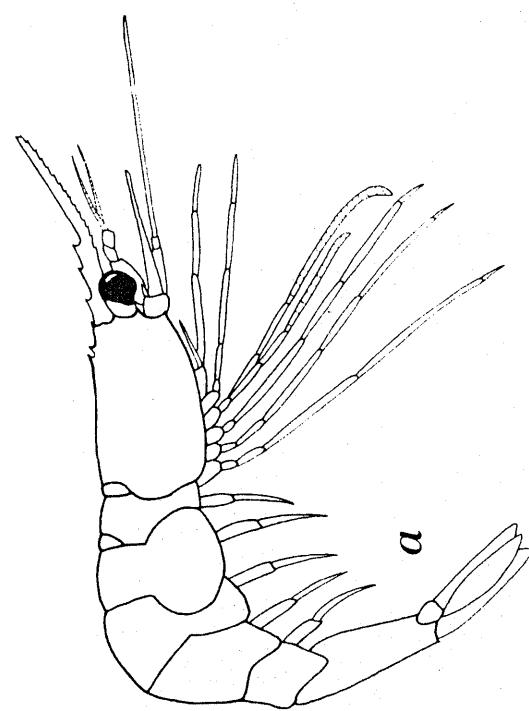
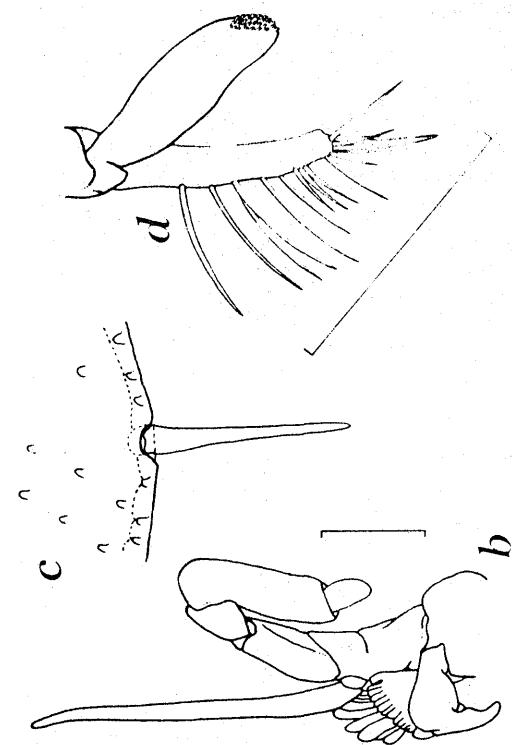
a. lateral view

(after A. Milne Edwards, 1883)

*Stylopandalus richardi*

- b. right second maxilliped (ovigerous female)
- c. posteromesial spine on third abdominal somite  
(ovigerous female)
- d. right appendix masculina and appendix interna,  
mesial aspect (male)

(after Chace, 1985)





**Family Crangonidae**

Key to genera and species  
[Based on Dardeau and Heard, 1983, and Chace, 1984]

1. Second pereopods subequal in length to other pereopods..... 2
- Second pereopods much shorter than other pereopods..... 3
2. (1) Carapace with 1 dorsal median spine..... *Crangon septemspinosa*  
Carapace with 2 to 4 dorsal median spines (sixth abdominal somite stout, expanded posterolaterally into prominent wing-like lobes or keels) .....  
..... *Metacrangon jacqueti agassizii*
3. (1) Eight branchiae on each side of body; apices of branchiae directed anteriorly (rostrum simple, not cleft apically, with 3 pairs of lateral teeth; median carina on carapace armed with 4 teeth; abdominal sterna unarmed) .....  
..... *Parapontocaris caribbaea*  
Six or seven branchiae on each side of body; apices of branchiae directed posteriorly ..... 4
4. (3) Rostrum armed with 1 or 2 pairs of lateral teeth in posterior half of length; first pereopod with rudimentary exopod; hepatic spines present .....  
..... *Pontophilus brevirostris*  
Rostrum without lateral teeth in posterior half; first pereopod without trace of exopod; hepatic spines absent ..... *Philocheras gorei*

*Crangon septemspinosa*

a. dorsal view (ovigerous female)

(after Williams, 1965a)

female:

b. carapace, lateral view

c. dorsal view

(after Crosnier and Forest, 1973)

*Metacrangon jacqueti agassizii*

female:

b. carapace, lateral view

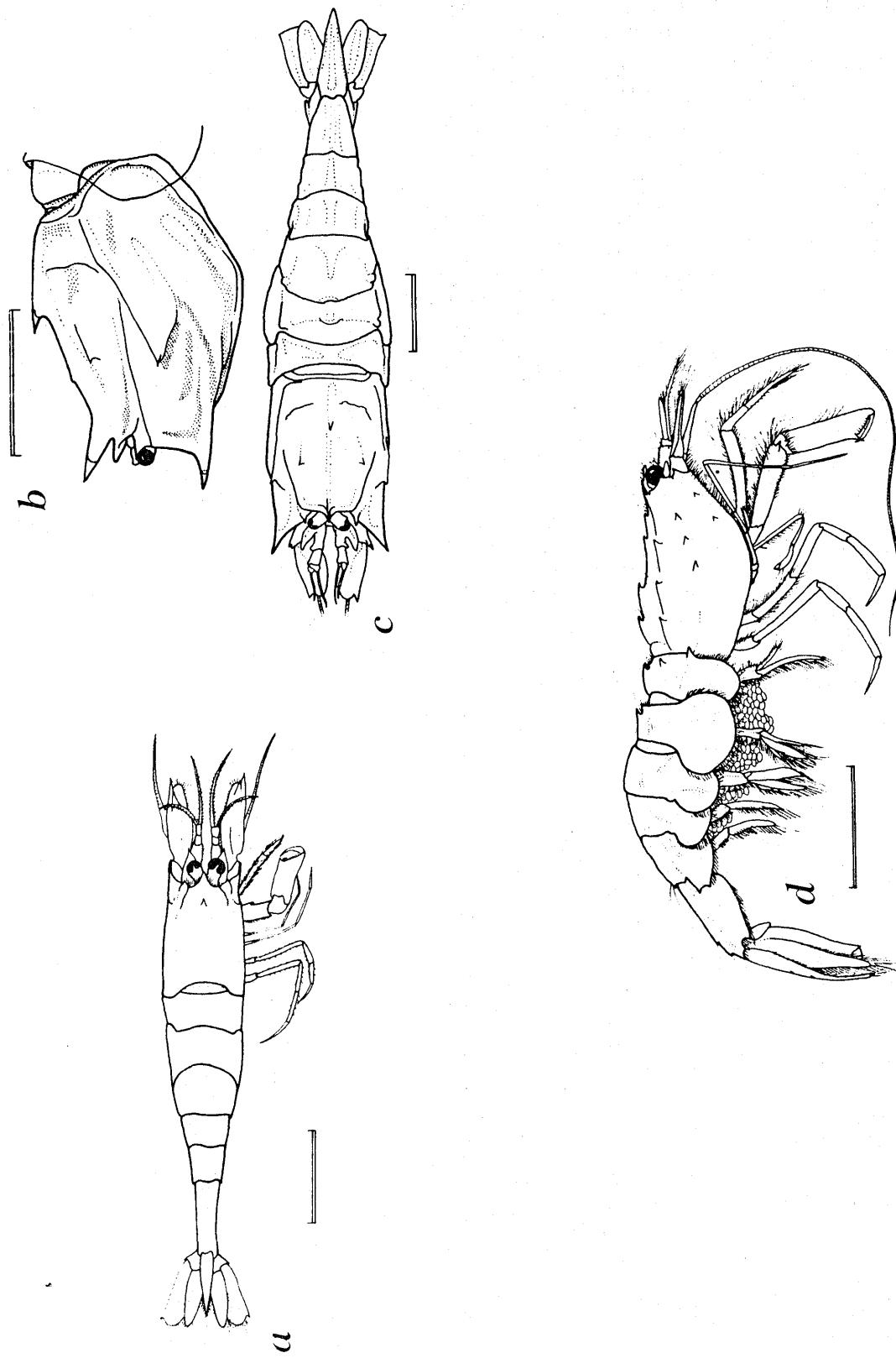
c. dorsal view

(after Crosnier and Forest, 1973)

*Parapontocaris caribaea*

d. lateral view (ovigerous female)

(after Dardieu and Heard, 1983)



*Pontophilus brevirostris*

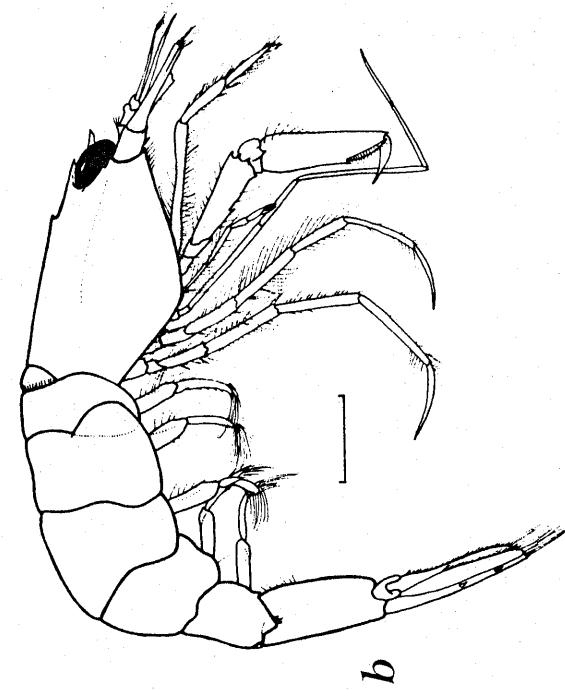
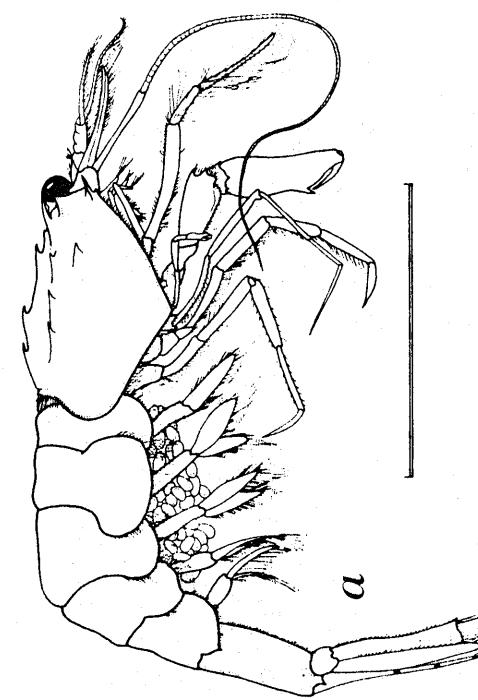
a. lateral view (ovigerous female)

(after Dardeau and Heard, 1983)

*Philoheras gorei*

b. lateral view (ovigerous female)

(after Dardeau and Heard, 1983)

*b**a*



**Family Glyphocrangonidae****Genus *Glyphocrangon* A. Milne Edwards, 1881**

## Key to species

[Adapted from Holthuis, 1971]

1. Anterior antennal carina formed of a row of tubercles; first abdominal somite with two transverse rows of tubercles between intermediate carinae ..... *G. spinicauda*  
Anterior antennal carina absent; first abdominal somite usually with only single transverse row of tubercles, viz., along posterior margin ..... 2
2. (1) Anterior intermediate carina not ending in spine; posterior antennal and posterior lateral carinae bearing several blunt tubercles or teeth; anterior of two teeth on anterior lateral carina behind pterygostomian spine reaching to or beyond orbital margin ..... *G. longleyi*  
Anterior intermediate carina ending in sharp spine; posterior antennal and posterior lateral carinae straight, without tubercles or teeth; anterior tooth of anterior lateral carina not reaching level of posterior margin of orbit ..... *G. haematonotus*

*Glyphocrangon spinicauda*

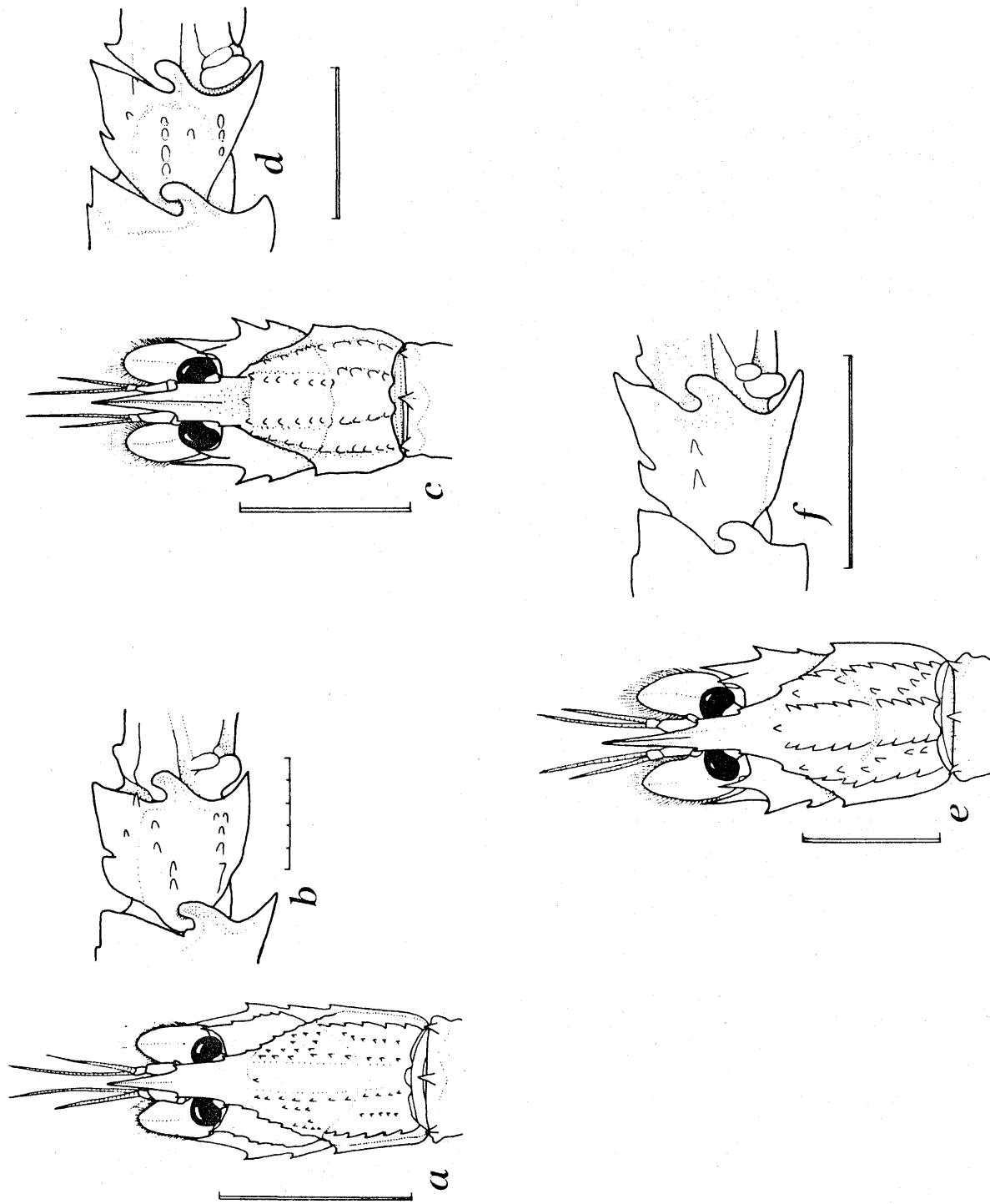
- a. anterior region, dorsal view
- b. sixth abdominal somite, lateral view  
(after Holthuis, 1971)
- c. anterior region, dorsal view
- d. sixth abdominal somite, lateral view  
(after Holthuis, 1971)

*Glyphocrangon longleyi*

- c. anterior region, dorsal view
- d. sixth abdominal somite, lateral view  
(after Holthuis, 1971)

*Glyphocrangon haematonotus*

- e. anterior region, dorsal view
- f. sixth abdominal somite, lateral view  
(after Holthuis, 1971)





**Infraorder Stenopodidea****Family Stenopodidae**

Key to genera and species

[Adapted from Burukovskii, 1983]

1. Body depressed; telson broad and lanceolate or retangular, terminating in three or five spines of equal size (sometimes without terminal spinule); endopod of uropod with one median dorsal crest ..... *Microprosthem semilaeve*  
Body compressed; telson elongated, tip terminating in two strong spines, sometimes with small spinule between them; endopod of uropod with two dorsal crests, median crest strong and inner one weaker with several dorsal hairs ..... 2
2. (1) Carapace and abdomen densely covered with uniformly distributed stout spines, sometimes arranged in longitudinal rows; spines hard and anteriorly directed; ischium of third maxilliped with outer spinules ..... *Stenopus*  
Abdomen without dorsal spines, sometimes with spinules near lateral margins of pleura; carapace with spines along posterior margin of cervical groove, often in parallel rows; spines erect, anteriorly directed, and pressed to surface of carapace; ischium of third maxilliped without outer spinules ..... *Odontozona libertae*

**Genus *Stenopus* Latreille, 1819**

Key to species

[Adapted from Chace, 1972]

Rostrum unarmed ventrally; third abdominal somite without shield shaped boss; spines on terga of 3 posterior abdominal somites not arranged in transverse rows; scaphocerite unarmed laterally for considerable distance proximal to distolateral tooth and with 2 or 3 rows of spinules arising from dorsal surfaces .. *S. hispidus*

Rostrum armed ventrally with 6 to 8 spines; third abdominal somite bearing lobate, shield-shaped boss on posteromesial part; spines on 3 posterior abdominal terga arranged in transverse rows; scaphocerite armed throughout distal two-thirds of lateral margin and without spinules on dorsal surface ..... *S. scutellatus*

*Stenopus hispidus*

a. lateral view

(after Limbaugh et al., 1961)

*Stenopus scutellatus*

b. lateral view

(after Limbaugh et al., 1961)

*Microprosthem semilaeve*

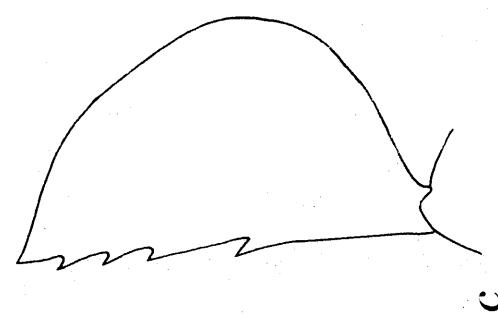
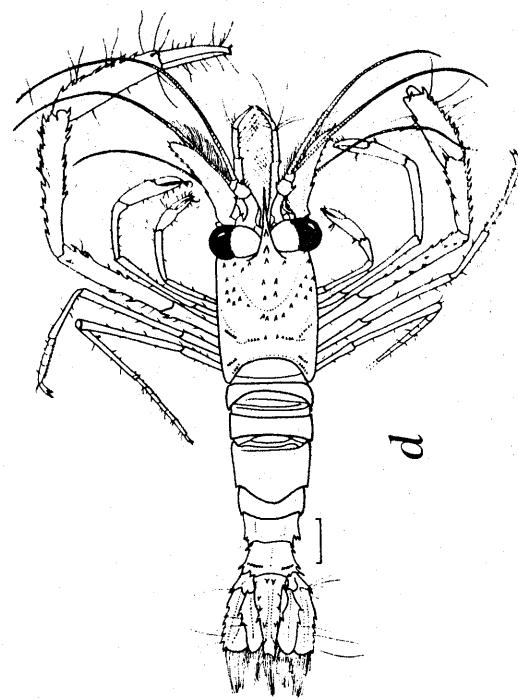
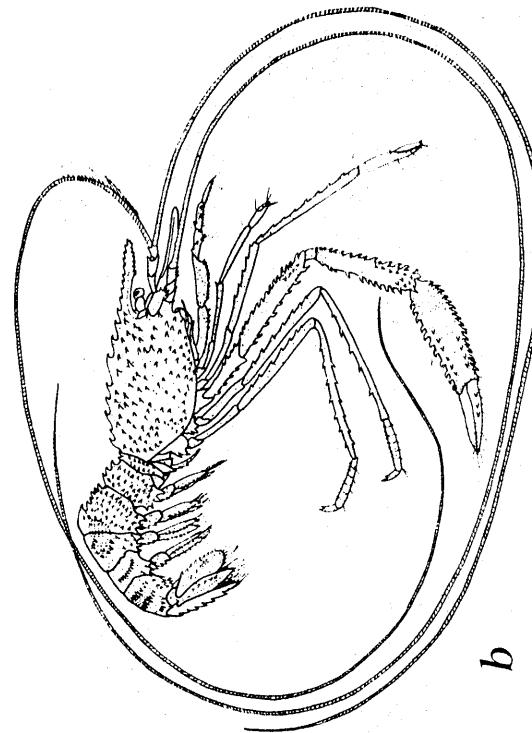
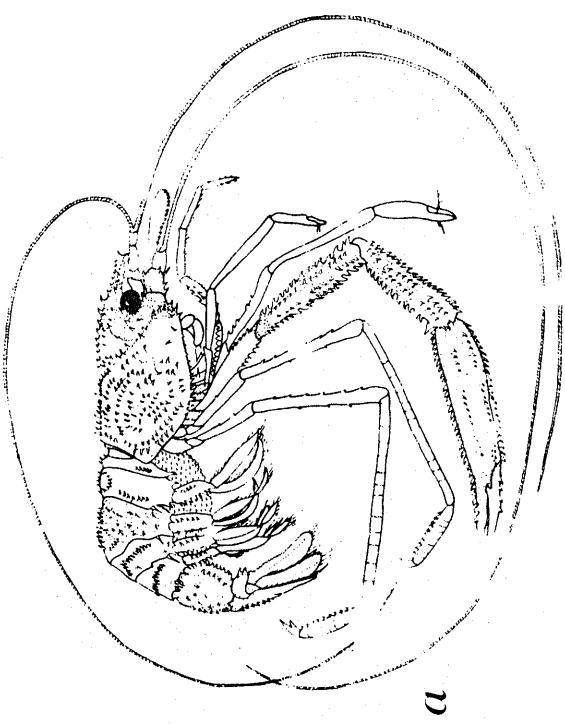
c. scaphocerite, dorsal view

(after Holthuis, 1946)

*Odontozona libertae*

d. dorsal view (male holotype)

(after Gore, 1981)





**Infraorder Astacidea****Family Nephropidae**

Key to genera and species  
[Based on Holthuis, 1974]

1. Eyes black, with pigment (carapace with longitudinal ridges behind cervical groove; series of lateral rostral spines extending backwards almost to cervical groove) ..... *Metanephrops binghami*  
Eyes white, lacking pigment..... 2
2. (l) Rostrum laterally compressed for larger part of its length, with dorsal and ventral but no lateral teeth; carapace with branchiostegal spine; body entirely covered by numerous closely placed and sharply pointed spinules; lateral margin of telson with 6 to 12 spines ..... *Acanthacaris caeca*  
Rostrum dorsoventrally depressed with lateral (and sometimes ventral) but without dorsal teeth; carapace without branchiostegal spine; body never uniformly covered with spinules, although granules may be present all over, or spinules may be placed on carapace; lateral margin of telson with at most 3 lateral spines; spines, if present, usually small and irregular ..... *Nephropsis aculeata*

*Metanephrops binghami*

a. dorsal view

(after Manning, 1978)

*Acanthacaris caeca*

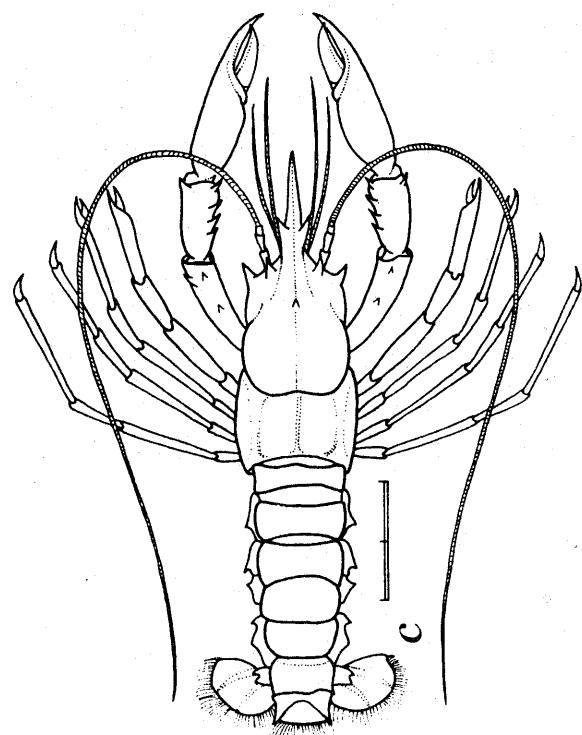
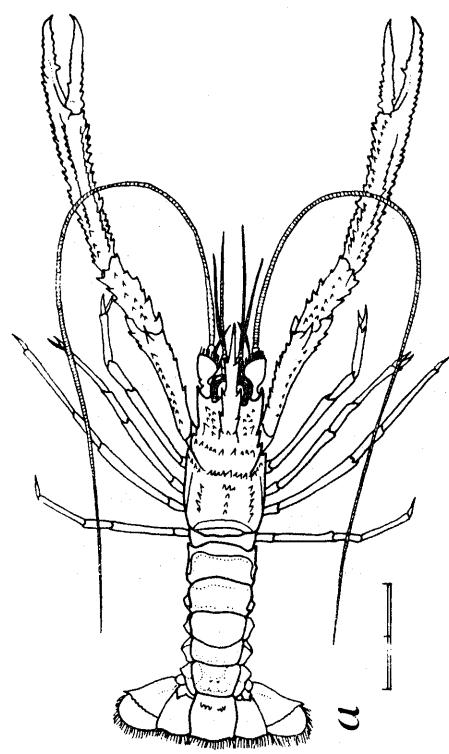
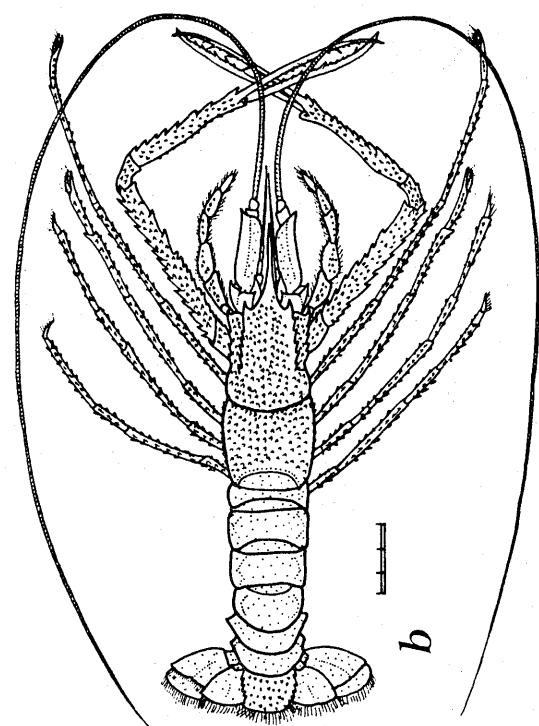
b. dorsal view

(after Manning, 1978)

*Nephropsis aculeata*

c. dorsal view

(after Manning, 1978)





**Infraorder Thalassinidea****Family Axiidae**

## Key to species

First through third pereopods with no epipod and podobranch; dactyli of third through fifth pereopods biungulate; rostrum triangular, margins unarmed .....  
..... *Coralaxius abelei*

First through third pereopods with epipod and podobranch; dactyli of third through fifth pereopods simple; rostrum triangular, margins dentate ..... *Axiopsis*

**Genus *Axiopsis* Borradaile, 1903**

## Key to genera and species

1. No middorsal keel at posterior border of carapace..... *A. serratifrons*  
Middorsal keel at posterior border of carapace..... 2
2. (1) Short middorsal trench present, extending from cervical groove; telson bearing median spine on posterior margin ..... *A. hirsutimana*  
Short middorsal trench absent; telson without median spine on posterior margin..... *A. oxypleura*

*Axiopsis serratifrons*

- a. anterior region of carapace, dorsal view  
(male)
  - b. major cheliped (female)
  - c. third and fourth abdominal pleura,  
lateral view (male)
- (after De Man, 1925)

*Axiopsis hirsutimana*

- a. anterior region of carapace, dorsal view  
(male)
- b. major cheliped (female)
- c. third and fourth abdominal pleura,  
lateral view (male)
- d. anterior region, dorsal view
- e. posterior margin of carapace and first three  
abdominal somites, lateral view
- f. telson and uropods

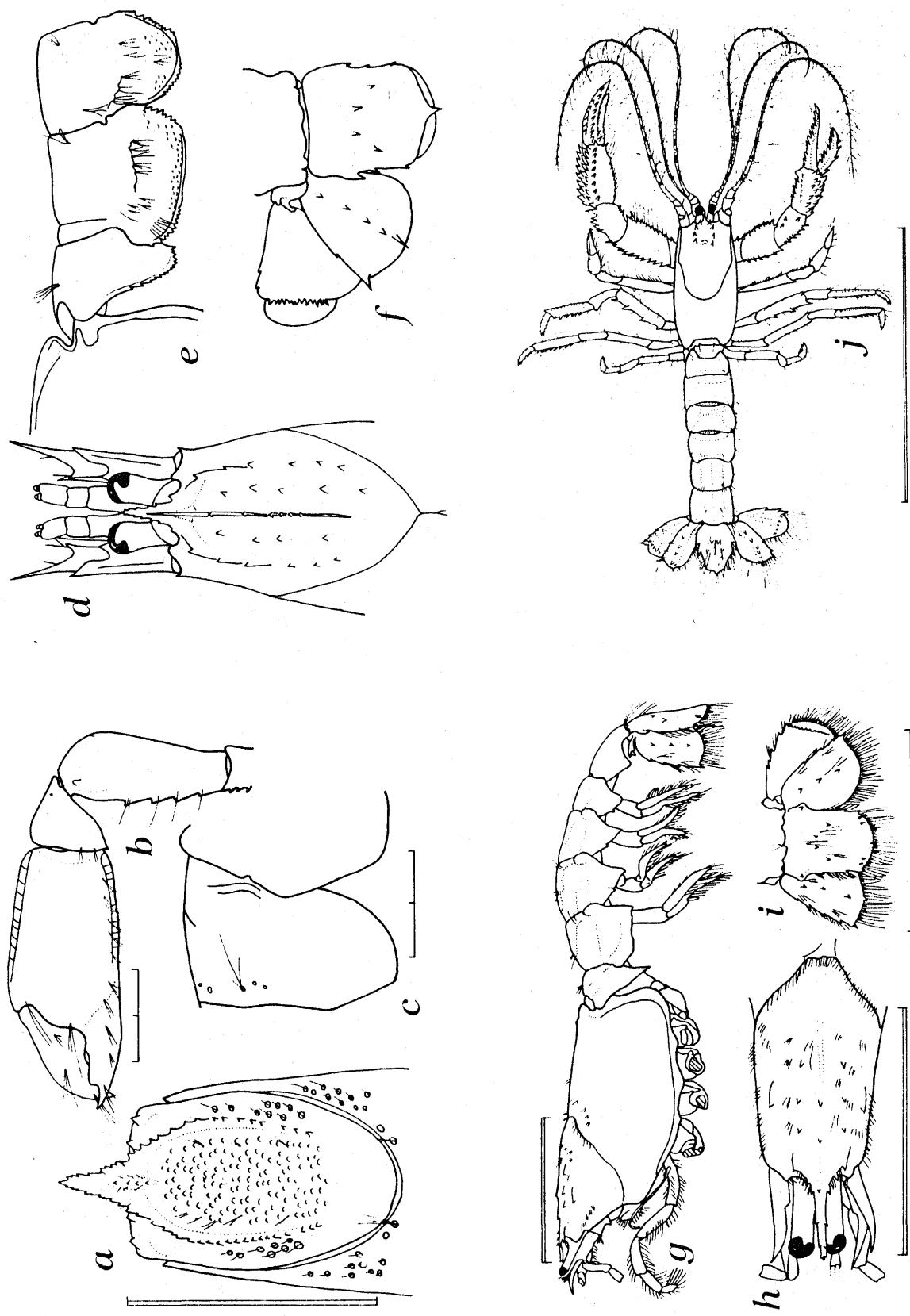
(after Boesch and Smally, 1972)

*Axiopsis oxypleura*

- male:
- g. lateral view
  - h. anterior region, dorsal view
  - i. telson and uropods
- (after Williams, 1974c)

*Coralaxius abelei*

- j. dorsal view
- (after Kensley and Gore, 1981)





**Family Callianassidae**

## Key to genera and species

[Adapted from de Saint Laurent and Le Loeuff, 1979]

1. Dorsal surface of carapace with raised oval area; third maxilliped always lacking exopod or with exopod vestigial; uropodal exopod with antero-dorsal lobe; fifth pereopod chelate ..... 2  
Dorsal surface of carapace without raised oval area; third maxilliped with or without exopod; fifth pereopod subchelate ..... *Gourretia latispina*
2. (1) Propodus of fourth pereopod without disto-ventral prominence; pleopods 1 and 2 always reduced or absent in male; pleopods 3 to 5 with appendix interna projecting beyond mesial border of endopod; epipod of first maxilliped only slightly dilated ventrally ..... *Callianassa*  
Propodus of fourth pereopod almost always with disto-ventral prominence; pleopods 1 and 2 present in male; pleopods 3 to 5 with appendix interna recessed in endopod and not exceeding, or only slightly exceeding, mesial border; epipod of third maxilliped with acute anterior lobe; propodus of third maxilliped nearly always greatly dilated ventrally ..... *Callichirus*

Genus *Callianassa* Leach, 1814

## Key to species

[Adapted from Biffar, 1971a, with modification]

1. Front with lateral spinous projections..... 2
- Front lacking lateral spinous projections..... 5
2. (1) Third maxilliped lacking strong spinous crest on mesial surface of ischium, series of small separate denticles; rostrum short, 0.25-0.33 times length of eyestalks (posterior margin of telson concave) ..... *C. guassutinga*  
Strong spinous crest present on third maxilliped; rostrum usually more than 0.33 times length of eyestalks (occasionally shorter in *C. rathbunae*) ..... 3
3. (2) Endopod of uropod elongate oval, twice as long as wide; telson widest midlaterally, generally rounded in outline, posterior margin convex or straight (length of eyestalks only 1.2-1.7 times width) ..... *C. acanthochirus*  
Endopod of uropod rhomboid or subtriangular; telson widest in anterior third, trapezoidal ..... 4
4. (3) Posterior margin of telson with triangular median projection (rostrum almost as long as eyestalks; endopod of uropod subtriangular) ..... *C. longiventris*  
Posterior margin of telson lacking median projection (pigmented area of eyestalk lateral, small, covering about 0.1 of exposed dorsal surface of eyestalk, mediadistal projection acute or rounded, curving laterally; upper exopodal plate almost as long as lower) ..... *C. rathbunae*
5. (1) Rostrum triangular, rounded or acute, extending less than 0.25 length of eyestalks.. 6  
Rostrum elongate triangular, spinous or flattened dorsoventrally, acute, extending more than 0.25 length of eyestalks ..... 10
6. (5) Antennular peduncle extending beyond tip of antennal peduncle..... 7  
Antennular peduncle not extending beyond tip of antennal peduncle..... 8
7. (6) Posterior border of telson straight, with acute median projection; distomedial projection of eyestalks elongate, slender, curving laterally; length of third antennular segment five times length of second segment ..... *C. atlantica*  
Posterior border of telson concave; tip of eyestalks with short rounded projection; length of third antennular segment three times length of second segment ..... *C. fragilis*

8. (6) Propodus of third maxilliped less than two times width of dactylus.....  
*C. quadracuta*
- Propodus of third maxilliped about four times width of dactylus..... 9
9. (8) Lateral margin of telson trilobed.....  
*C. trilobata*
- Lateral margin of telson more or less smoothly rounded (posterior margin of telson inconspicuously convex or concave; distal margin of endopod of uropod quadrate; propodus of third pereopod short, extending posteriorly only as far as margin of carpus, length 1.5 times width) .....  
*C. branneri*
10. (5) Antennular peduncle extending beyond tip of antennal peduncle...  
*C. jamaicense*
- Antennular peduncle not extending beyond tip of antennal peduncle..... 11
11. (10) Ischium and merus of third maxilliped wide, combined length 1.1-1.4 times greatest width .....  
*C. biformis*
- Ischium and merus of third maxilliped narrow, combined length more than 2.0 times greatest width .....  
*C. marginata*

### Genus *Callichirus* Stimpson, 1866

Key to species  
[Adapted from Biffar, 1971a]

- Eyestalks shorter than first segment of antennular peduncle, terminating in short, subtriangular distal projections; telson widest midlaterally .....  
*C. major*
- Eyestalks extending beyond first antennular segment, distomedial projection of eyestalks elongate, curving laterally; telson widest in posterior third .....  
*C. islagrande*

Key to large chelipeds of species of family Callianassidae (except for *C. biformis*)  
[Adapted from Biffar, 1971a]

1. Superior and inferior margins of carpus ending distally in two acute prominences; superior margin of palm ending in acute prominence distally .....  
*C. quadracuta*
- Carpus otherwise, no second prominence on superior and inferior margins, distal margins usually rounded; margin of palm rounded distally ..... 2
2. (1) Ischium with midinferior projection, remainder of margin denticulate..... 3
- Ischium lacking midinferior projection, inferior margin serrate, denticulate, spinous, or entire ..... 4

3. (2) Projection on ischium denticulate, approximately as long as remainder of segment's width; inferior margin of merus inconspicuously serrate, without elongate projection ..... *Callichirus islagrande* (male)
- Projection not denticulate, length approximately 0.2 times remainder of segment's width; merus with proximal inferior bifurcate projection, remainder of margin with several strong denticles ..... *C. jamaicense*
4. (2) Ischium with distinct inferior spines..... 5
- Ischium lacking distinct inferior spines..... 8
5. (4) Merus and palm with two or three spines along superior margin ..... *C. acanthochirus*
- Merus and palm lacking superior spines..... 6
6. (5) Inferior margin of merus entire..... *C. marginata*
- Inferior margin of merus spinous or serrate..... 7
7. (6) Merus with 3-5 spines on proximal half of inferior margin, remainder of margin denticulate; ischium with numerous (7-9) spines on inferior margin; cutting edge of dactylus entire ..... *C. longiventris*
- Merus with 7-12 spines plus acute serrations; ischium with 3-4 spines distally, acute serrations proximally; cutting edge of dactylus with median quadrate notch (male) or entire (female) ..... *C. rathbunae*
8. (4) Inferior margin of merus entire..... 9
- Inferior margin of merus serrate, spinous, or with some sort of proximal inferior projection ..... 10
9. (8) Propodal finger with acute triangular tooth proximally; carpus less than 1.7 times length of palm ..... *Callichirus major* (female)
- Propodal finger serrate but lacking well-developed tooth; carpus more than 1.7 times length of palm ..... *Callichirus islagrande* (female)
10. (8) Proximal inferior corner of merus with spinous or robust spine like projection.... 11
- Proximal inferior projection, if present, quadrate or forming hook, not spinelike.. 12
11. (10) Lateral surface of palm with 2-3 spines just proximal to base of propodal finger; projection on merus strong, bifurcate ..... *C. guassutinga*
- Surface of palm lacking spines; distally curving spinous projection on merus, remainder of margin weakly serrate ..... *Gourretia latispina*

12. (10) Merus with broad, well-developed, proximal inferior hook, distal margin of hook concave, tip acute or subacute, remainder of margin weakly serrate ..... 13  
Merus lacking hook, inferior margin serrate, spinous, or with quadrate proximal inferior projection ..... 15
13. (12) Propodal notch extending proximally into palm; cutting edge of dactylus with three strong teeth; length of carpus less than 0.75 times length of palm .....  
..... *C. fragilis* (male)  
Propodal notch extending little or not at all into palm; dactylus lacking strong dentition; length of carpus greater than 0.75 times length of palm ..... 14
14. (13) Proximal inferior margin of carpus broadly rounded, extending proximally beyond level of superior articulation with merus; cutting edge of propodal finger serrate; proximal superior margin of merus elevated, denticulate, margin more or less straight; total length of carpus, palm, and dactylus in adults less than 15 mm .....  
..... *C. fragilis* (female)  
Proximal inferior margin of carpus rounded, not extending proximally beyond level of articulation; propodal finger serrate in proximal third only; superior margin of merus rounded, highest centrally; total length of carpus, palm, and dactylus in adults more than 20 mm ..... *C. atlantica*
15. (12) Merus with proximal inferior quadrate (may appear triangular) projection, inferior margin including projection serrate (carpus much --more than 1.25--longer than palm; propodal notch extending proximally into palm; dactylus hooked, with single rounded bifid tooth; propodal finger heavy, short, blunt at tip) .....  
..... *Callichirus major* (male)  
Merus without distinct projection, inferior margin either convex and serrate or forming serrate keel ..... 16
16. (15) Carpus 0.33-0.67 times length of palm; palm subquadrate; dactylus heavy, with 2-3 strong teeth on cutting edge, acute at tip ..... *C. branneri*  
Carpus 0.65-0.95 times length of palm; palm distinctly longer than wide; dactylus with two truncate teeth medially (male) or lacking strong dentition (female) .....  
..... *C. trilobata*

*Callianassa guassutinga*

- a. anterior region, dorsal view
- b. third maxilliped
- c. telson and left uropods
- (after Biffar, 1971a)
- d. anterior region, dorsal view
- e. third maxilliped
- f. telson and right uropods

*Callianassa acanthochirus*

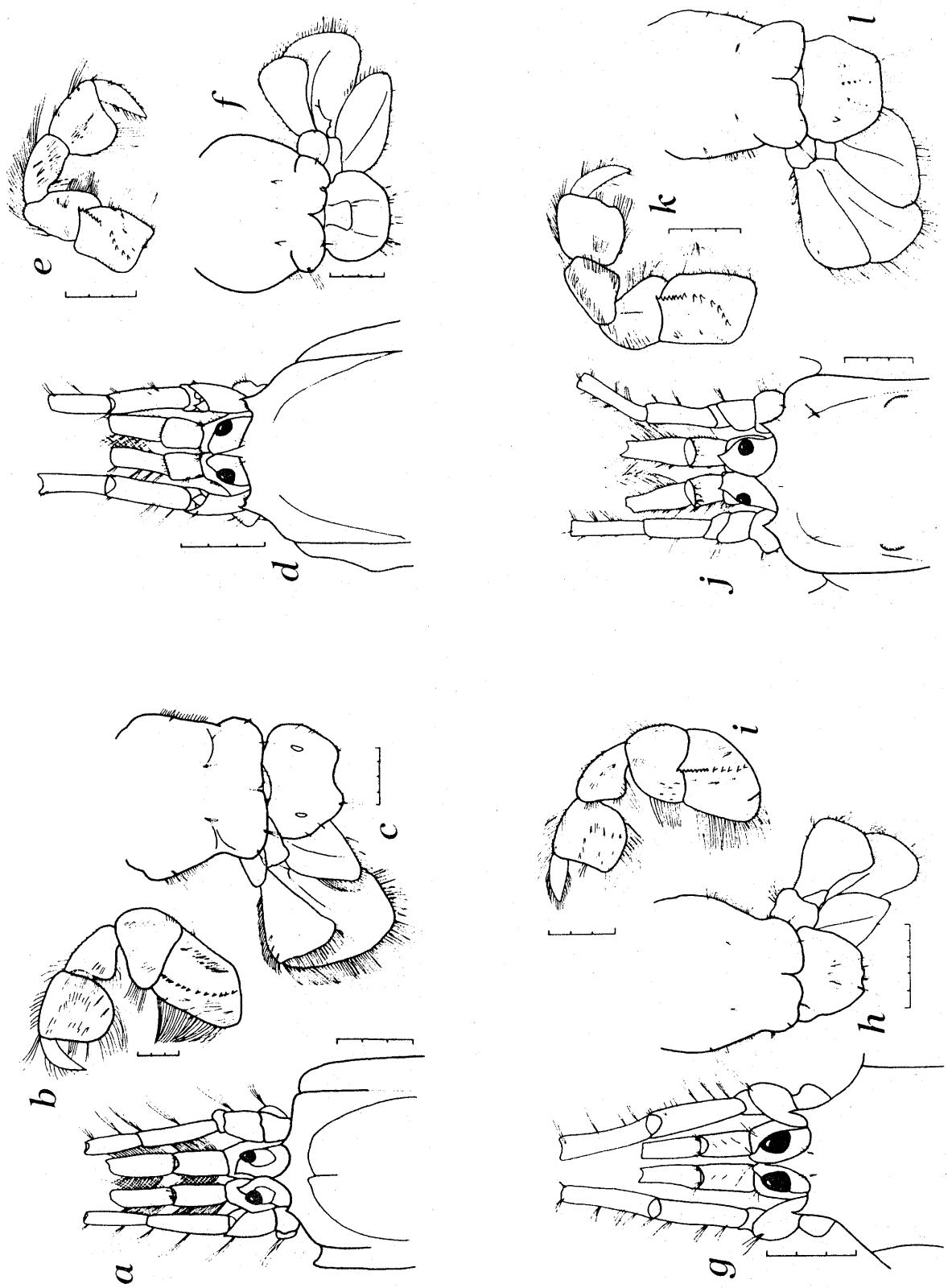
(after Biffar, 1971a)

*Callianassa longiventris*

- g. anterior region, dorsal view
- h. telson and right uropods
- i. third maxilliped
- (after Biffar, 1971a)
- j. anterior region, dorsal view
- k. third maxilliped
- l. telson and left uropods

*Callianassa rathbunae*

(after Biffar, 1971a)



*Callianassa atlantica*

male:

- a. anterior region, dorsal view
- b. major (right) cheliped
- c. telson and left uropods

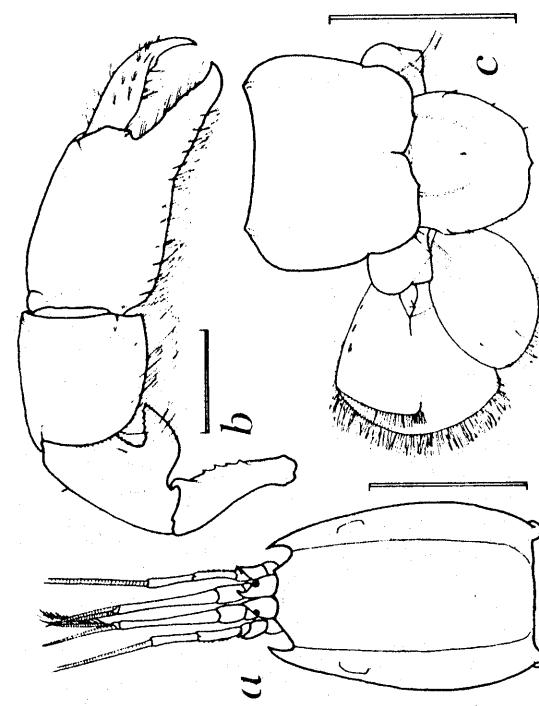
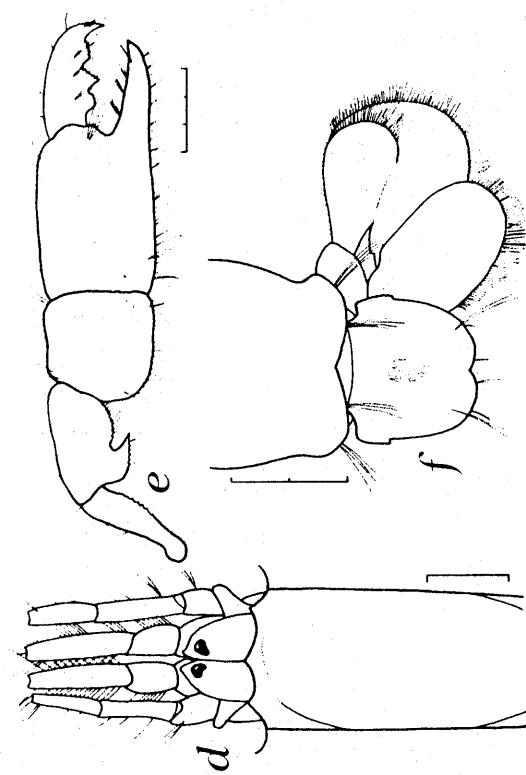
(after Williams, 1984)

*Callianassa fragilis*

d. anterior region, dorsal view

- e. major cheliped (male)
- f. telson and right uropods

(after Biffar, 1971a)



*Callianassa quadracuta*

- a. anterior region, dorsal view
- b. third maxilliped
- c. male second pleopod  
(after Biffar, 1971a)
- d. anterior region, dorsal view
- e. third maxilliped
- f. telson and right uropods  
(after Biffar, 1971a)

*Callianassa trilobata*

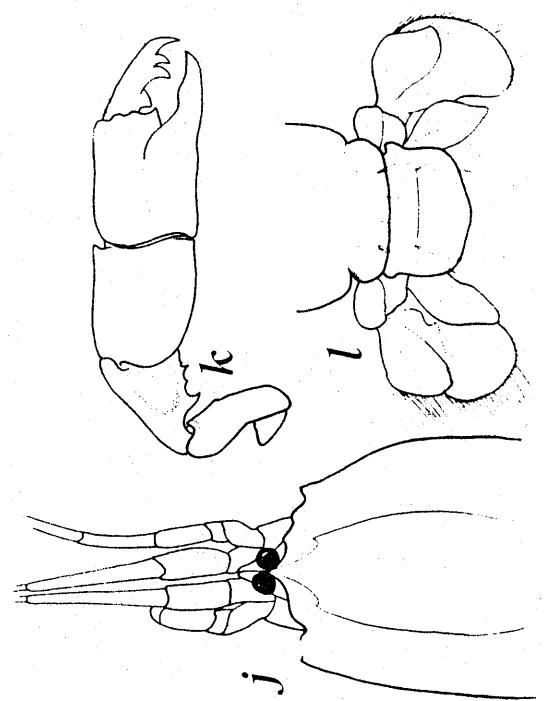
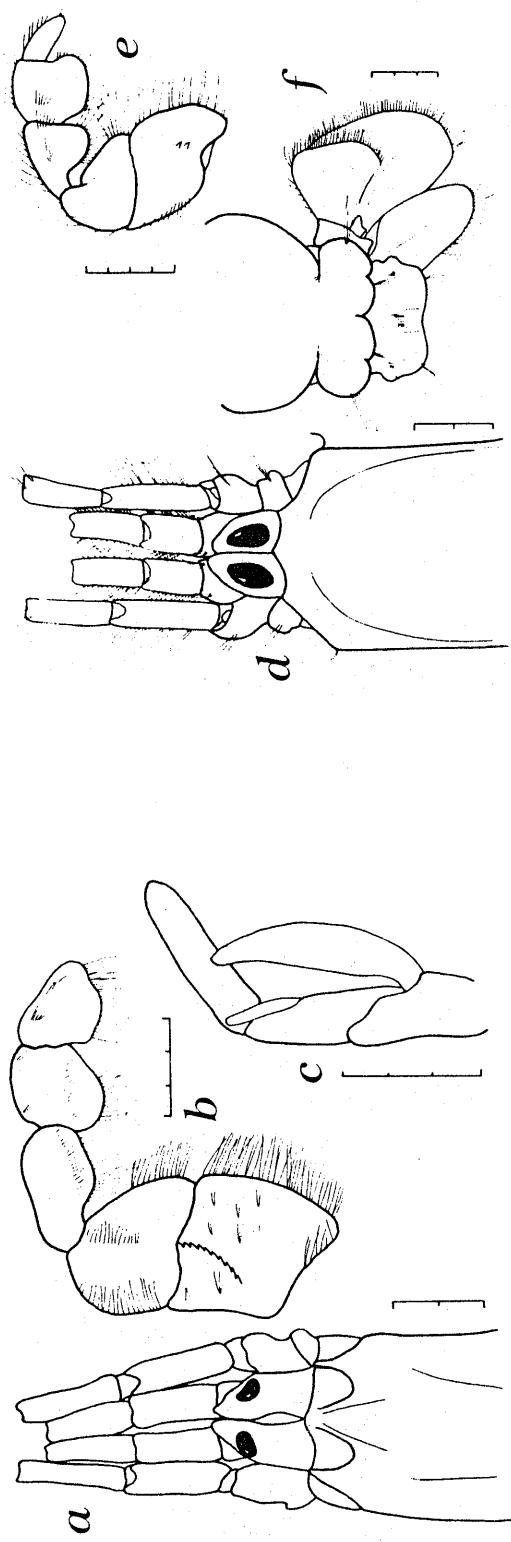
- d. anterior region, dorsal view
- e. third maxilliped
- f. telson and right uropods  
(after Biffar, 1971a)

*Callianassa branneri*

- male:
  - g. anterior region, dorsal view
  - h. third maxilliped
  - i. telson and right uropods  
(after Biffar, 1971a)
- j. anterior region, dorsal view
- k. major cheliped
- l. telson and uropods  
(after Schmitt, 1935b)

*Callianassa jamaicense*

- j. anterior region, dorsal view
- k. major cheliped
- l. telson and uropods  
(after Schmitt, 1935b)



*Callianassa biformis*

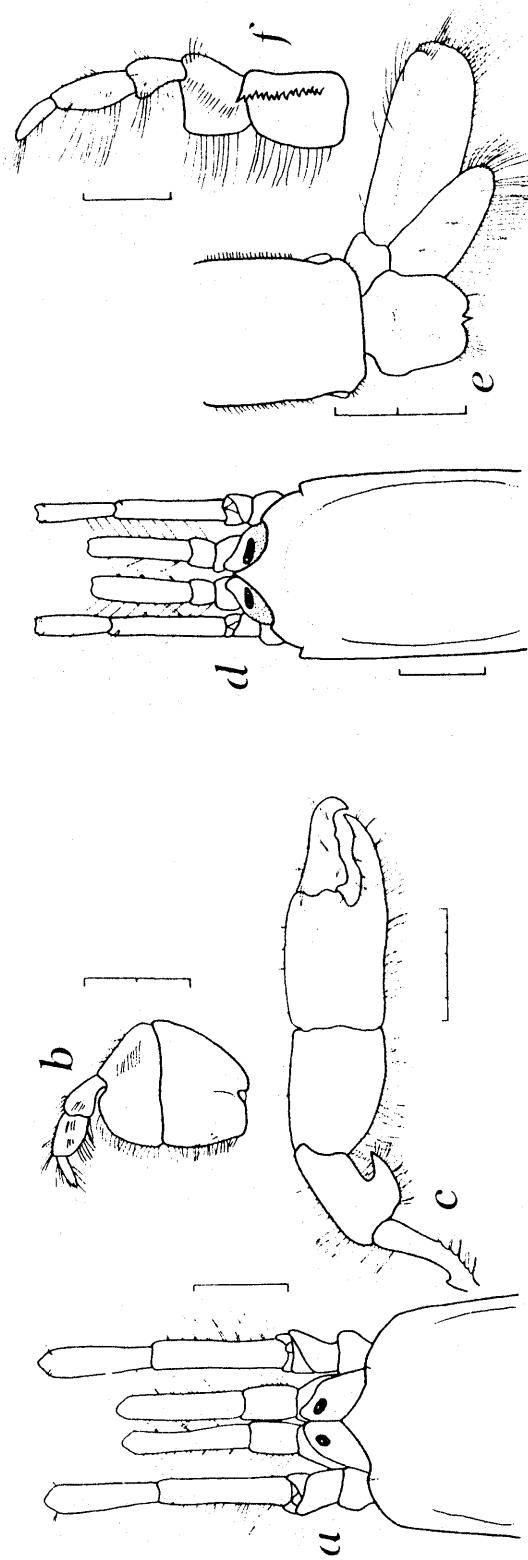
- a. anterior region, dorsal view
- b. third maxilliped
- c. major cheliped (male)

(after Biffar, 1971b)

*Callianassa marginata*

- d. anterior region, dorsal view
- e. telson and right uropods
- f. third maxilliped

(after Biffar, 1971b)



*Callichirus major*

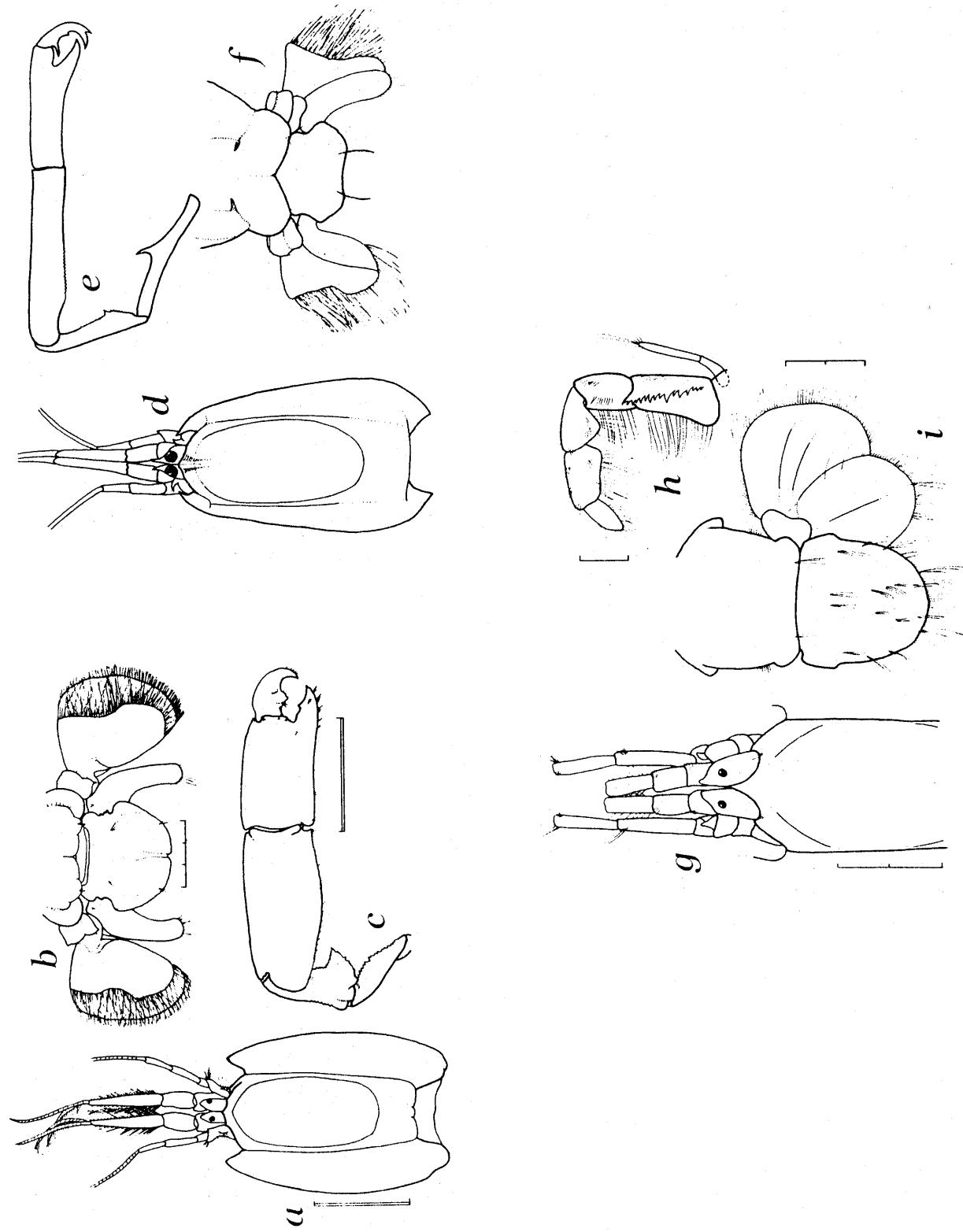
- a. anterior region, dorsal view
  - b. telson and uropods
  - c. major (right) cheliped
- (after Williams, 1984)

*Callichirus islagrande*

- male:
  - d. anterior region, dorsal view
  - e. major cheliped
  - f. telson and uropods
- (after Schmitt, 1935b)

*Gourretia latispina*

- g. anterior region, dorsal view
  - h. third maxilliped
  - i. telson and right uropods
- (after Biffar, 1971b)





**Family Upogebiidae****Genus *Upogebia* Leach, 1814**

Key to species

[Adapted from Schmitt, 1935a]

Anterolateral border of carapace armed with small spine on level with eyes;  
immovable finger of chela shorter than movable finger ..... *U. affinis*

Anterolateral border of carapace not armed with spine in line with eyestalks;  
immovable finger of chela longer than movable finger ..... *U. operculata*

*Upogebia affinis*

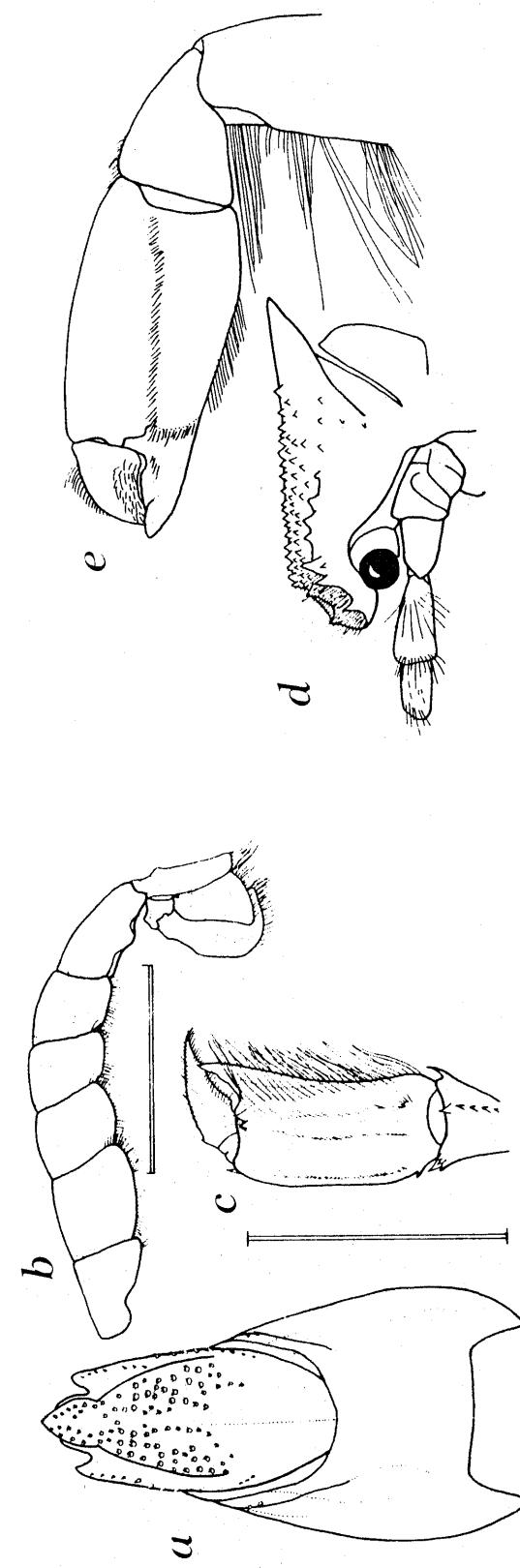
female:

- a. carapace, dorsal view
- b. abdomen, lateral view
- c. chela and carpus, right external view  
(after Williams, 1984)

*Upogebia operculata*

d. anterior part of carapace, lateral view

- e. chela and carpus, left external view  
(after Schmitt, 1935a)





**Infraorder Palinura****Family Palinuridae**

Key to genera and species  
[Adapted from Manning, 1978]

First pair of pereopods enlarged in males, ending in apparent (false) pincers, with wide, red cross bands; carapace ornamented with strong, scale-like sculpture; tail brick red, with 4 or 5 conspicuous transverse grooves on each segment and with yellowish spots and stripes ..... *Justitia longimanus*

First pair of pereopods not enlarged, with no trace of pincer, without cross bands; carapace without scale-like sculpture; tail variously colored, smooth or with at most 1 transverse groove (frontal horns over eyes very sharp; antennular flagella longer than peduncle) ..... *Panulirus*

**Genus *Panulirus* White, 1847**

## Key to species

1. Each abdominal somite smooth, without complete transverse groove (antennular plate bearing 2 pairs of strong spines) ..... *P. laevicauda*  
Each abdominal somite with complete transverse groove..... 2
2. (1) Antennular plate bearing 2 pairs of strong spines; tail with 4 conspicuous yellow spots ..... *P. argus*  
Antennular plate bearing one pair of strong spines; tail without 4 conspicuous yellow spots ..... *P. guttatus*

*Panulirus laevicauda*

a. dorsal view

(after Manning, 1978)

*Panulirus argus*

b. lateral view

(after Williams, 1965a)

*Panulirus guttatus*

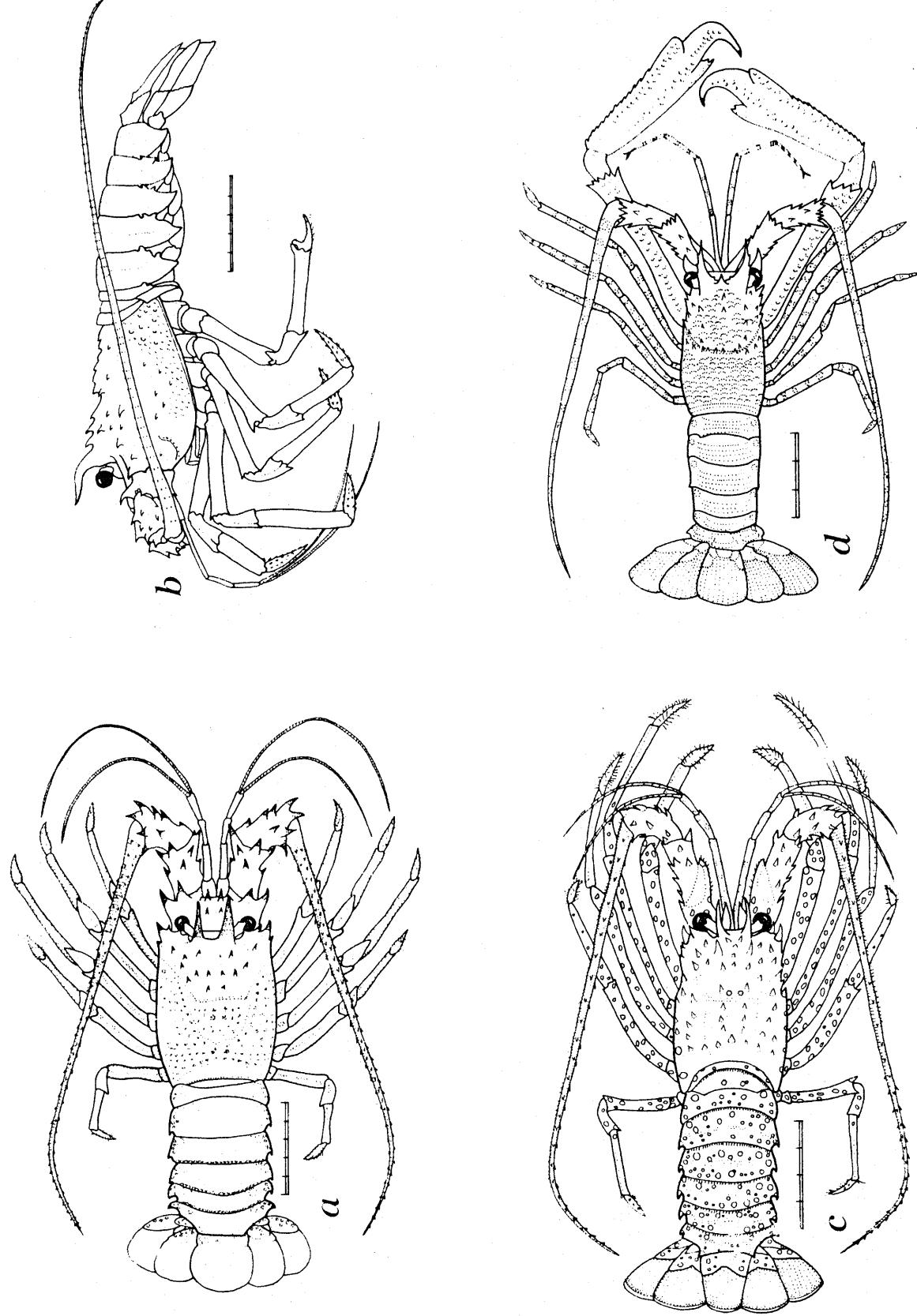
c. dorsal view

(after Manning, 1978)

*Justitia longimanus*

d. dorsal view

(after Manning, 1978)



**Family Scyllaridae**

Key to genera and species  
[Adapted from Manning, 1978]

1. Carapace much broader than long, its sides very thin and cut into very large, flattened, triangular projections ..... *Parribacus antarcticus*  
Carapace usually longer than broad, its sides not very thin, either smooth or denticulate ..... 2
2. (1) Front and usually lateral edges of antennae smooth or finely denticulate, not cut into large triangular projections; size large ..... *Scyllarides*  
Front and lateral edges of antennae cut into distinct teeth; size small..... *Scyllarus*

**Genus *Scyllarides* Gill, 1898**

Key to species  
[Adapted from Lyons, 1970]

Gastric, cardiac, and branchial regions of carapace elevated, distinct; pregastric and gastric teeth prominent in profile; second through fourth abdominal somites with median, node-like carina ..... *S. nodifer*

Gastric, cardiac, and branchial regions of carapace low, not strongly defined; pregastric and gastric teeth not obvious in profile; second through fourth abdominal somites low, rounded, without distinct carina ..... *S. aequinoctialis*

**Genus *Scyllarus* Fabricius, 1775**

Key to species  
[Adapted from Lyons, 1970]

1. Gastric and all lateral prominences on carapace sharp; second segment of antennular peduncle cylindrical; pleura of fourth abdominal somite sharply rectangular or acute laterally ..... *S. depressus*

Prominences on carapace blunt; second segment of antennular peduncle flattened superiorly; pleura of fourth abdominal somite rounded laterally ..... 2

2. (1) Pregastric tooth of carapace nearly always bilobed, incised; first to fourth abdominal somites with deep, narrow median notch in posterior margin ..... *S. americanus*

Pregastric tooth of carapace rounded, entire; first to fourth abdominal somites with very shallow, broad median notch in posterior margin ..... *S. chacei*

*Scyllarides nodifer*

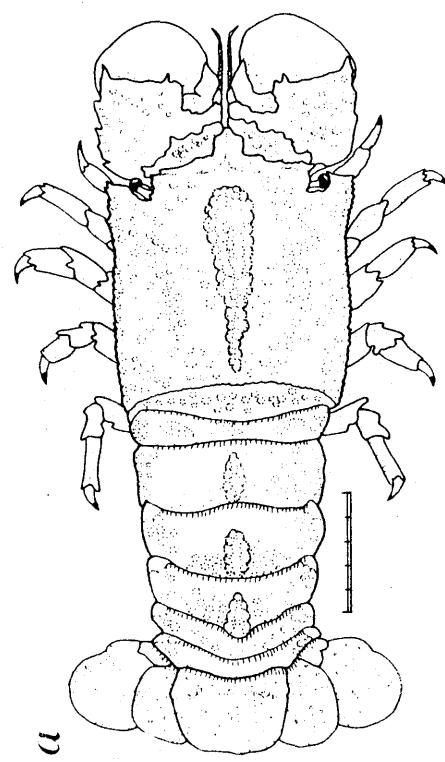
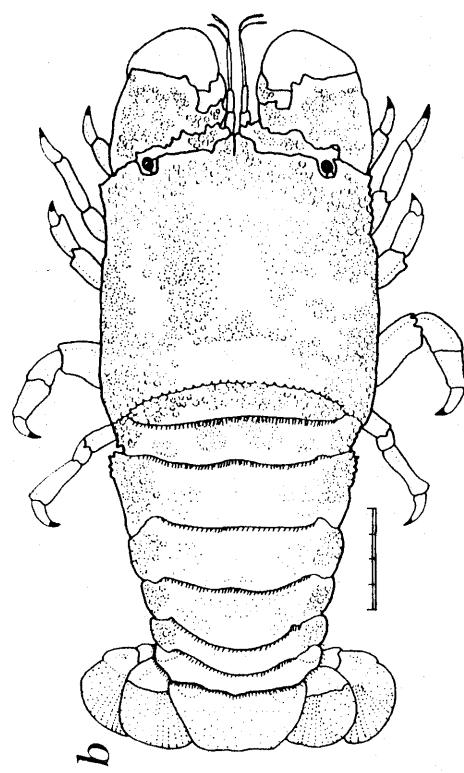
a. dorsal view

(after Manning, 1978)

*Scyllarides aequinoctialis*

b. dorsal view

(after Manning, 1978)



*Scyllarus depressus*

a. dorsal view

(after Felder, 1973)

*Scyllarus americanus*

b. dorsal view

(after Williams, 1965a)

*Scyllarus chacei*

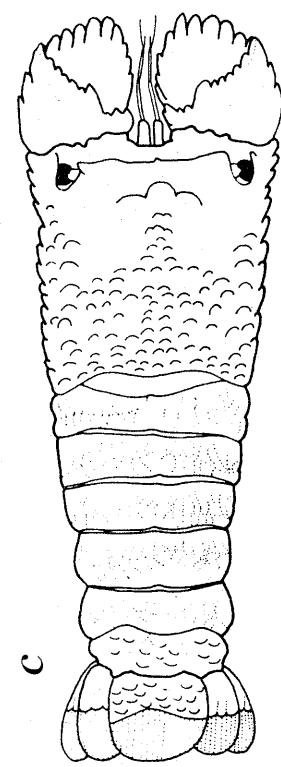
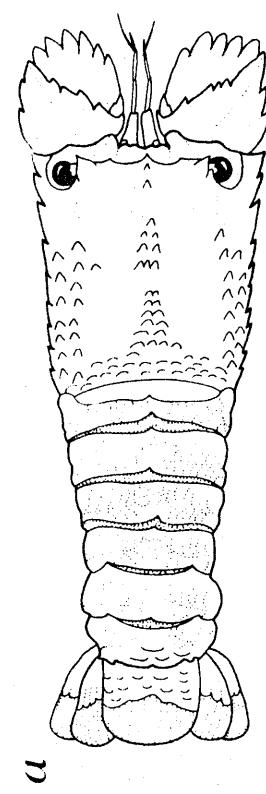
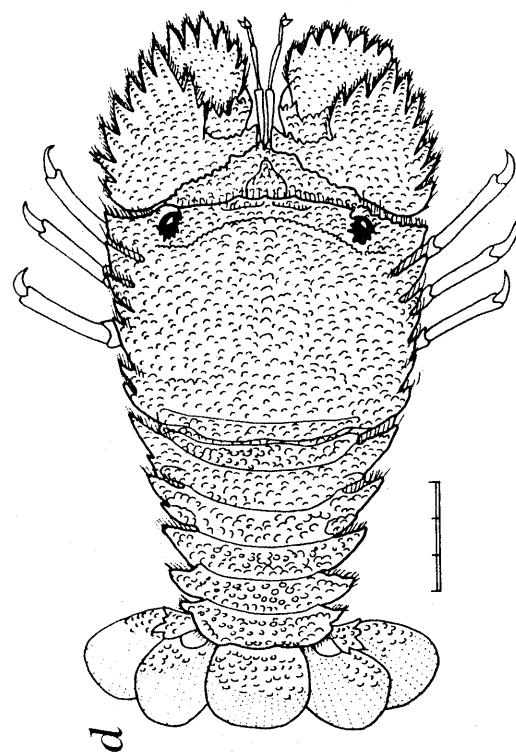
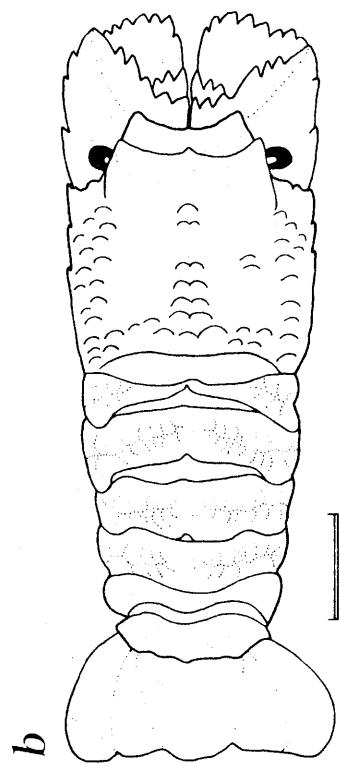
c. dorsal view

(after Felder, 1973)

*Parribacus antarcticus*

d. dorsal view

(after Manning, 1978)





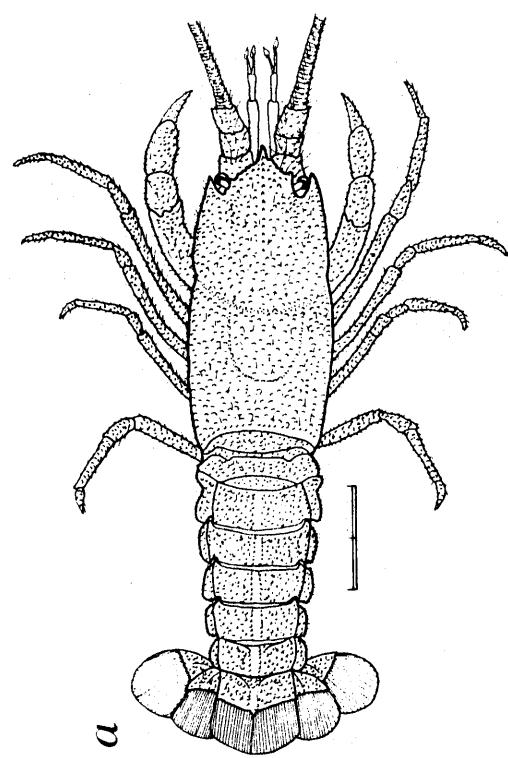
**Family Synaxiidae****Genus *Palinurellus* Von Martens, 1881**

Carapace entirely covered with small, rounded nodules and short hairs, but without enlarged spines; small triangular rostrum present between eyes; antennae shorter than carapace, antennular flagella shorter than antennular peduncles; pereopods without true pincers, first pair not longer than, but at least twice as thick as, second [from Manning, 1978] ..... *P. gundlachi*

*Palinurellus gundlachi*

a. dorsal view

(after Manning, 1978)





**Infraorder Anomura****Family Coenobitidae**

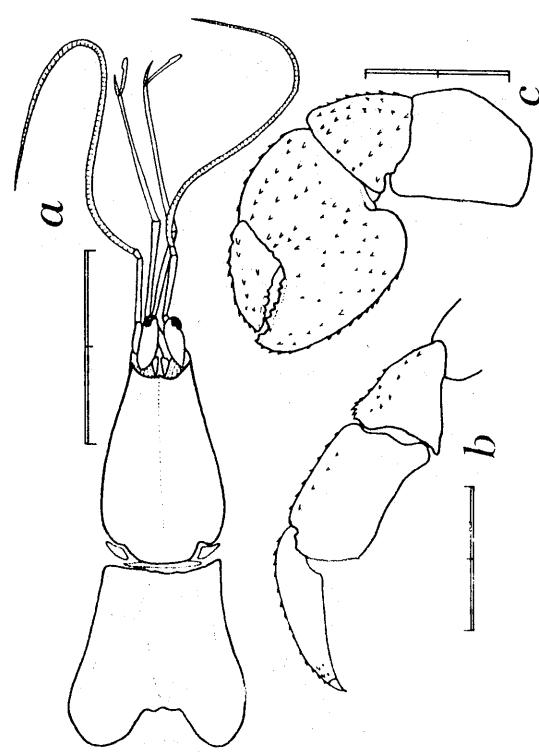
**Genus *Coenobita*** Latreille, 1826  
[Adapted from Chace and Hobbs, 1969]

Eyestalks flattened on mesial surface; antennular peduncle five times as long as eyestalks, flagellum blunt tipped; antennal peduncle originating below eyestalk; chelipeds unequal, left much larger than right, studded with closely appressed, dark-tipped spines; third left pereopod (second walking leg) with propodus and dactylus very broad, flattened, and smooth, with inferior margins rather sharp and obscurely serrate ..... *C. clypeatus*

*Coenobita clypeatus*

- a. anterior region, dorsal view
- b. second left walking leg
- c. left cheliped

(after Provenzano, 1959)



## Family Diogenidae

### Key to genera and species

[Adapted from Provenzano, 1959, with additions]

1. Abdomen secondarily straightened for housing in rock cavities or sponges; chelae and distal segments of walking legs forming opercular face ..... *Cancellus*  
 Abdomen coiled for housing in gastropod shells; chelae and distal segments of walking legs not forming opercular face ..... 2
2. (1) Paired appendages present on first two abdominal somites of male and on first somite only of female ..... *Paguristes*  
 No paired appendages on anterior abdominal somites of either sex ..... 3
3. (2) Chelipeds similar and subequal; fingers moving horizontally ..... 4  
 Chelipeds dissimilar and unequal; fingers moving obliquely or nearly vertically ... 5
4. (3) Finger tips spooned; antennal flagellum long and not hairy ..... *Clibanarius*  
 Finger tips acuminate; antennal flagellum short and very hairy ..... *Isocheles wurdemanni*
5. (3) Chelipeds not markedly unequal, right slightly larger than left ..... *Petrochirus diogenes*  
 Chelipeds markedly unequal, left much larger than right ..... 6
6. (5) Major palm tuberculate, with appressed setae ..... *Dardanus*  
 Major palm smooth, without hairs ..... *Calcinus tibicen*

**Genus *Cancellus* H. Milne Edwards, 1836**

Key to species  
[Adapted from Mayo, 1973]

Ocular scale with more than one terminal tooth or spine; fifth coxal segments of male flattened; overall color of live or recently preserved specimens green ..... *C. viridis*

Ocular scale with one triangular tooth; fifth coxal segments of male concave and expanded; overall color cream with purple, dark red, or brown ..... *C. ornatus*

**Genus *Clibanarius* Dana, 1851**

Key to species  
[Adapted from Provenzano, 1959]

1. Dactyli of walking legs shorter than propodi..... 2
- Dactyli of walking legs not shorter than propodi..... 3
2. (1) Legs with broad longitudinal light stripe on dark background..... *C. antillensis*  
    Legs without any longitudinal stripes, instead banded with orange at proximal ends of propodi and dactyli; dominant color blue ..... *C. tricolor*
3. (1) Propodi with dark stripe laterally, bordered on each side by light stripe of similar width ..... *C. cubensis*  
    Propodi with 4 thin light stripes laterally, separated by broad dark stripes ..... *C. vittatus*

**Genus *Dardanus* Paulson, 1875****Key to species**

[Adapted from Williams, 1984, with addition]

1. Propodus of third left pereopod (second left walking leg) not hairy, without lateral longitudinal ridge or groove; rugae arranged in herringbone pattern ... *D. insignis*  
Propodus of third left pereopod conspicuously hairy, with lateral longitudinal ridge paralleled by groove; ridge crossed by rugae ..... 2
2. (1) Dactylus of third left pereopod with shallow ventral groove; cornea widely rounded ..... *D. fucosus*  
Dactylus of third left pereopod without shallow ventral groove; cornea barely expanded, convex ..... *D. venosus*

**Genus *Paguristes* Dana, 1852**

## Key to species

[Based on Provenzano, 1959, and McLaughlin and Provenzano, 1974a]

1. Rostrum broadly rounded or pointed, but not advanced beyond level of lateral projections on front of anterior shield of carapace ..... 2  
Rostrum slender and definitely advanced beyond level of lateral projections on front of anterior shield of carapace ..... 6
2. (1) Eye scales adjacent, ending in more than 1 terminal spine ..... *P. hummi*  
Eye scales separated, ending in acuminate tip ..... 3
3. (2) Anterolateral sides of anterior shield of carapace definitely spiny ..... 4  
Anterolateral sides of anterior shield of carapace not spiny ..... 5
4. (3) Cornea narrow and tapering anteriorly to blunt point; anterolateral sides of anterior shield of carapace with about 3 transverse rows of spinules; second antennal segment with two spines on anterior margin, one on each side of base of antennal acicle ..... *P. oxyophthalmus*  
Cornea broad and not tapering anteriorly; anterolateral sides of anterior shield of carapace roughened by scattered spiny granules; second antennal segment with several spines on lateral margin ..... *P. lymani*
5. (3) Rostrum very poorly developed, obtusely triangular or broadly rounded, or often obsolete ..... *P. laticlavus*  
Rostrum short, obtusely pointed, slightly less advanced than more acute lateral projections ..... *P. moorei*
6. (1) Anterior shield of carapace not noticeably longer than broad ..... 7  
Anterior shield of carapace noticeably longer than broad ..... 12
7. (6) Antennular peduncles extending beyond eyestalks ..... 8  
Antennular peduncles not extending beyond eyestalks ..... 9
8. (7) Dorsal surface of carapace with numerous small spines or spinules and tufts of setae laterally ..... *P. inconstans*  
Dorsal surface of carapace hairy towards sides ..... *P. triangulatus*
9. (7) Upper surface of hands of chelipeds with hairs inconspicuous, not obscuring spines ..... 10  
Upper surface of hands of chelipeds with hairs conspicuous, at least obscuring surface ..... 11

10. (9) Fifth antennal segment bearing 3 spines on basal part of outer margin; antennal acicle with 2-3 spines on inner margin ..... *P. grayi*  
 Fifth antennal segment bearing 2 spines on basal part of outer margin; antennal acicle with no spines on inner margin ..... *P. erythrops*
11. (9) Antennal peduncles slightly exceeding acicles ..... *P. sericeus*  
 Antennal peduncles reaching just beyond middle of eyestalks ..... *P. puncticeps*
12. (6) Antennal peduncle not overreaching middle of eyestalks ..... *P. spinipes*  
 Antennal peduncle overreaching middle of eyestalks ..... 13
13. (12) Rostrum slender, its sides parallel from base to near acute tip ..... 14  
 Rostrum broad at base, its sides converging to tip ..... 15
14. (13) Terminal segment of antennal peduncle armed with two spines; carapace triangular in shape in dorsal view ..... *P. tenuirostris*  
 Terminal segment of antennal peduncle without spines; carapace rectangular in shape in dorsal view ..... *P. cadenati*
15. (13) Shield with dorsolateral surface and margins unarmed or with very few, minute spinules ..... 16  
 Shield with dorsolateral surface and margins armed with numerous small spines or spinulose tubercles ..... 19
16. (15) Dorsal margins of meri of chelipeds unarmed ..... *P. hernancortezi*  
 Dorsal margins of meri of chelipeds with spinules or spinulose protuberances ..... 17
17. (16) Rostrum greatly exceeding lateral projections, slender, acute, strongly depressed distally, terminating in small spine ..... *P. anomalus*  
 Rostrum considerably exceeding lateral projections, terminating acutely or subacutely but not in a small spine ..... 18
18. (17) Fifth antennal segment with two dorsal spines ..... *P. wassi*  
 Fifth antennal segment with few tufts of short setae, with no spines ..... *P. limonensis*
19. (15) Chelipeds virtually devoid of setae ..... *P. starcki*  
 Chelipeds covered with tufts of short, plumose setae ..... 20

20. (19) Dorsomesial margins of carpi of chelipeds with 4 or 5 strong spines; ocular peduncles with distinct, often irregular dark bands distally (brood pouch of female large, subovate or subquadrate) ..... *P. tortugae*

Dorsomesial margins of carpi of chelipeds with 6 or more moderately small spines; ocular peduncles without distinct dark bands distally (brood pouch of female very small, subtriangular) ..... *P. invisisacculus*

*Cancellus viridis*

holotype male:

- a. anterior region, dorsal view
- b. fifth coxal segments

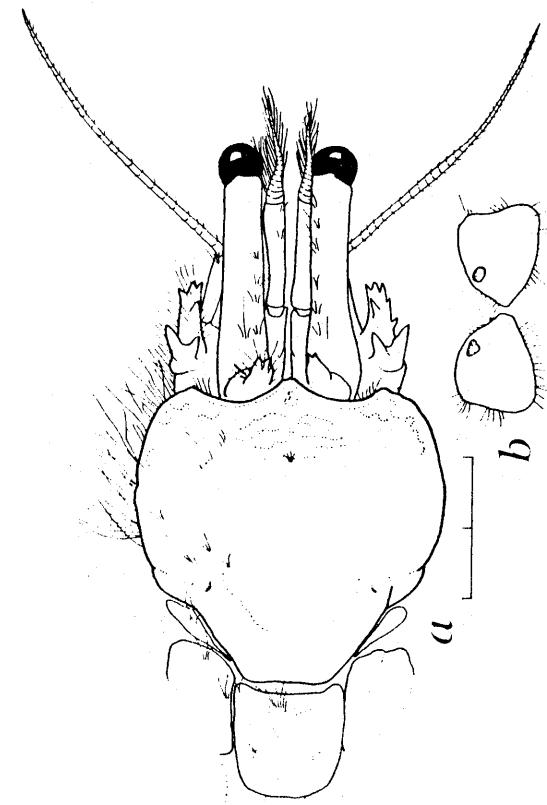
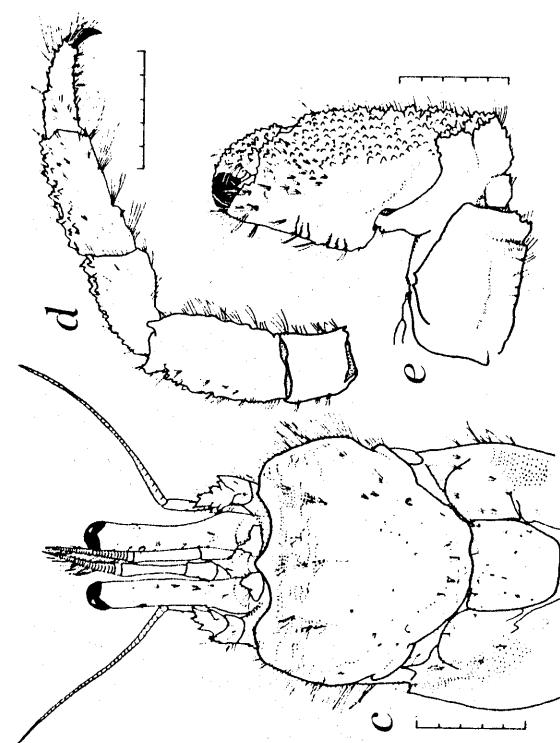
(after Mayo, 1973)

*Cancellus ornatus*

male:

- c. anterior region, dorsal view
- d. left third pereopod
- e. left cheliped, lateral view

(after Mayo, 1973)



*Clibanarius antennensis*

a. anterior part of body and pereopods, dorsal view

(after Benedict, 1901)

*Clibanarius tricolor*

b. anterior part of body and pereopods, dorsal view

(after Benedict, 1901)

*Clibanarius cubensis*

c. walking leg

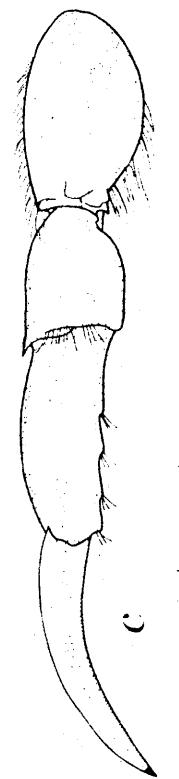
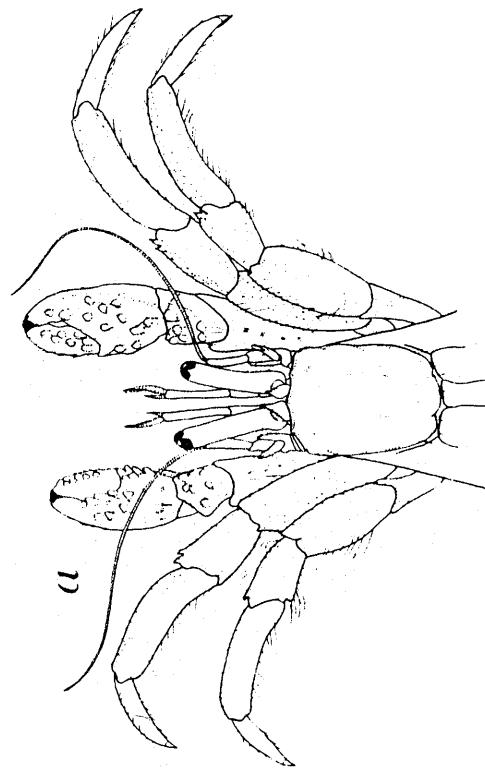
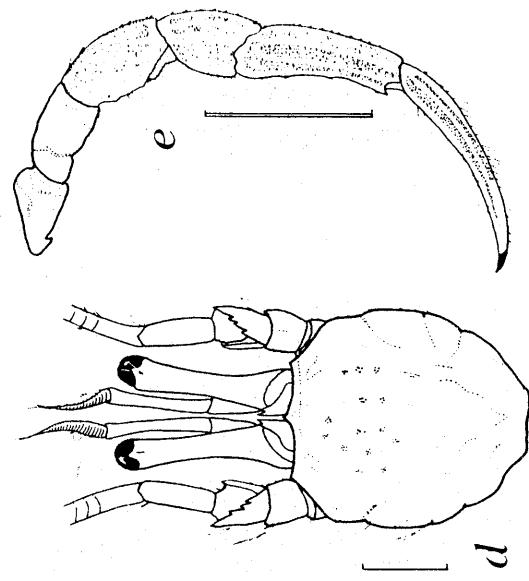
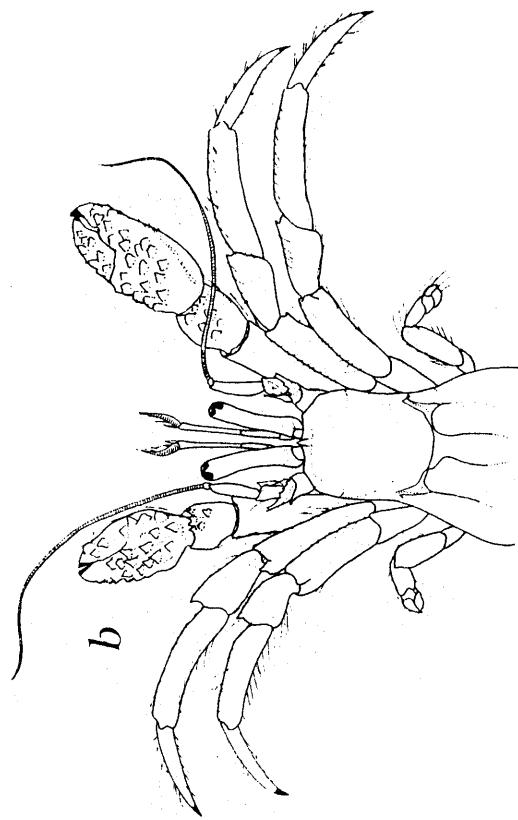
(after Provenzano, 1959)

*Clibanarius vittatus*

d. anterior part of body, dorsal view

e. third pereopod

(after Holthuis, 1959)



*Dardanus insignis*

a. anterior part, dorsal view (male)

(after Williams, 1965a)

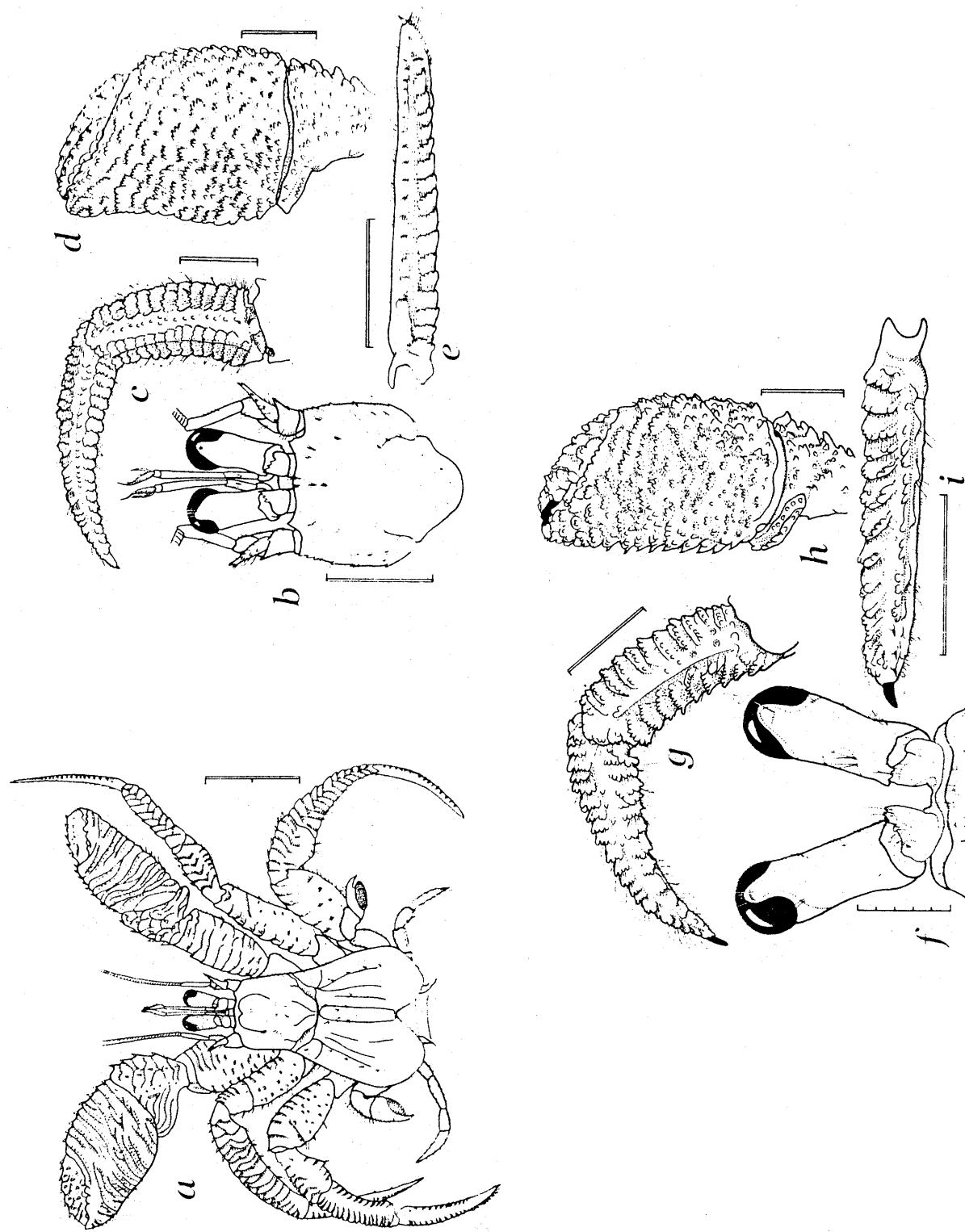
*Dardanus fucosus*

- b. anterior part, dorsal view (male)
  - c. lateral view of third left pereopod (holotype male)
  - d. lateral view of major chela (holotype male)
  - e. ventral view of dactylus of third pereopod (holotype male)
- ( $\sigma$ , after Williams, 1984; c-e, after Biffar and Provenzano, 1972)

*Dardanus venosus*

lectotype male:

- f. eyestalks
- g. lateral view of third left pereopod
- h. lateral view of major chela
- i. ventral view of dactylus of third pereopod  
(after Biffar and Provenzano, 1972)



*Paguristes hummi*

- a. anterior part of body and chelipeds, dorsal view  
(after Provenzano, 1959)
- b. anterior part of body, dorsal view
- c. cheliped

(after Holthuis, 1959)

*Paguristes oxyophthalmus*

- a. anterior part of body and chelipeds, dorsal view
- b. anterior part of body, dorsal view
- c. cheliped

(after Holthuis, 1959)

*Paguristes lymani*

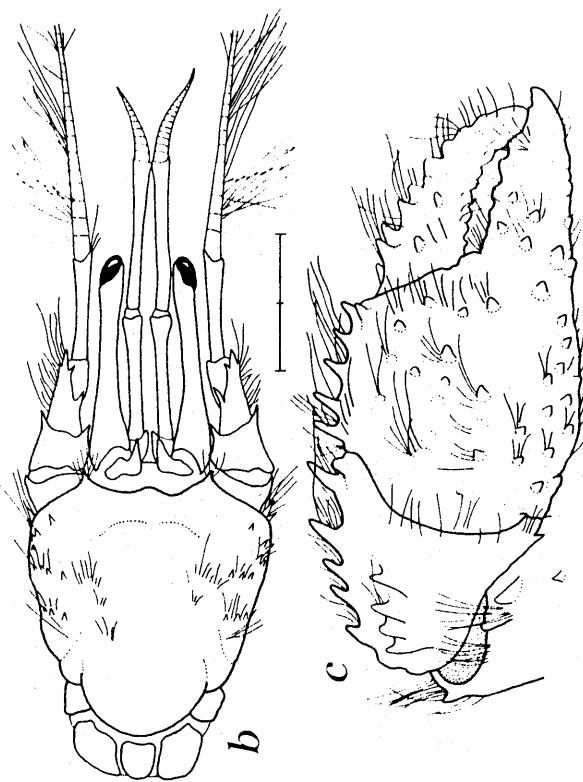
- d. anterior part of body, dorsal view
- e. right chela and carpus, external view

(after Williams, 1965a)

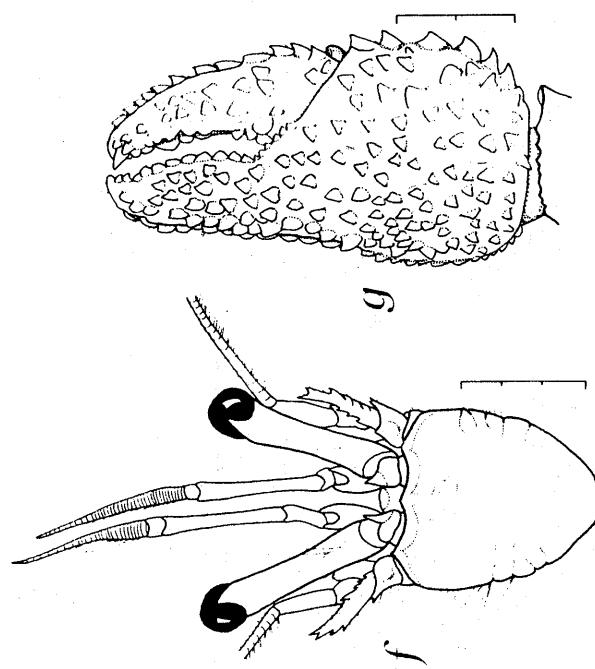
*Paguristes laticlayus*

- male:
- f. anterior part of body, dorsal view
- g. left chela, external view

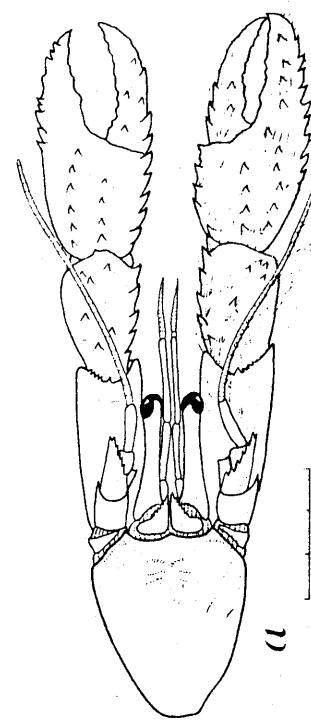
(after McLaughlin and Provenzano, 1974b)



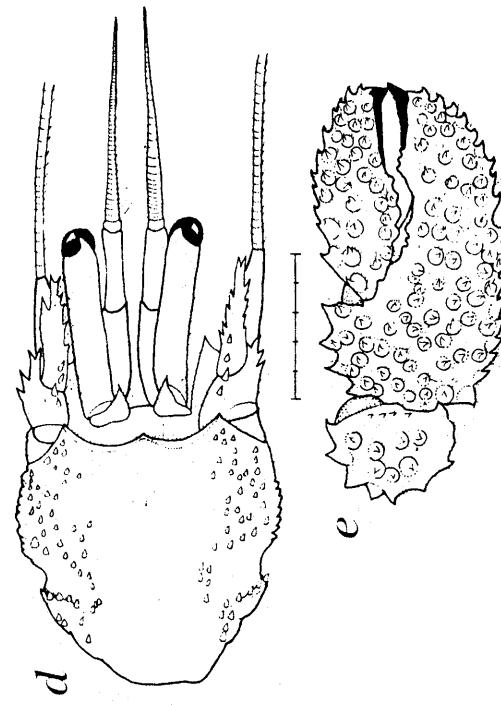
c



g



a



d



e

*Paguristes moorei*

holotype female:

- a. anterior part of body, dorsal view
- b. right chela and carpus, external view

(after Williams, 1984)

*Paguristes inconstans*

holotype male:

- c. anterior part of body, dorsal view
- d. left cheliped, lateral view

(after McLaughlin and Provenzano, 1974b)

*Paguristes triangulatus*

holotype female:

- e. anterior part of body, dorsal view
- f. right chela and carpus, external view

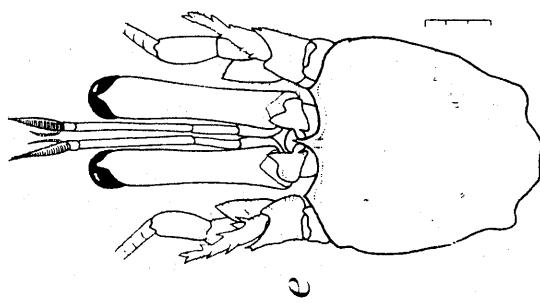
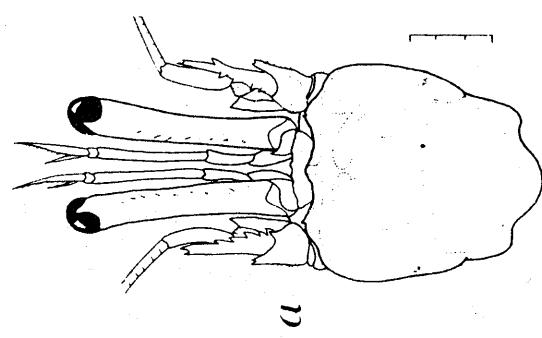
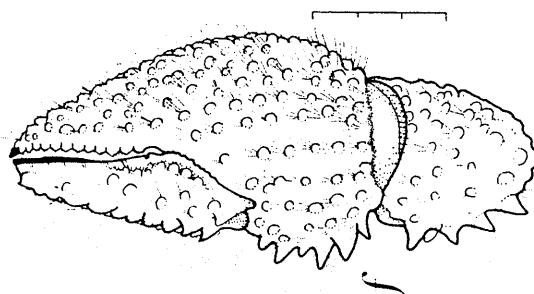
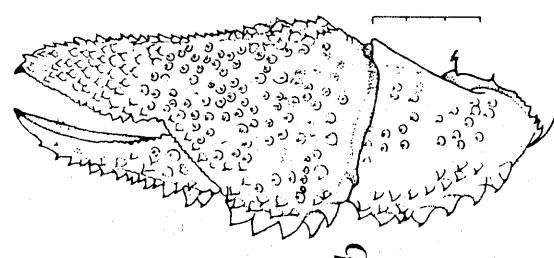
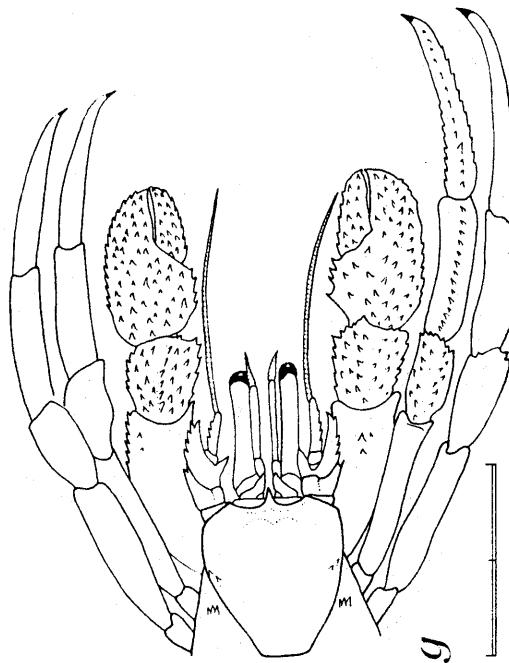
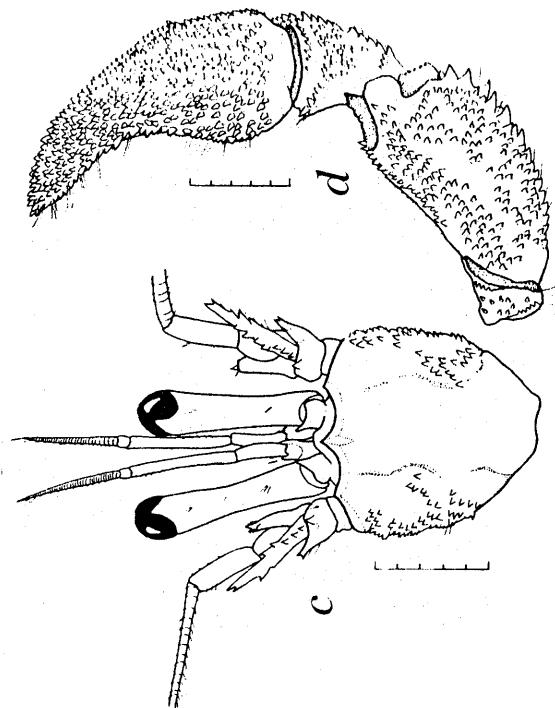
(after Williams, 1965a)

*Paguristes grayi*

holotype male:

- g. anterior part of body and pereopods, dorsal view

(after Provenzano, 1959)



*Paguristes erythrops*

holotype female:

- a. cheliped
- b. anterior part of body, dorsal view  
(after Holthuis, 1959)

*Paguristes sericeus*

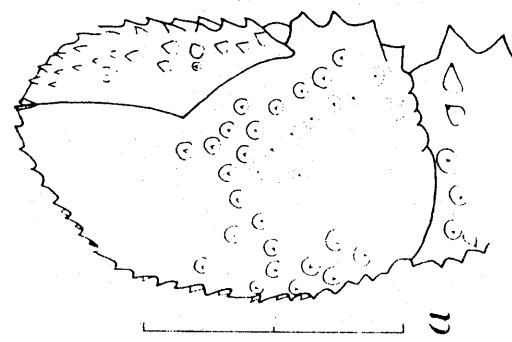
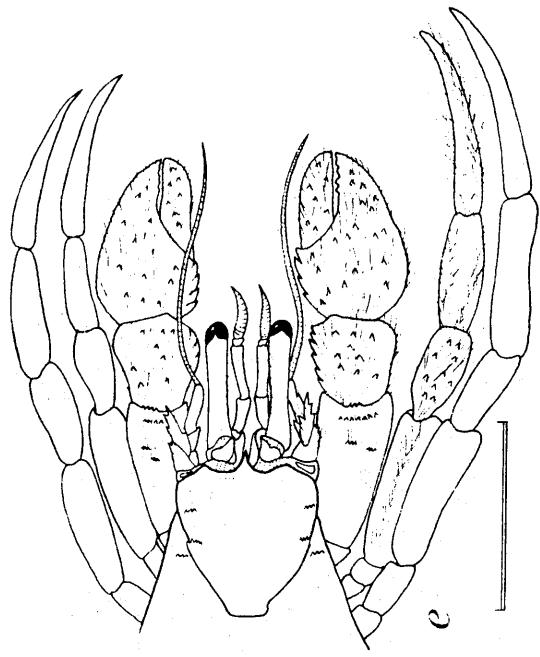
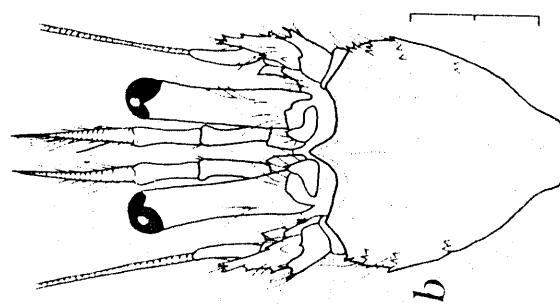
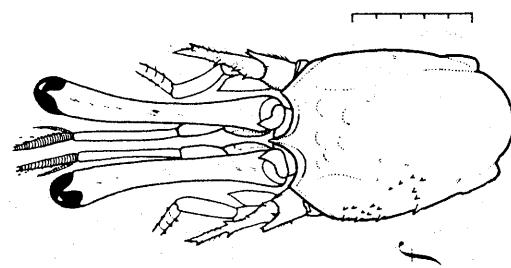
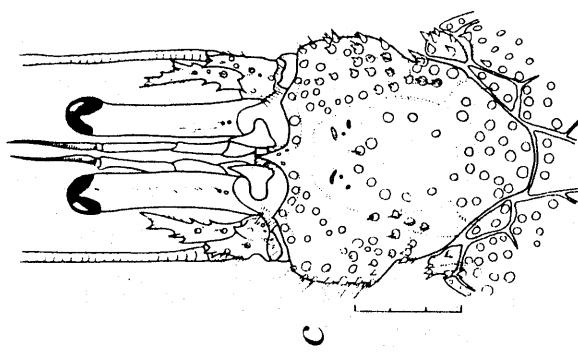
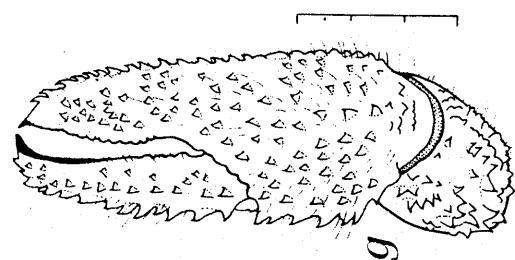
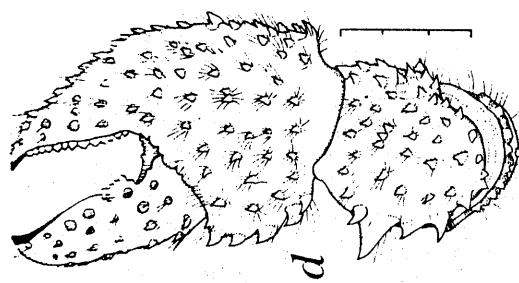
- c. anterior part of body, dorsal view
- d. right chela and carpus, external view  
(after Williams, 1965a)

*Paguristes puncticeps*

- e. anterior part of body and pereopods, dorsal view  
(after Provenzano, 1959)

*Paguristes spinipes*

- f. anterior part of body, dorsal view
- g. right chela and carpus, external view  
(after Williams, 1965a)



*Paguristes tenuirostris*

- a. anterior part of body, dorsal view  
(after Benedict, 1901)

*Paguristes cadenati*

- b. anterior part of body, dorsal view
- c. left cheliped
- d. left third pereopod  
(after Forest, 1954)

*Paguristes hernancortezii*

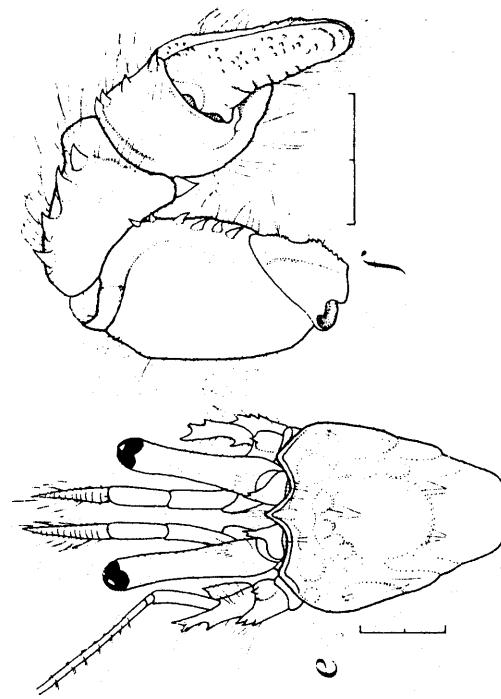
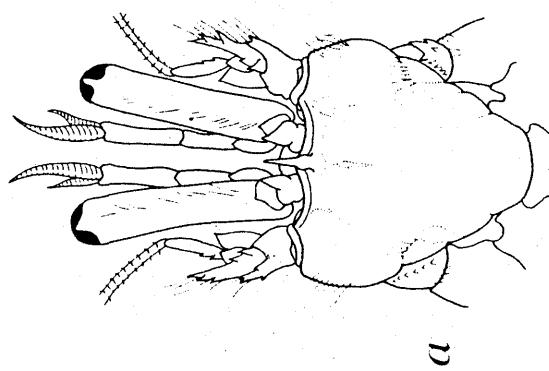
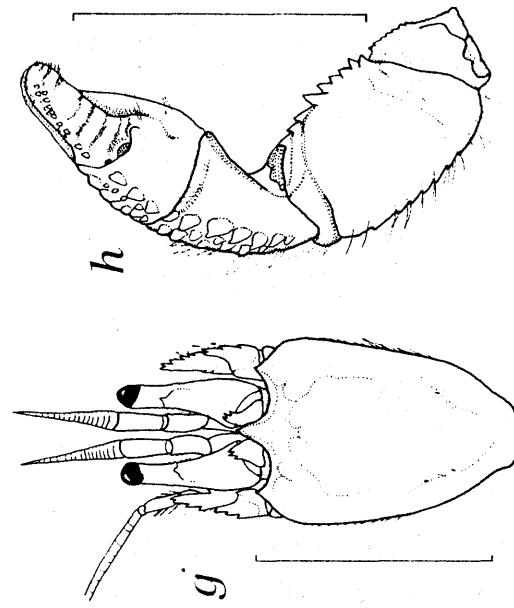
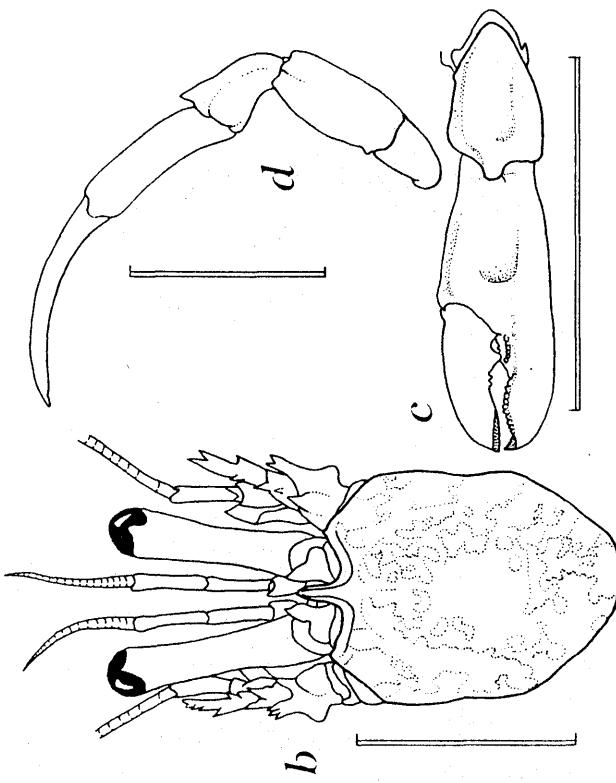
holotype male:

- e. anterior part of body, dorsal view
- f. left cheliped, mesial view  
(after McLaughlin and Provenzano, 1974a)

*Paguristes anomalous*

male:

- g. anterior part of body, dorsal view
- h. left cheliped, mesial view  
(after McLaughlin and Provenzano, 1974a)



*Paguristes wassi*

holotype male:

- a. anterior part of body, dorsal view
- b. left third pereopod, lateral view  
(after Provenzano, 1961)

*Paguristes limonensis*

holotype male:

- c. anterior part of body, dorsal view
- d. left cheliped, lateral view

(after McLaughlin and Provenzano, 1974b)

*Paguristes starcki*

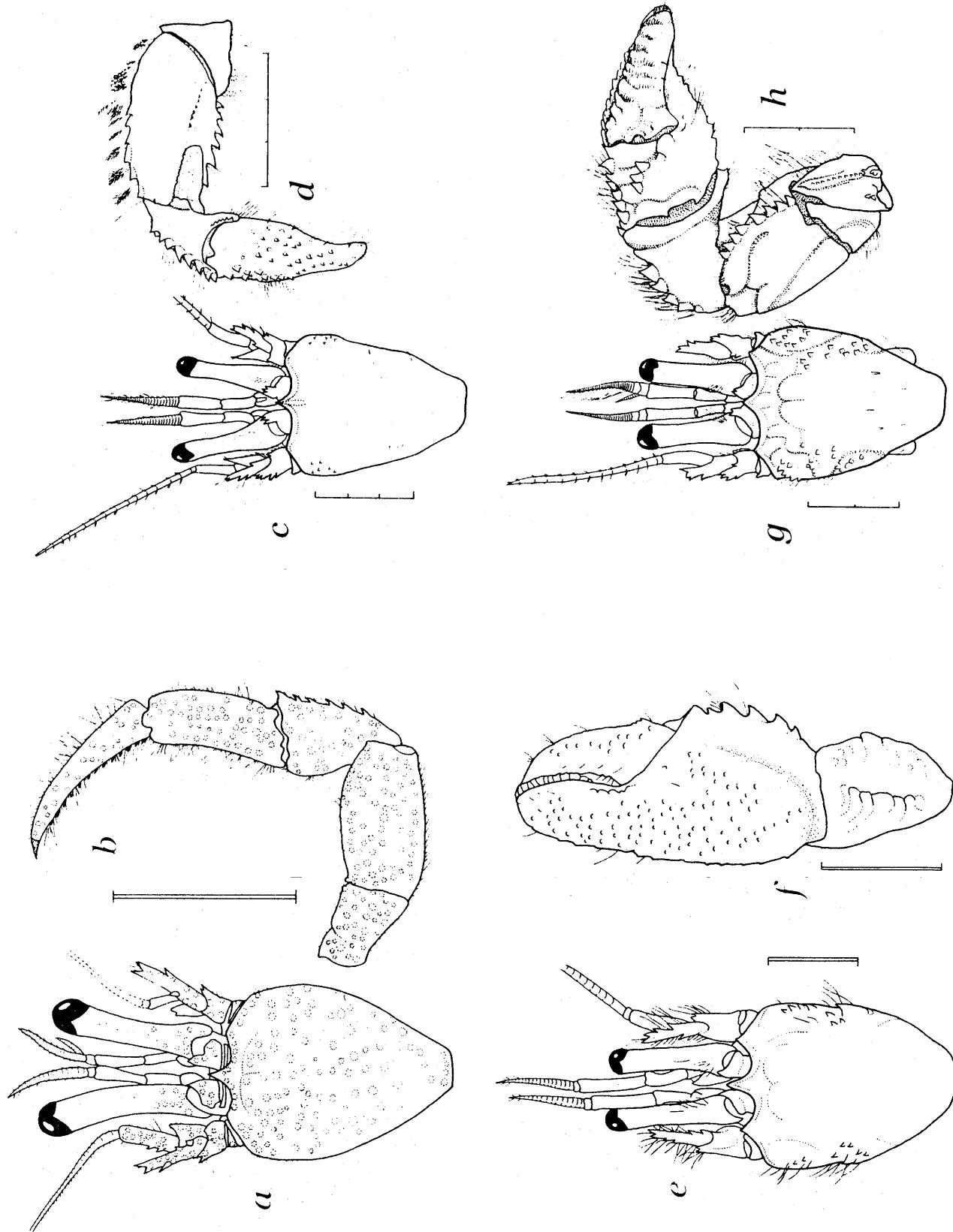
holotype male:

- e. anterior part of body, dorsal view
- f. left chela, dorsal view  
(after Provenzano, 1965)

*Paguristes tortugae*

male:

- g. anterior part of body, dorsal view
- h. left cheliped, mesial view  
(after McLaughlin and Provenzano, 1974a)



*Paguristes invisisacculus*

holotype male:

- a. anterior part of body, dorsal view
  - b. left cheliped, mesial view
- (after McLaughlin and Provenzano, 1974a)

*Calcinus tibicen*

- c. anterior part of body and pereopods,  
dorsal view

(after Provenzano, 1959)

*Isocheles wurdemanni*

- d. anterior part of body and chelipeds, dorsal view

(after Provenzano, 1959)

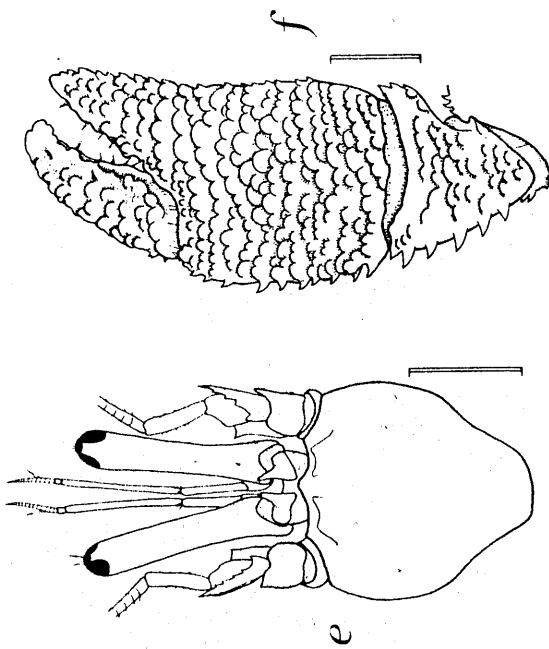
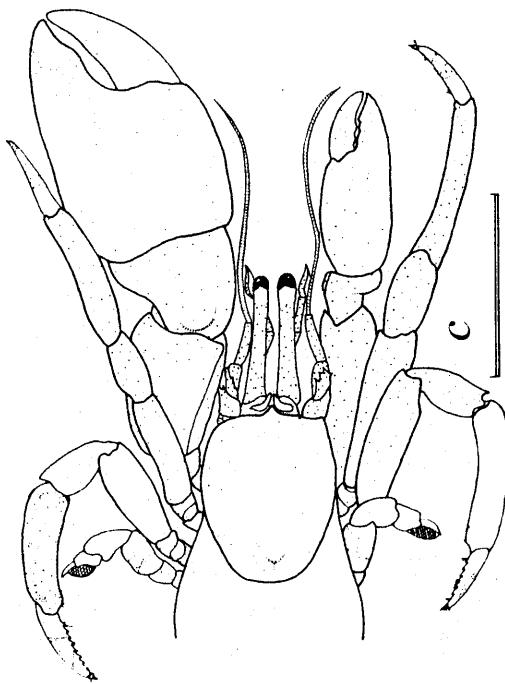
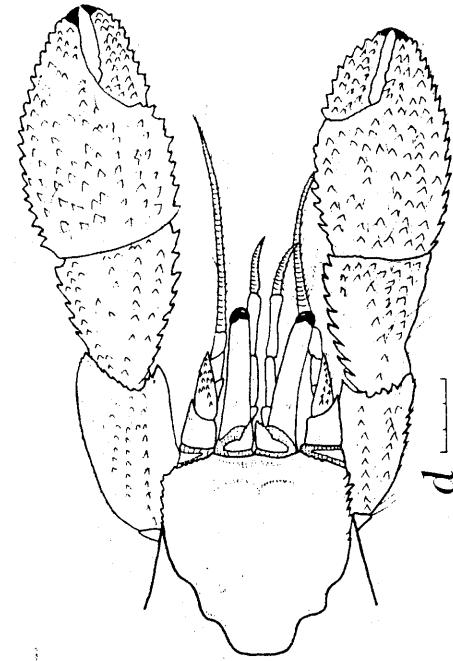
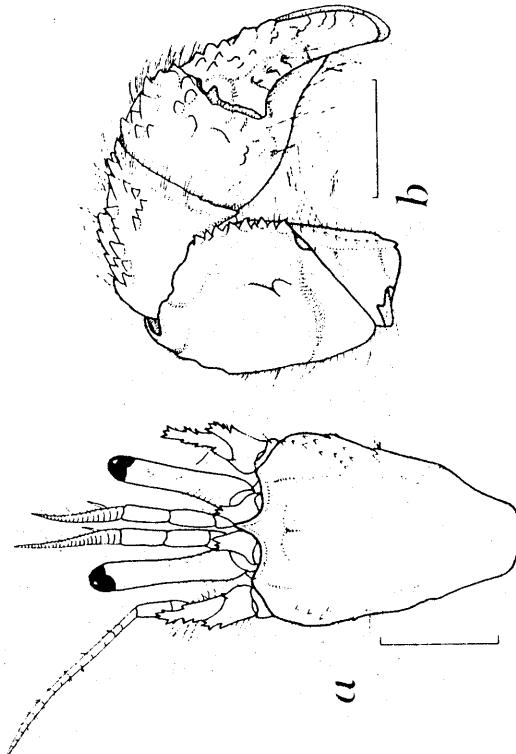
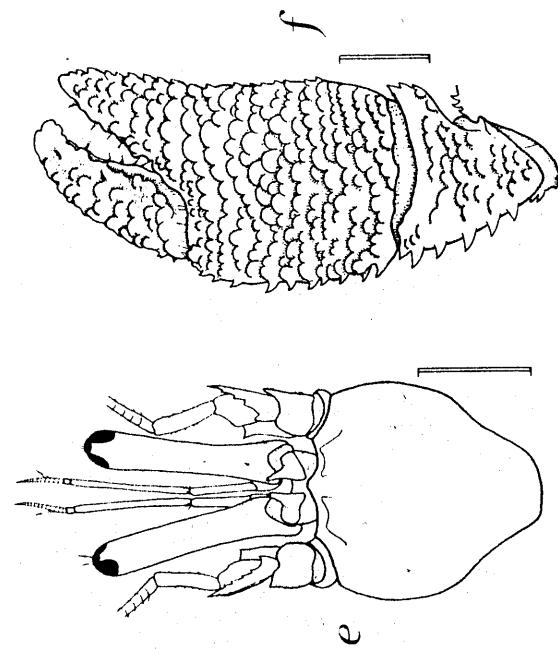
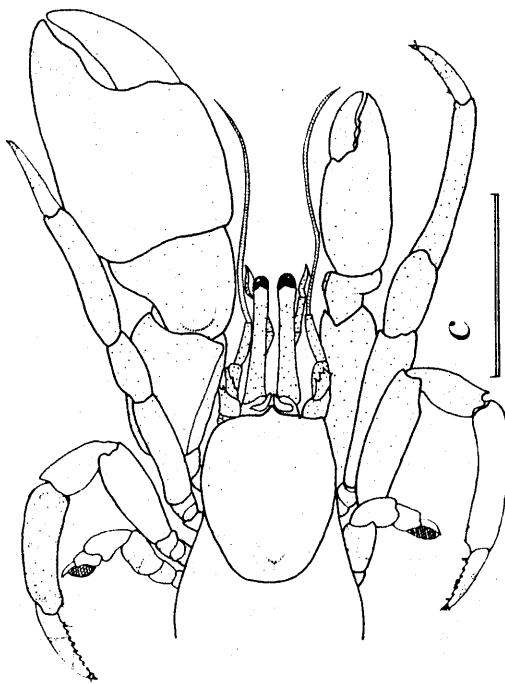
*Petrochirus diogenes*

female:

- e. anterior part of body, dorsal view

- f. right chela and carpus, external view

(after Williams, 1984)





Family Lithodidae

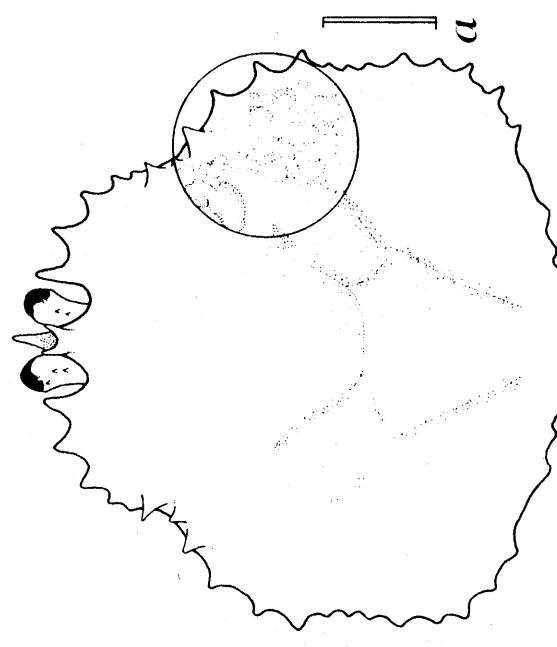
Genus *Paralomis* White, 1856

Gastric region with no spines; carapace with strong lateral spines; lateral cardiac furrows not meeting posteriorly; median rostral spine with no central tooth; walking legs moderately compressed [from Chace, 1939] ..... *P. cubensis*

***Paralomis cubensis***

a. carapace, dorsal view

(after specimen at SI-NMNH, USNM 213542)





**Family Paguridae**

## Key to genera and species

[Based on McLaughlin, 1981a, and Williams, 1984]

1. Form Cancriform; 10 pairs of gills present..... *Ostraconotus spatulipes*  
Form not Cancriform; 11 or 13 pairs of gills present ..... 2
2. (1) Ischium of third maxilliped without mesioventral accessory spine near anterior end of mesial dentate crest ..... *Iridopagurus*  
Ischium of third maxilliped with mesioventral accessory spine near anterior end of mesial dentate crest ..... 3
3. (2) Paired pleopods on first abdominal somite of male (next four somites have unequally biramous appendage on left side) .... *Tomopaguropsis problematica*  
No paired appendages on first abdominal somite in male..... 4
4. (3) Sexual tube well developed in male..... 5  
No sexual tube in male..... 7
5. (4) Right tube long, filiform at extremity..... *Nematopaguroides pusillus*  
Right tube not filiform at its extremity..... 6
6. (5) Tube directed toward exterior (laterally) turning dorsally over anterior part of abdomen; chelipeds very unequal; third pereopods of right and left sides similar ..... *Catapagurus sharrei*  
Tube directed laterally, not turned over abdomen; chelipeds subequal; third pereopod of left side modified ..... *Solenopagurus lineatus*
7. (4) No paired pleopods on first abdominal somite of female (except *P. piercei*)..... *Pagurus*  
Paired pleopods on first abdominal somite of female..... 8
8. (7) Thirteen pairs of gills present..... *Pylopaguropsis atlantica*  
Eleven pairs of gills present..... 9
9. (8) Propodi of fourth pereopods with single row of scales..... 10  
Propodi of fourth pereopods with two or more rows of scales..... 13
10. (9) Uropods symmetrical or nearly so..... *Pylopagurus discoidalis*  
Uropods markedly asymmetrical..... 11

11. (10) Spines of chelae with basal rosettes..... *Rhodochirus rosaceus*  
Spines of chelae without basal rosettes..... 12
12. (11) Dactylus and immovable finger of left chela "spoon-shaped"..... *Tomopagurus*  
Dactylus and immovable finger of left chela not "spoon-shaped" (right chela  
operculate; preungual process present) ..... *Phimochirus*
13. (9) Uropods symmetrical or nearly so, with protopods produced posteriorly.....  
..... *Agaricochirus*  
Uropods markedly asymmetrical, with protopods not produced posteriorly..... 14
14. (13) Left chela triangular in cross-section, dactylus and immovable finger not  
dorsoventrally flattened ..... *Anisopagurus*  
Left chela not triangular in cross-section, dactylus and immovable finger  
dorsoventrally flattened ..... *Manucomplanus corallinus*

**Genus *Agaricochirus* McLaughlin, 1981**

## Key to species

[Adapted from McLaughlin, 1982]

1. Tergite of fifth abdominal somite with distinct patch of short, stiff setae (anterior lobe of sternite of third pereopods well developed, subquadrate) ..... *A. gibbosimanus*  
Tergite of fifth abdominal somite without distinct patch of short, stiff setae..... 2
2. (1) Dorsolateral margin of carpus of right cheliped with row of strong spines, at least distally ..... *A. alexandri*  
Dorsolateral margin of carpus of right cheliped with row of low protuberances or unarmed ..... 3
3. (2) Dorsal surface of dactylus of right cheliped with longitudinal ridge of broad tubercles; margins of mushroom-shaped tubercles unarmed ..... *A. boletifer*  
Dorsal surface of dactylus of right cheliped with longitudinal rows of simple tubercles; margins of mushroom-shaped tubercles armed with tiny spines ..... *A. acanthinus*

**Genus *Anisopagurus* McLaughlin, 1981**

## Key to species

- Eye scales armed with 4-5 spines on medial margin..... *A. pygmaeus*
- Eye scales with apical spine..... *A. bartletti*

### Genus *Iridopagurus* De Saint Laurent-Dechancé, 1966

#### Key to species

[From McLaughlin, personal communication]

1. Distodorsal margin of merus of left cheliped with strong spine..... *I. iris*
- Distodorsal margin of merus of left cheliped glabrous..... 2
2. (1) Chelipeds with dense patch of setae on dorsolateral distal surface of palm and proximal surface of immovable finger ..... *I. caribensis*
- Chelipeds without dense patch of setae on dorsolateral distal surface of palm and immovable finger ..... 3
3. (2) Right chela with row of spines on dorsomesial margin and dorsal midline proximally; 4th pereopod with preungual process ..... *I. globulus*
- Right chela with numerous irregular rows of spines on dorsal surface; 4th pereopod without preungual process ..... 4
4. (3) Chelae with palms ovate, dorsal surfaces with reticulated color pattern; dactyli of 2nd and 3rd pereopods with 3-8 corneous spinules on inferior margins ..... *I. reticulatus*
- Chelae with palms subrectangular, dorsal surfaces with colored band across fingers proximally; dactyli of 2nd and 3rd pereopods with 8-12 corneous spinules on inferior margins ..... *I. violaceus*

### Genus *Pagurus* Fabricius, 1775

#### Key to species

[Based on Lematre et al., 1982, and Williams, 1984]

1. Ocular acicles with several terminal submarginal or marginal spines..... 2
- Ocular acicles with single terminal submarginal spine (rarely 1 or 2 accessory mesial marginal spinules) ..... 4
2. (1) Chelae with short setae forming dense mat-like covering on dorsal surfaces..... *P. provenzanoi*
- Chelae glabrous or with short to long setae, but setae not forming dense mat-like covering on dorsal surfaces ..... 3

3. (2) Left chela with longitudinal row of moderately strong or strong spines in proximity to dorsolateral margin; antennal flagella with setae less than 1 article in length .....  
..... *P. brevidactylus*
- Left chela without longitudinal row of moderately strong or strong spines in proximity to dorsolateral margin; antennal flagella with setae 1-2 articles in length ....  
..... *P. carolinensis*
4. (1) Width of major chela at least length (except *P. maclaughlinae*)..... 5
- Width of major chela less than length (except *P. maclaughlinae*)..... 7
5. (4) Dactylus of major chela with sharply produced angle on mesial margin.....  
..... *P. politcaris*
- Dactylus of major chela without sharply produced angle on mesial margin..... 6
6. (5) Chelipeds with palms dented on dorsal surfaces, covered with small, closely crowded granules .....  
..... *P. impressus*
- Palm of major chela bearing irregular rows of spines on dorsal surface; palm of minor chela bearing single or double rows of spines on dorsal midline .....  
..... *P. maclaughlinae*
7. (4) Rostrum distinct, usually produced as small lobe..... *P. marshi*
- Rostrum not distinct or produced as small lobe..... 8
8. (7) Antennal flagella with long, usually uniformly paired setae, 3-8 articles in length, at least every second article proximally ..... 9
- Antennal flagella with short, or irregularly short and long, not uniformly paired, setae over entire length ..... 11
9. (8) Dactyli of pereopods without row of corneous spines on inferior margins (rarely with 1-3 minute spinules) .....  
..... *P. gymnodactylus*
- Dactyli of pereopods with row of corneous spines on inferior margins..... 10
10. (9) Antennal flagella short, not overreaching left chela; carpus of 2nd right pereopod with dorsal row of spines .....  
..... *P. annulipes*
- Antennal flagella long, overreaching right chela; carpus of 2nd right pereopod without dorsal row of spines, rarely 1 or 2 spines in large individuals (shield length 2.5 mm) .....  
..... *P. criniticornis*
11. (8) Palm of small (left) chela triangular in cross section, upper surface divided by longitudinal ridge into 2 obliquely sloping facets ..... 12
- Palm of small (left) chela not triangular in cross section, either oval or flattened... 13

12. (II) Eyestalks moderately to noticeably stout with definitely dilated corneas; minor chela simply ornamented dorsally with numerous rounded, slightly appressed to spiniform tubercles ..... *P. politus*
- Eyestalks slender, curved slightly outward, cornea only very slightly dilated; major chela with prominent, sometimes strongly elevated median single or double rows of spines ..... *P. stimpsoni*
13. (II) Eye scales triangular; eyestalks equally swollen at base and cornea; rostrum obtuse but definitely exceeding obsolescent lateral projections; major chela 3 or more times longer than wide ..... *P. piercei*
- Eye scales rounded distally; eyestalks with cornea dilated, broader than base; rostrum obtuse but about equaling lateral projections; major chela 2.5 (or less) times longer than wide ..... 14
14. (13) Chelipeds subcylindrical, relatively smooth on lateral surface; palm lightly crested and minutely dentate along lateral margin, dorsal surface minutely granulate and with 2 incomplete rows of subspinous tubercles and scattered smaller ones; dorsal surface of eye scale shallowly excavated ..... *P. longicarpus*
- Chelipeds not subcylindrical, relatively spiny on lateral surface and setose; palm with more or less diagonal rows of spines on dorsal surface and with irregularly but closely set plates near base of immovable finger and occasionally on dactylus, spine or tubercle usually arising from center of each plate; not shallowly excavated on dorsal surface ..... *P. defensus*

**Genus *Phimochirus* McLaughlin, 1981**

## Key to species

[Adapted from McLaughlin, 1981b]

1. Palm of right chela with dorsal tuberculate median ridge formed by shallow mesial and lateral depressions ..... *P. randalli*  
Palm of right chela without dorsal tuberculate median ridge formed by shallow mesial and lateral depressions ..... 2
2. (1) Dorsal surface of palm and immovable finger of right chela with strong or moderately strong tubercles, at least distally (exopod of left uropod without dense tuft of long setae) ..... *P. holthuisi*  
Dorsal surface of palm and immovable finger of right chela smooth, granular, or weakly tuberculate ..... 3
3. (2) Dorsal surface of carpus of right cheliped unarmed ..... *P. leurocarpus*  
Dorsal surface of carpus of right cheliped tuberculate, spinose, or spinulose (palm of left chela with dorsomedial row of small spines or tubercles extending to base of dactylus) ..... *P. operculatus*

**Genus *Tomopagurus* A. Milne Edwards and Bouvier, 1893**

## Key to species

[Adapted from McLaughlin, 1981a]

1. First antennal segment with prominent, often hooked, lateral spine ..... 2  
First antennal segment without prominent, often hooked, lateral spine ..... 4
2. (1) Propodus and dactylus of left third pereopod with lateral faces densely setose ..... 3  
Propodus and dactylus of left third pereopod with lateral faces not densely setose.... *T. rubropunctatus*
3. (2) Carpus of right second pereopod with one spine on dorsal margin ..... *T. cokeri*  
Carpus of right second pereopod with more than one spine on dorsal margin..... *T. wassi*
4. (1) Dorsal surface of right chela with prominent acute spines ..... *T. cubensis*  
Dorsal surface of right chela with spinulose or blunt tubercles (carpus of second right pereopod with one or two strong spines on dorsal margin distally) ..... *T. chacei*

*Agaricochirus gibbosimanus*

- a. anterior part of body, dorsal view
  - b. right chela, dorsal view
- (a, after McLaughlin, 1982; b, after A. Milne Edwards and Bouvier, 1893)

*Agaricochirus alexandri*

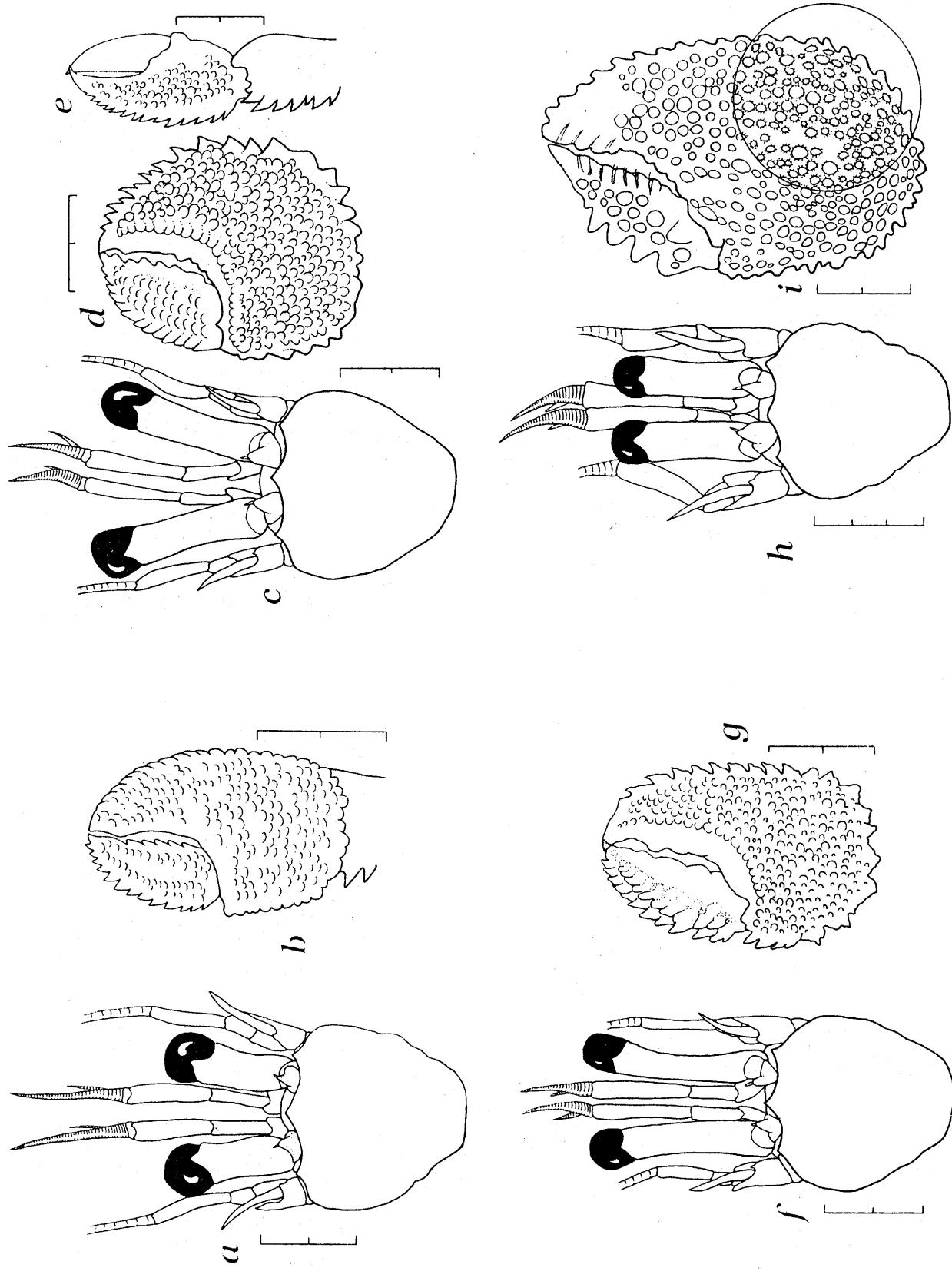
- c. anterior part of body, dorsal view
  - d. right chela, dorsal view
  - e. left chela and anterior portion of carpus, dorsal view
- (c, after McLaughlin, 1982; d, e, after A. Milne Edwards and Bouvier, 1893)

*Agaricochirus boletifer*

- f. anterior part of body, dorsal view
  - g. right chela, dorsal view
- (f, after McLaughlin, 1982; g, after A. Milne Edwards and Bouvier, 1893)

*Agaricochirus acanthinus*

- h. anterior part of body, dorsal view
  - i. right chela, dorsal view
- (after McLaughlin, 1982)



*Anisopagurus pygmaeus*

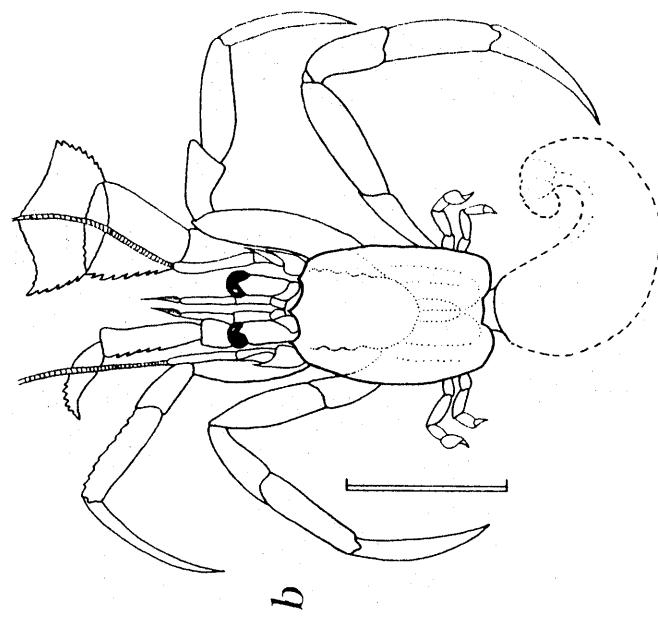
a. anterior part of body and chelipeds, dorsal view

(after Provenzano, 1959)

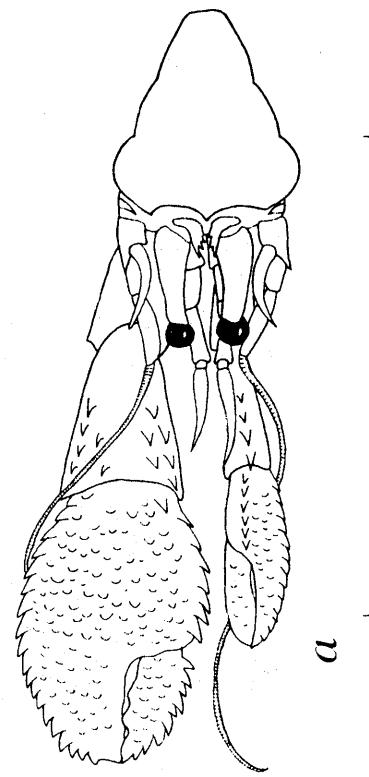
*Anisopagurus bartletti*

b. dorsal view

(after A. Milne Edwards and Bouvier, 1893)



b



a

*Iridopagurus iris*

male:

- a. anterior part of body, dorsal view
- b. right cheliped, dorsal view
- c. left second pereopod, inner face

(after De Saint Laurent-Déchancé, 1966)

*Iridopagurus caribensis*

male:

- d. anterior part of body, dorsal view
- e. right cheliped, dorsal view
- f. left second pereopod, inner face

(after De Saint Laurent-Déchancé, 1966)

*Iridopagurus globulus*

holotype male:

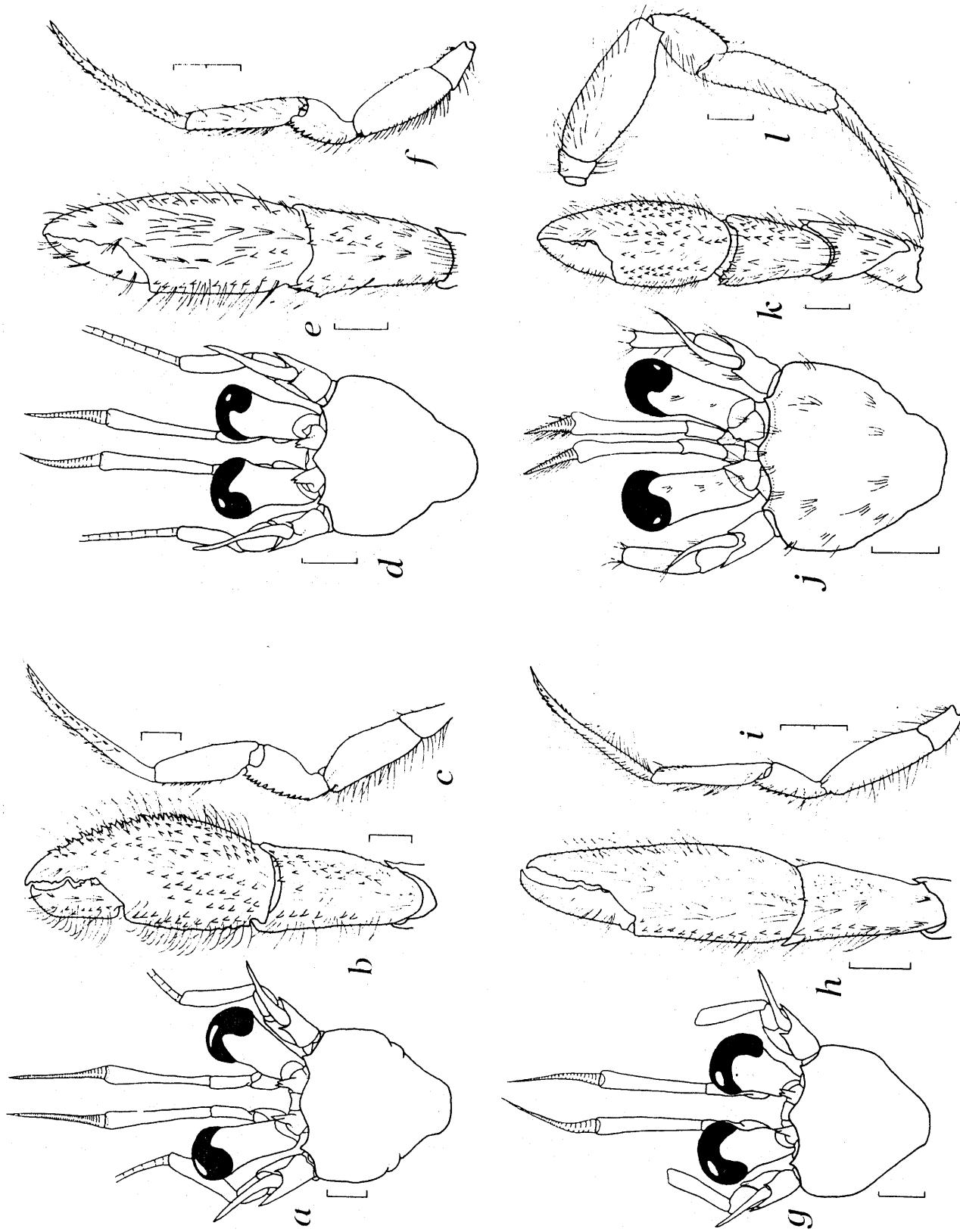
- g. anterior part of body, dorsal view
- h. right cheliped, dorsal view
- i. left second pereopod, inner face

(after De Saint Laurent-Déchancé, 1966)

*Iridopagurus reticulatus*

- j. anterior part of body, dorsal view
- k. right cheliped, dorsal view
- l. right second pereopod, lateral view

(after García-Gómez, 1983)

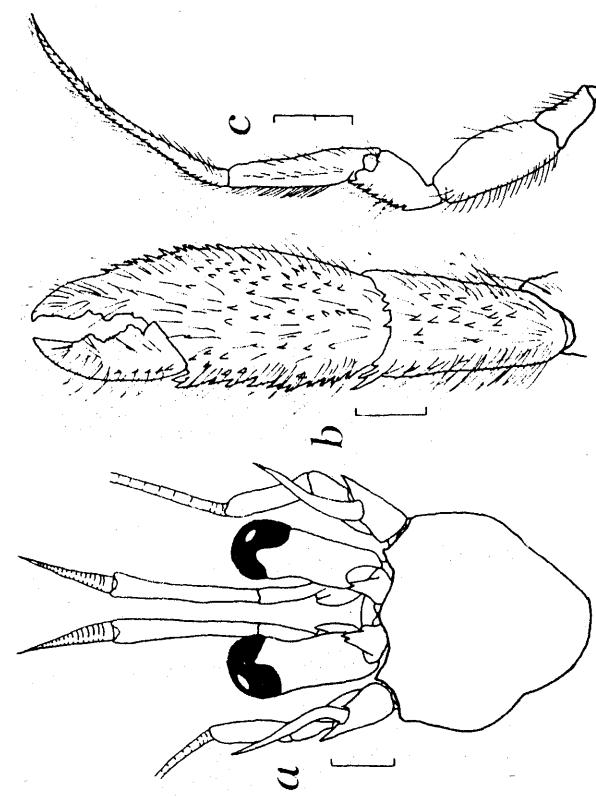


*Iridopagurus violaceus*

holotype female:

- a. anterior part of body, dorsal view
- b. right cheliped, dorsal view
- c. left second pereopod, inner face

(after De Saint Laurent-Déchancé, 1966)



*Pagurus provenzanoi*

- a. anterior part of body, dorsal view (holotype male)
  - b. right cheliped, dorsal view
  - c. left cheliped, dorsal view (female)
- (after Forest and De Saint Laurent, 1967)

*Pagurus brevidactylus*

- male:
  - d. anterior part of body, dorsal view
  - e. left cheliped, dorsal view
- (after McLaughlin, 1975)

*Pagurus carolinensis*

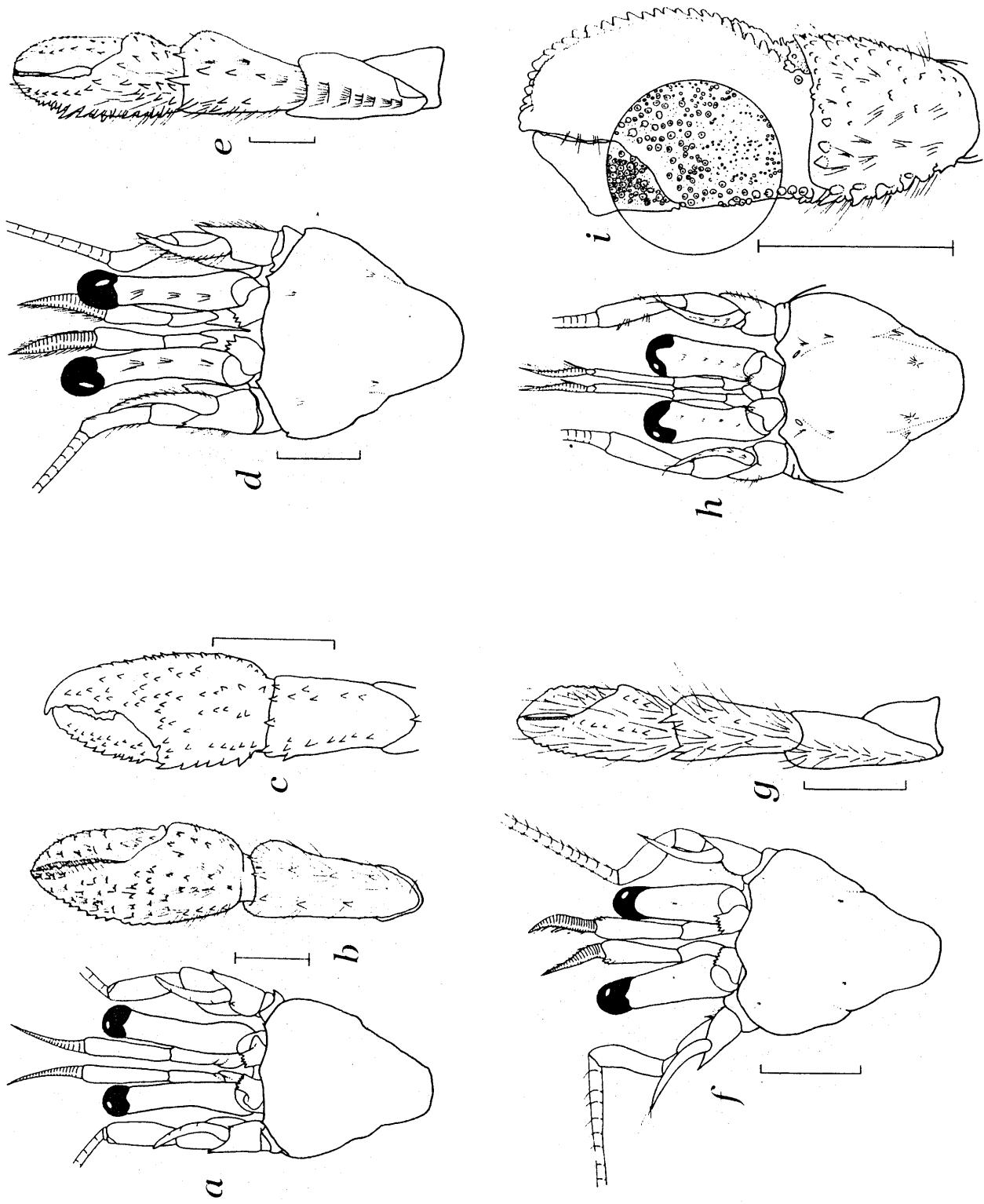
male:

- f. anterior part of body, dorsal view
  - g. left cheliped, dorsal view
- (after McLaughlin, 1975)

*Pagurus pollicaris*

female:

- h. anterior part of body, dorsal view
  - i. right cheliped, dorsal view
- (after Williams, 1984)



***Pagurus impressus***

ovigerous female:

- a. anterior part of body, dorsal view
  - b. right cheliped, dorsal view
  - c. left cheliped, dorsal view
- (after Williams, 1984)

***Pagurus maclaughlinae***

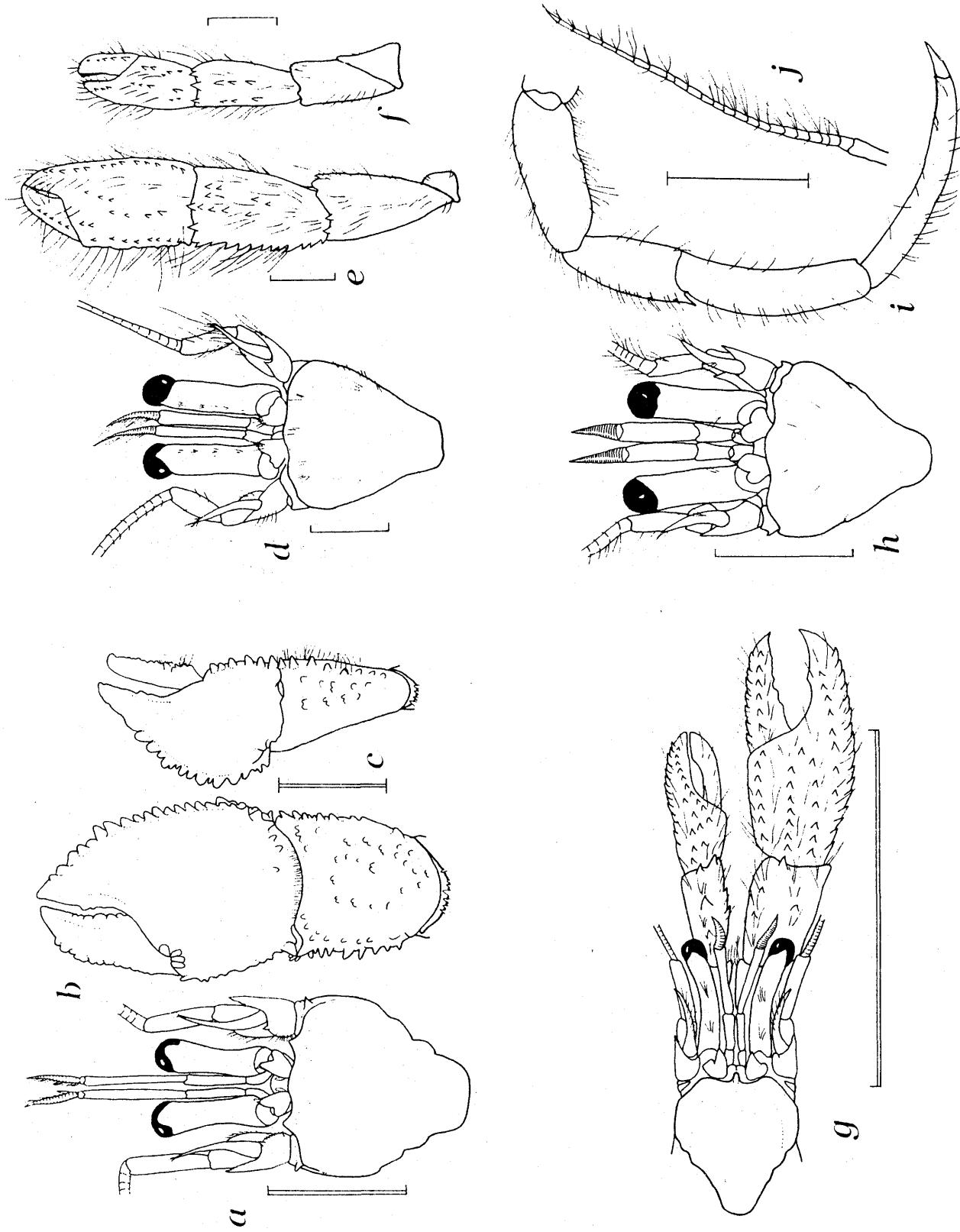
- d. anterior part of body, dorsal view
  - e. left cheliped, dorsal view
  - f. right cheliped, dorsal view
- (after García-Gómez, 1982)

***Pagurus marshi***

- g. anterior part of body and chelipeds, dorsal view
- (after Provenzano, 1959)

***Pagurus gymnodactylus***

- h. anterior part of body, dorsal view
  - i. right second pereopod, mesial view
  - j. antennal flagellum, lateral view
- (after Lemaire, 1982)



*Pagurus annulipes*

a. anterior part of body, dorsal view

b. carpus of right second pereopod (male, shield length, 1.3 mm)

c. carpus of right second pereopod (male, shield length, 2.5 mm)

(after Lemaitre, 1982)

*Pagurus criniticornis*

male:

a. anterior part of body, dorsal view

b. second pereopod, lateral view

c. second pereopod (male, shield length, 2.5 mm)

(after Forest and De Saint Laurent, 1967)

*Pagurus politus*

male:

f. anterior part of body, dorsal view

g. right cheliped, dorsal view

h. left cheliped dorsal view

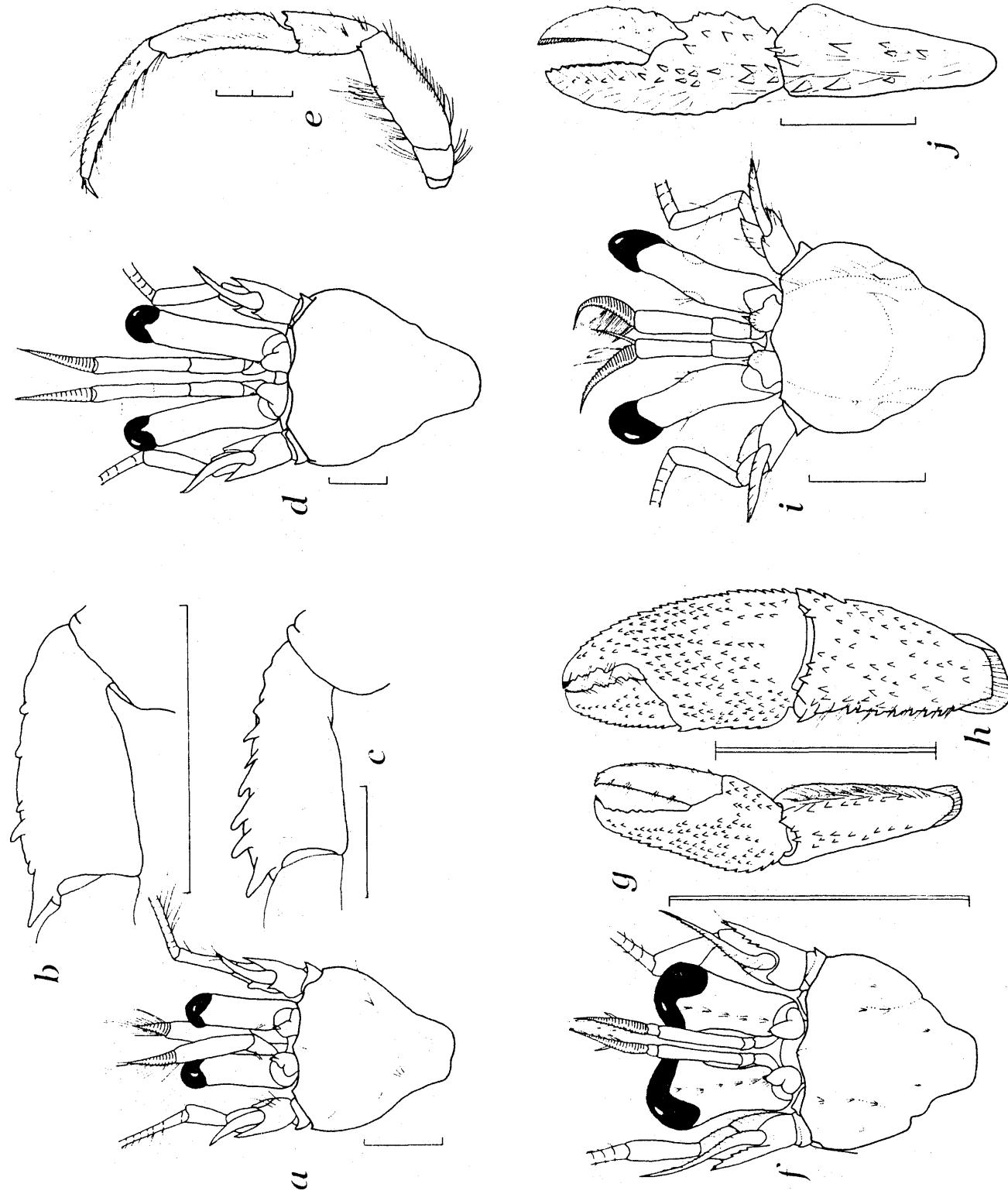
(after Williams, 1984)

*Pagurus stimpsoni*

i. anterior part of body, dorsal view

j. left cheliped, dorsal view

(after Wass, 1963, as *P. hendersoni*)



*Pagurus piercei*

- a. anterior part of body, dorsal view
  - b. major chela, dorsal view
- (after Wass, 1963)

*Pagurus longicarpus*

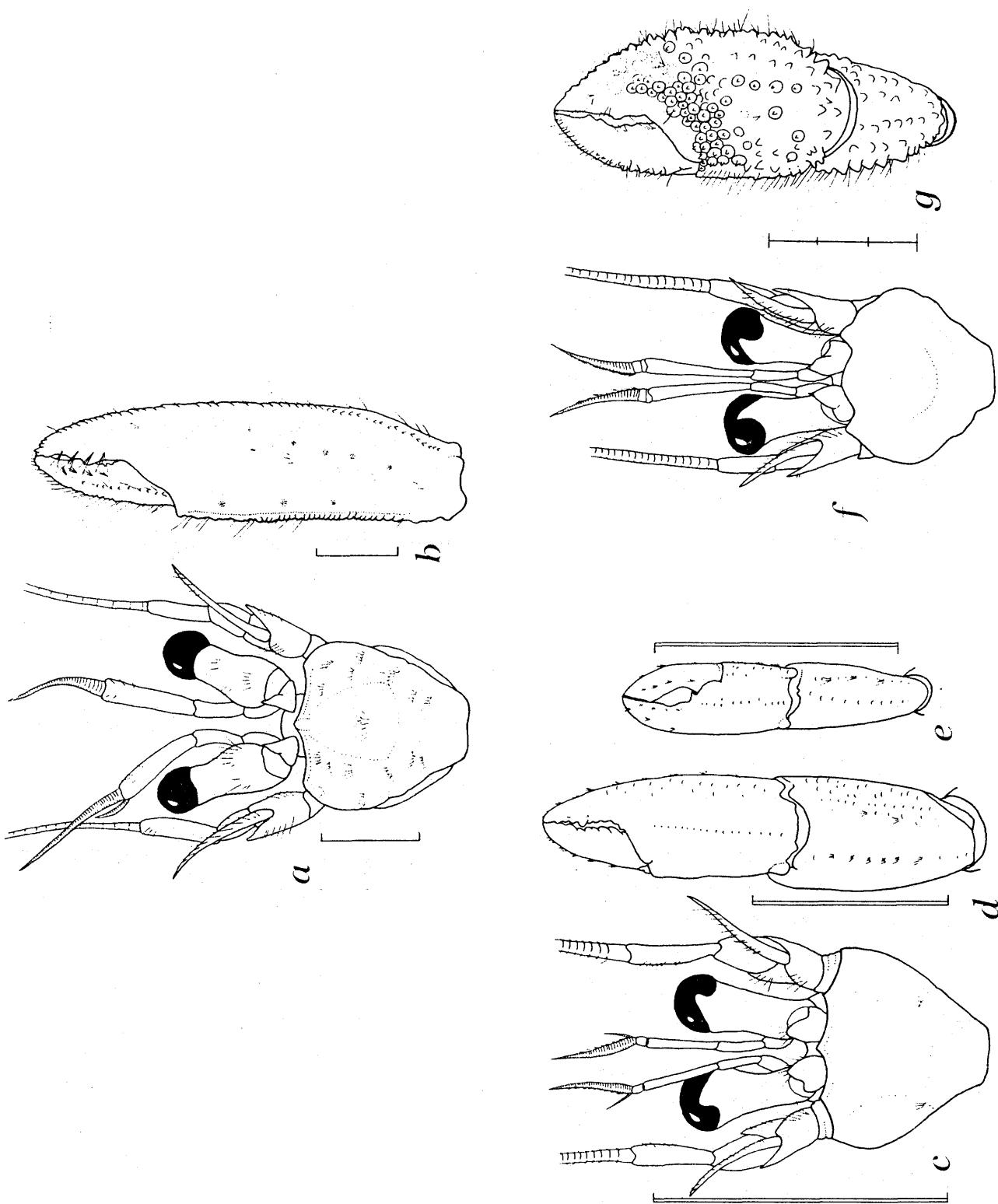
male:

- c. anterior part of body, dorsal view
  - d. right cheliped, dorsal view
  - e. left cheliped, dorsal view
- (after Williams, 1984)

*Pagurus defensus*

female:

- f. anterior part of body, dorsal view
  - g. right cheliped, dorsal view
- (after Williams, 1984)



*Phimochirus randalli*

- a. anterior part of body, dorsal view
  - b. major chela, dorsal view (holotype male)
- (a, after McLaughlin, 1981b; b, after Provenzano, 1961)

*Phimochirus holthuisi*

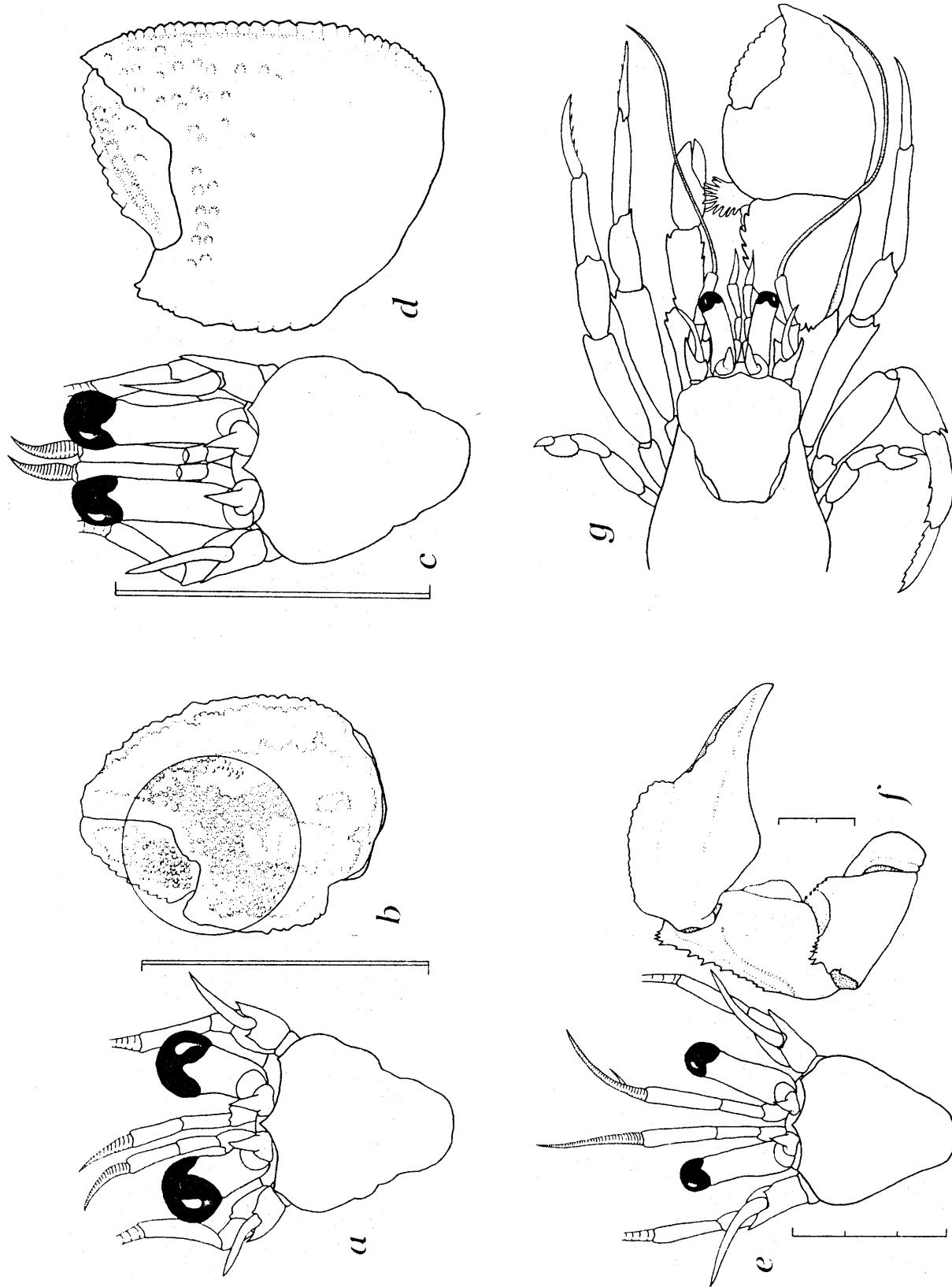
- c. anterior part of body, dorsal view
  - d. major chela, dorsal view (holotype male)
- (c, after McLaughlin, 1981b; d,  
after Provenzano, 1961)

*Phimochirus leurocarpus*

- e. anterior part of body, dorsal view
  - f. right cheliped, lateral view
- (after McLaughlin, 1981b)

*Phimochirus operculatus*

- g. anterior part of body and pereopods  
(after Provenzano, 1959)



*Tomopagurus rubropunctatus*

- a. anterior part of body, dorsal view
  - b. major chela, dorsal view
  - c. third right pereopod
  - d. anterior part of body, dorsal view
  - e. right chela and carpus, dorsal view
  - f. second right pereopod
- (a, after McLaughlin, 1981a; b, c, after Wass, 1963,  
as *Pagurus rubrolineatus*)

*Tomopagurus cokeri*

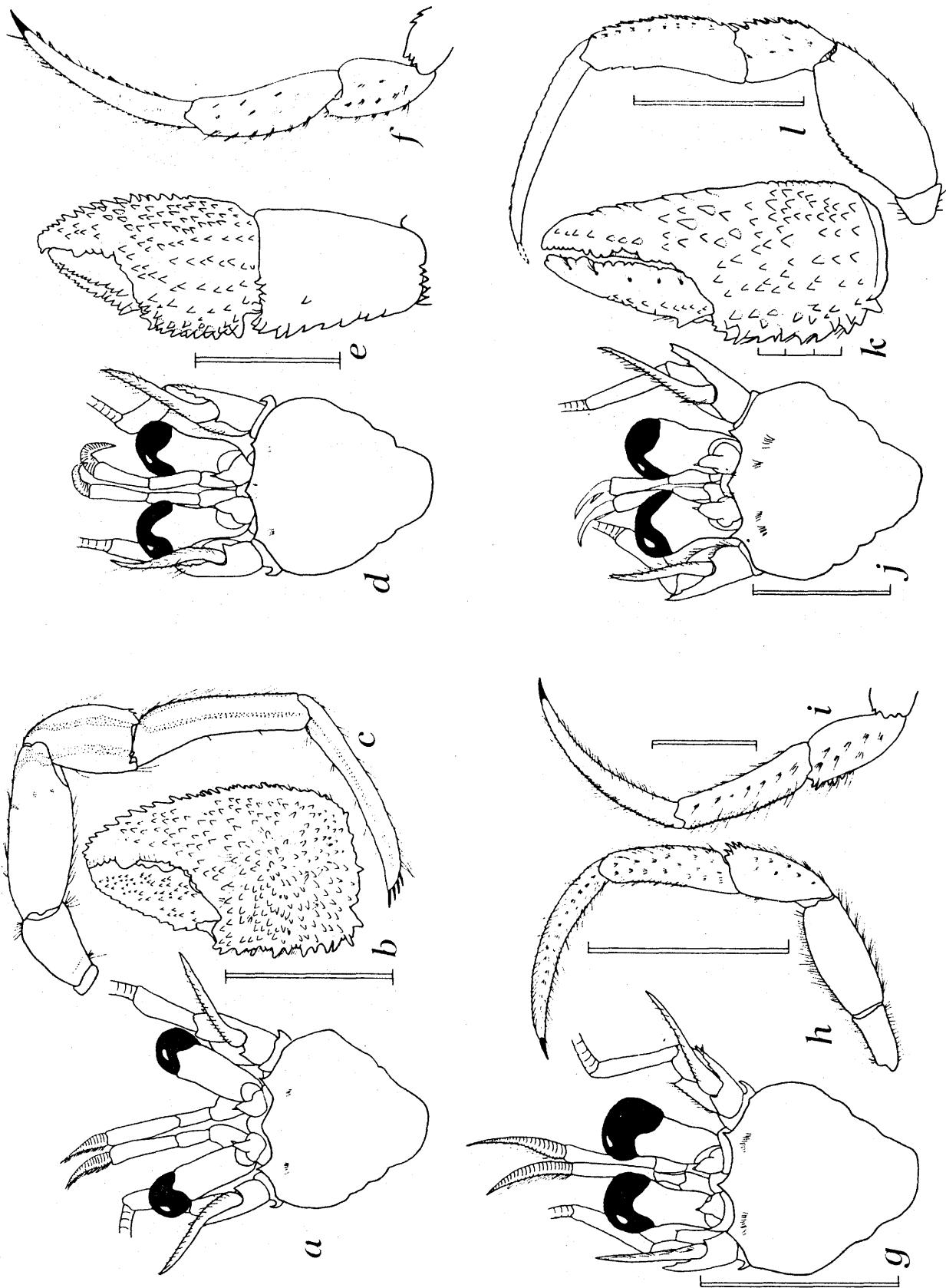
- a. anterior part of body, dorsal view
- b. major chela, dorsal view
- c. third right pereopod
- d. anterior part of body, dorsal view
- e. right chela and carpus, dorsal view
- f. second right pereopod

(after McLaughlin, 1981a)

*Tomopagurus wassi*

- g. anterior part of body, dorsal view
  - h. third left pereopod
  - i. second right pereopod
  - j. anterior part of body, dorsal view
  - k. major chela, dorsal view
  - l. second left pereopod
- (a, after McLaughlin, 1981a; b, c, after Wass, 1963)

*Tomopagurus cubensis*



*Tomopagurus chacei*

- a. anterior part of body, dorsal view
  - b. major chela, dorsal view
- (a, after McLaughlin, 1981a; b, after Wass, 1963)
- c. anterior part of body, dorsal view
  - d. thorax and sexual tube, ventral view
  - e. left cheliped, dorsal view
  - f. right cheliped, dorsal view

(after Forest and De Saint Laurent, 1967)

*Catopagurus sharrei*

- a. anterior part of body, dorsal view
  - b. major chela, dorsal view
- c. anterior part of body, dorsal view
  - d. thorax and sexual tube, ventral view
  - e. left cheliped, dorsal view
  - f. right cheliped, dorsal view

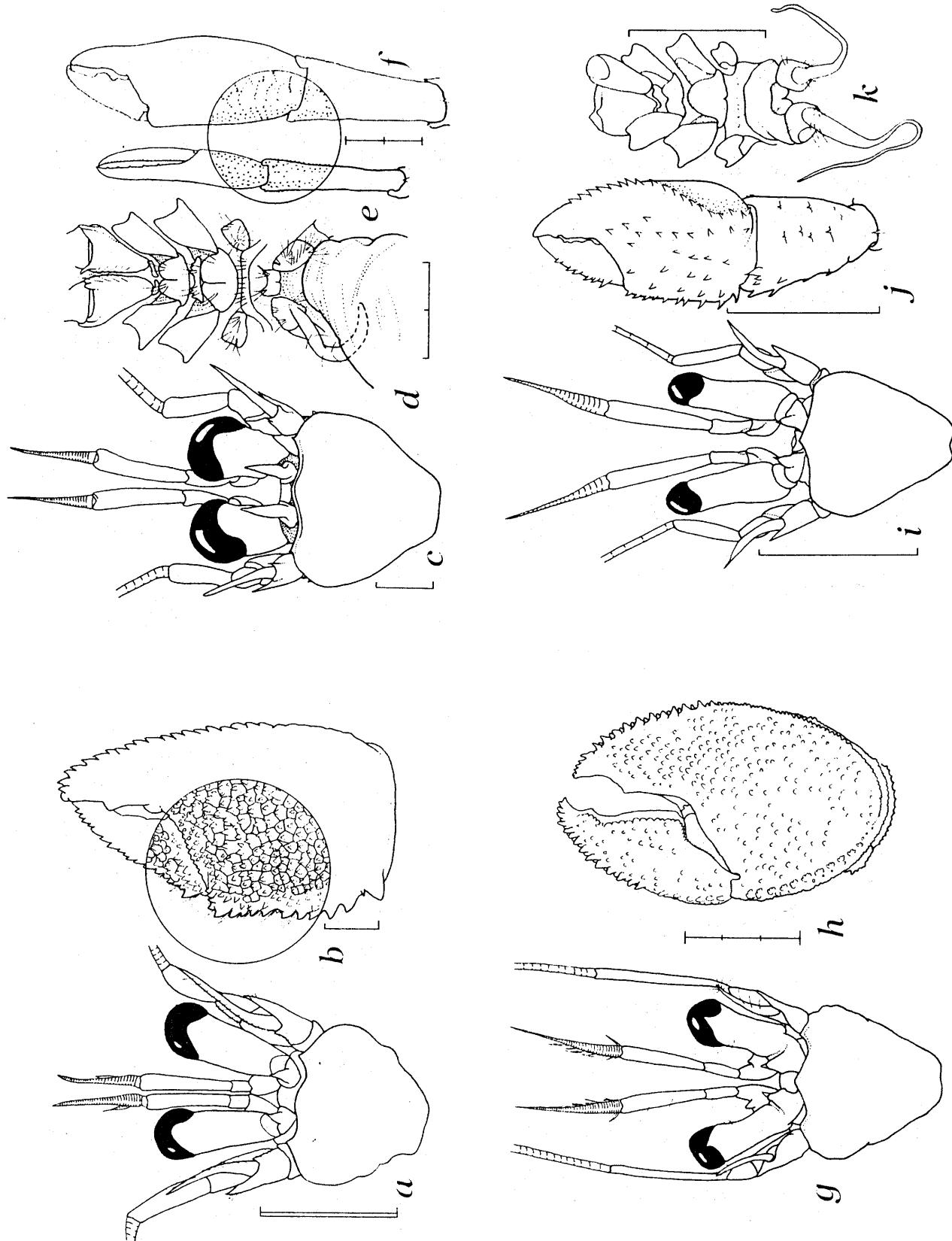
(after Forest and De Saint Laurent, 1967)

*Manucomplanus corallinus*

- g. anterior part of body, dorsal view
  - h. right chela, dorsal view
- (after Williams, 1984)
- i. anterior part of body, dorsal view
  - j. chela and carpus of right cheliped, dorsal view

*Nematopaguroides pusillus*

- k. thorax and sexual tubes, ventral view
- (after Forest and De Saint Laurent, 1967)
- i. anterior part of body, dorsal view
  - j. chela and carpus of right cheliped, dorsal view



*Ostraconotus spatulipes*

a. dorsal view

(after A. Milne Edwards and Bouvier, 1893)

*Pylopaguropsis atlantica*

a. dorsal view

b. anterior part of body, dorsal view

c. chela, carpus, and merus of major cheliped

(after Wass, 1963)

*Pylopagurus discoidalis*

d. anterior part of body, dorsal view

e. right chela, dorsal view, showing color pattern

(after Williams, 1984)

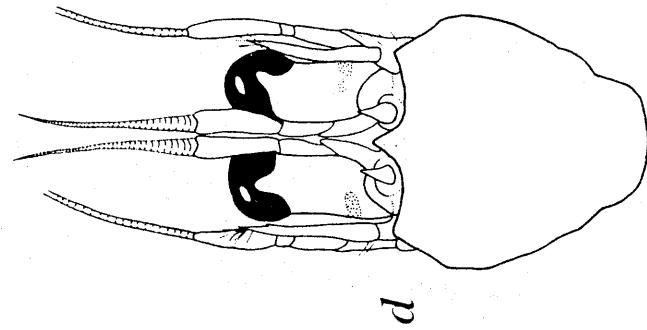
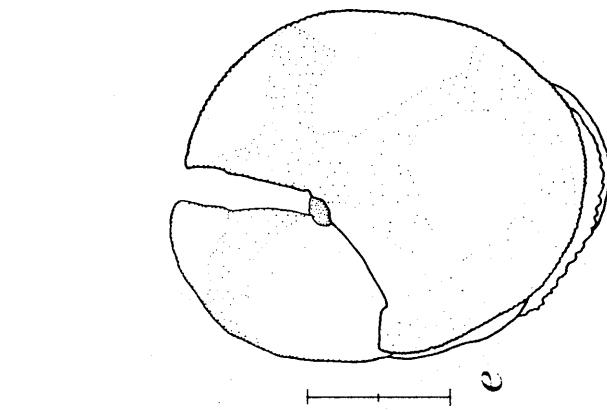
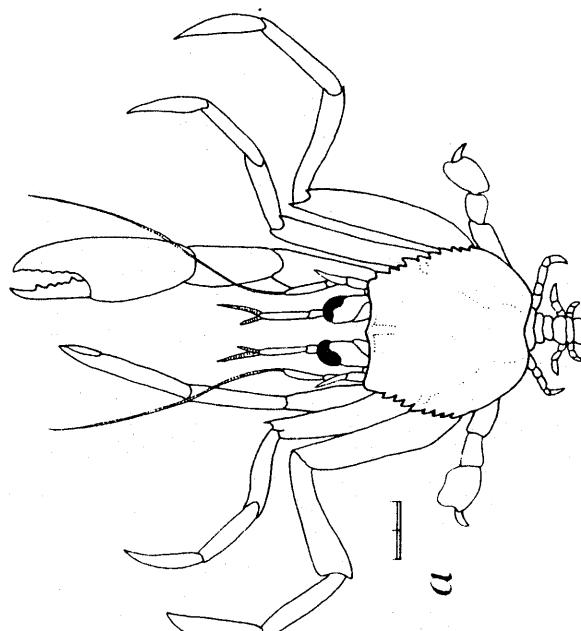
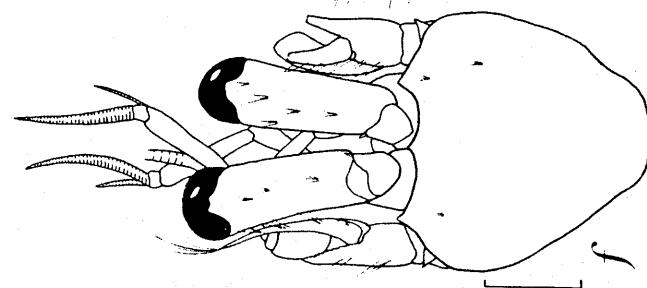
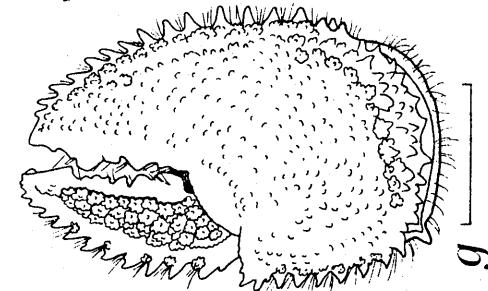
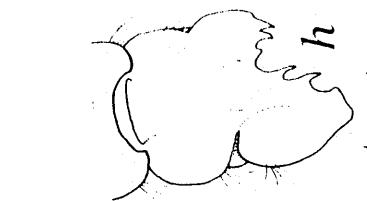
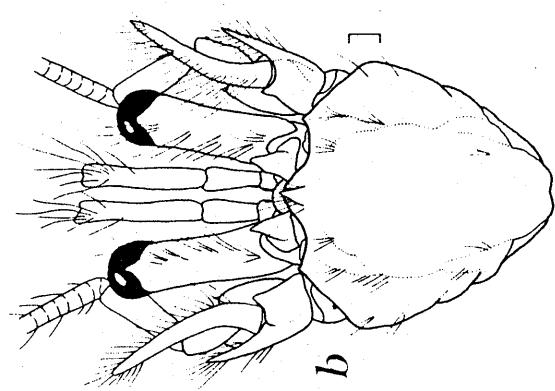
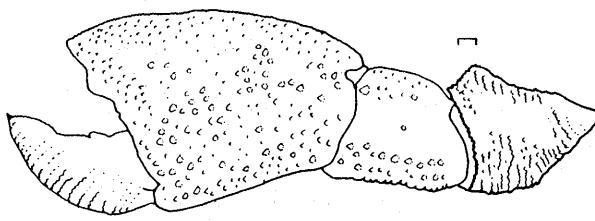
*Rhodochirus rosaceus*

f. anterior part of body, dorsal view

g. right chela, dorsal view

h. telson

(after Williams, 1984)



*Solenopagurus lineatus*

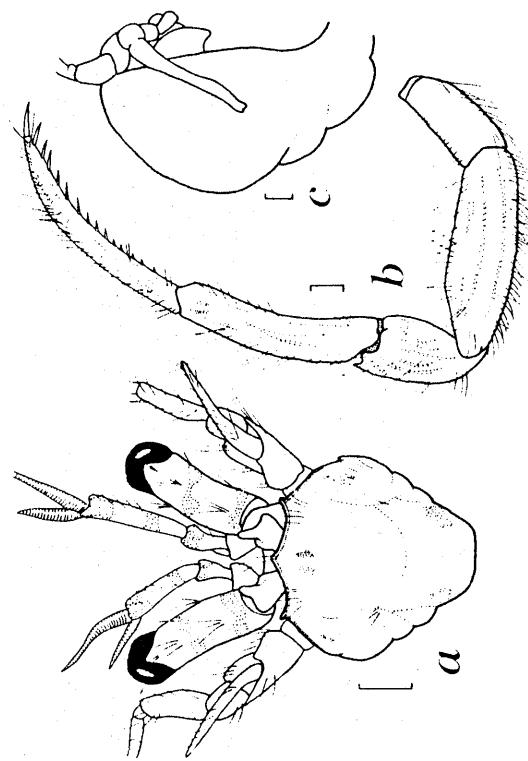
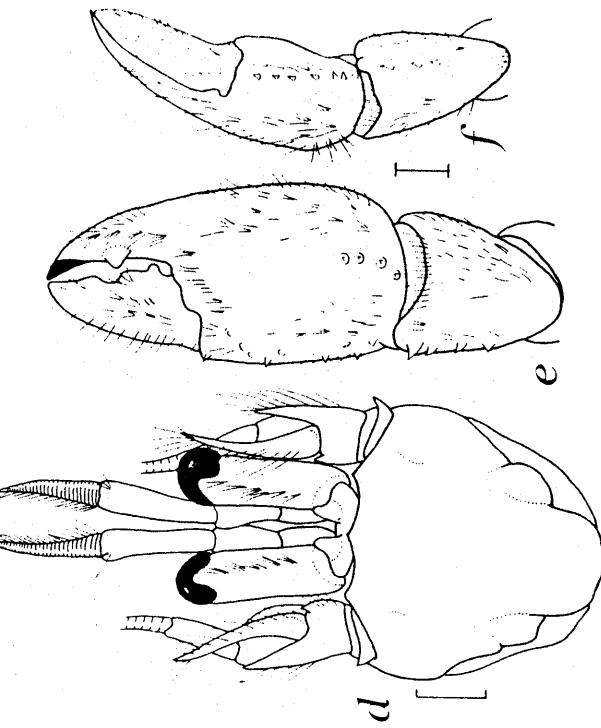
- a. anterior part of body, dorsal view
- b. third pereopod
- c. sexual tube extending over abdomen

(after Wass, 1963)

*Tomopagurus problematicus*

- d. anterior part of body, dorsal view
- e. chela and carpus of right cheliped, dorsal view
- f. chela and carpus of left cheliped, dorsal view

(after Williams, 1984)





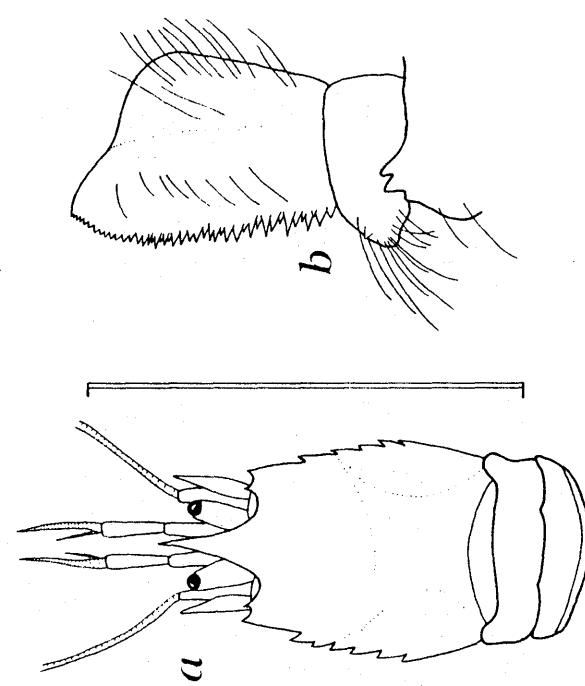
**Family Chirostylidae**

**Genus *Uroptychus* Henderson, 1888**

Carapace broader than long, with lateral margins dentate or spinose; gastric region with no spines; cornea much smaller than eyestalk ..... *U. armatus*

*Uropychus armatus*

- a. anterior part of body, dorsal view (male)
- b. merus and ischium of left third maxilliped  
(after A. Milne Edwards and Bouvier, 1897)





## Family Galatheidae

Key to genera and species  
[Adapted from Chace, 1942b]

1. Integument hard, well calcified; transverse ciliated lines on carapace feeble or absent; exopod of first maxilliped without lash ..... *Munidopsis*  
Integument pliable, not strongly calcified; well developed transverse ciliated lines on carapace; exopod of first maxilliped with simple lash ..... 2
2. (1) Rostrum triangular and flattened or concave above ..... *Galathea rostrata*  
Rostrum not triangular with long, slender spine (side walls of carapace not visible in dorsal view) ..... *Munida*

## Genus *Munida* Leach, 1820

Key to species  
[Adapted from Chace, 1942b]

1. Posterior margin of carapace unarmed; no median spines on cardiac region ..... 2  
Ridge along posterior margin of carapace armed with spines; one or more median spines on cardiac region ..... 11
2. (1) Rostral spines armed laterally with distinct spinules ..... *M. spinifrons*  
Rostral spine not distinctly spinose on margins ..... 3
3. (2) Inner terminal spine of basal segment of antennular peduncle much shorter than outer one ..... 4  
Inner terminal spine of basal segment of antennular peduncle nearly or quite twice as long as outer one ..... 7
4. (3) Intermediate spines present between large gastric pair situated directly behind supraoculars ..... 5  
No intermediate spines between large gastric pair ..... 6
5. (4) No spines on dorsal surface of triangular area of carapace behind anterior branch of cervical groove ..... *M. miles*  
One or two spines on each triangular area between branches of cervical groove, and widely separated pair behind posterior branch of cervical groove, one on either side of cardiac region ..... *M. sanctipauli*

6. (4) Supraocular spines extending beyond eyes; second and third abdominal somites armed with spines ..... *M. valida*  
 Supraocular spines not reaching as far as eyes; third abdominal somite unarmed.....  
 ..... *M. forceps*
7. (3) Usually two or more spines on ridge behind cervical groove..... 8  
 No spines on ridge behind cervical groove..... 10
8. (7) Abdominal somites unarmed (two to four spines on ridge behind cervical groove)...  
 ..... *M. irrasa*  
 Second abdominal somite armed with spinules..... 9
9. (8) Supraocular spines reaching to or beyond cornea; medium-sized to large species....  
 ..... *M. iris iris*  
 Supraocular spines not reaching to cornea; very small species..... *M. pusilla*
10. (7) Second abdominal somite usually armed with few spinules..... *M. angulata*  
 Abdominal somites unarmed (spine at anterolateral angle of carapace long, followed by six small lateral spines) ..... *M. simplex*
11. (1) Rostral spine slightly shorter than supraocular spines..... *M. longipes*  
 Rostral spine distinctly longer than supraoculars..... 12
12. (11) Transverse striae of carapace armed with many small spinules; posterior margin of carapace armed with six to fifteen spines; basal joint of antennular peduncle with from three to five lateral spines in addition to terminal pair; thoracic sternum with small marginal spine at insertion of each appendage ..... *M. affinis*  
 Transverse striae of carapace at most tuberculate or beaded; posterior margin of carapace armed with two to six spines; basal segment of antennular peduncle with no or two lateral spines in addition to terminal pair; thoracic sternum unarmed (strong median spine on posterior portion of fourth abdominal somite; supraocular spines reaching to distal margin of cornea or beyond; transverse striae on carapace very numerous, discontinuous and obscure) ..... *M. stimpsoni*

**Genus *Munidopsis* Whiteaves, 1874**

## Key to species

[Adapted from Mayo, 1974]

1. Dorsal surface of carapace without distinct spines or pair of tubercles on gastric region (rostrum slightly decurved; antennular spines adjacent or overlapping in dorsal view; no distinct protuberance beneath frontal margin lateral to eye) ..... *M. polita*
- Dorsal surface of carapace with distinct spines or at least one pair of tubercles on gastric region ..... 2
2. (1) Rostrum broad, spade-shaped; frontal margin of carapace with postantennal spine... *M. platirostris*
- Rostrum narrow, not simply spine-like, but with distal constriction, often with obtuse teeth at base of constriction; frontal margin of carapace without postantennal spine (gastric region of carapace without distinct pair of sharp spines, but with pair of obscure tubercles or spinules; lateral submarginal depressions distinct on carapace) ..... *M. armata*

***Munida spinifrons***

a. dorsal view

(after Henderson, 1888)

***Munida miles***

b. dorsal view

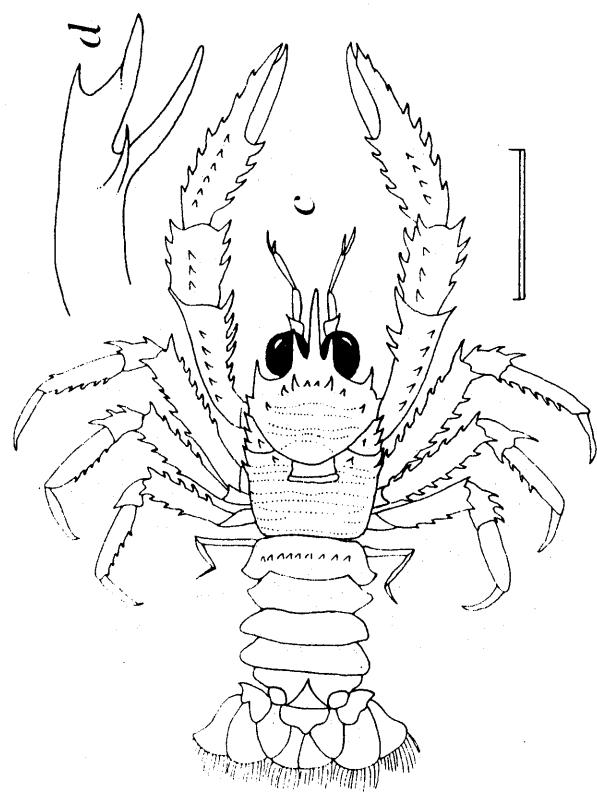
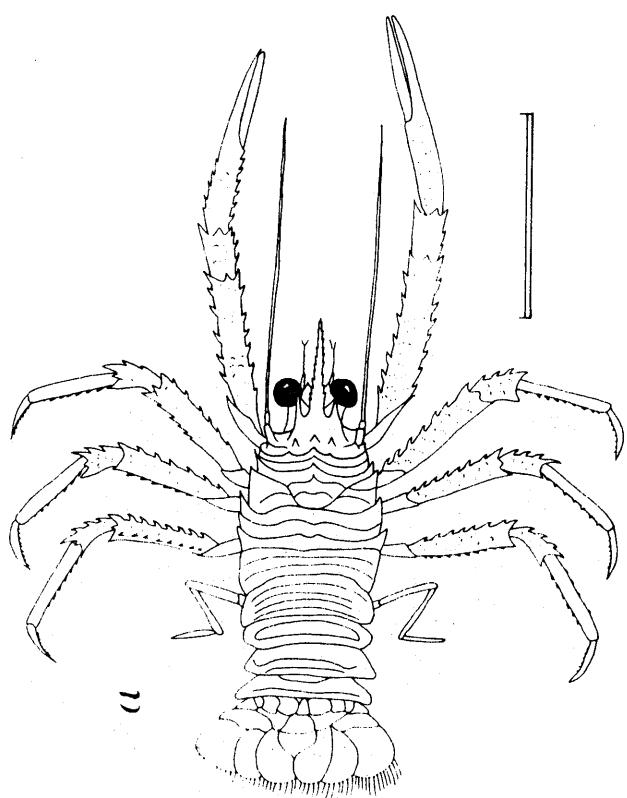
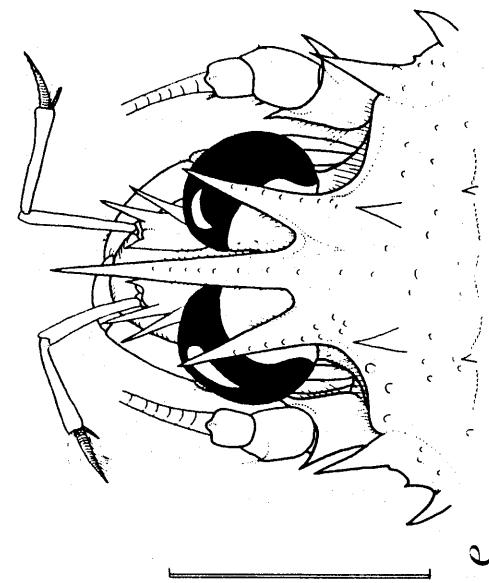
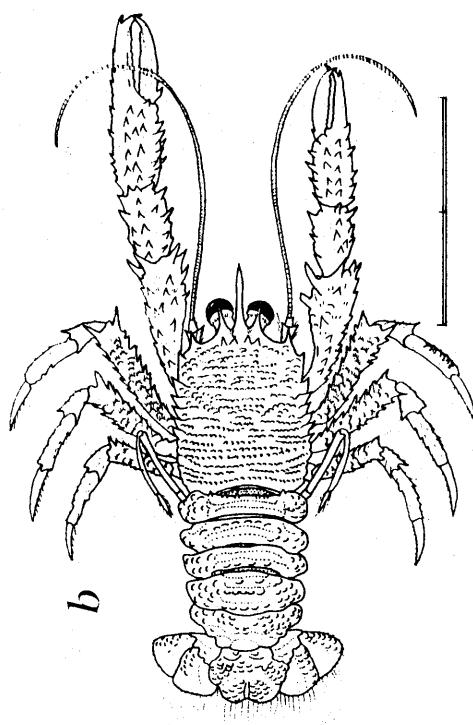
(after Benedict, 1902, as *M. decora*)***Munida sanctipauli***

c. dorsal view

d. antennular peduncle, ventrolateral view

(c, after Henderson, 1888; d, after specimen at  
SI-NMNH, USNM 11487)***Munida valida***e. frontal region and appendages,  
dorsal view (male)

(after Williams, 1984)



*Munida forceps*

a. dorsal view (male)

(after A. Milne Edwards and Bouvier, 1897)

*Munida irrasa*

male:

b. frontal region and appendages, dorsal view

c. right chela, external view

(after Williams, 1984)

*Munida iris iris*

female:

d. frontal region and appendages, dorsal view

e. second, third, and part of fourth abdominal somites, dorsal view

(after Williams, 1984)

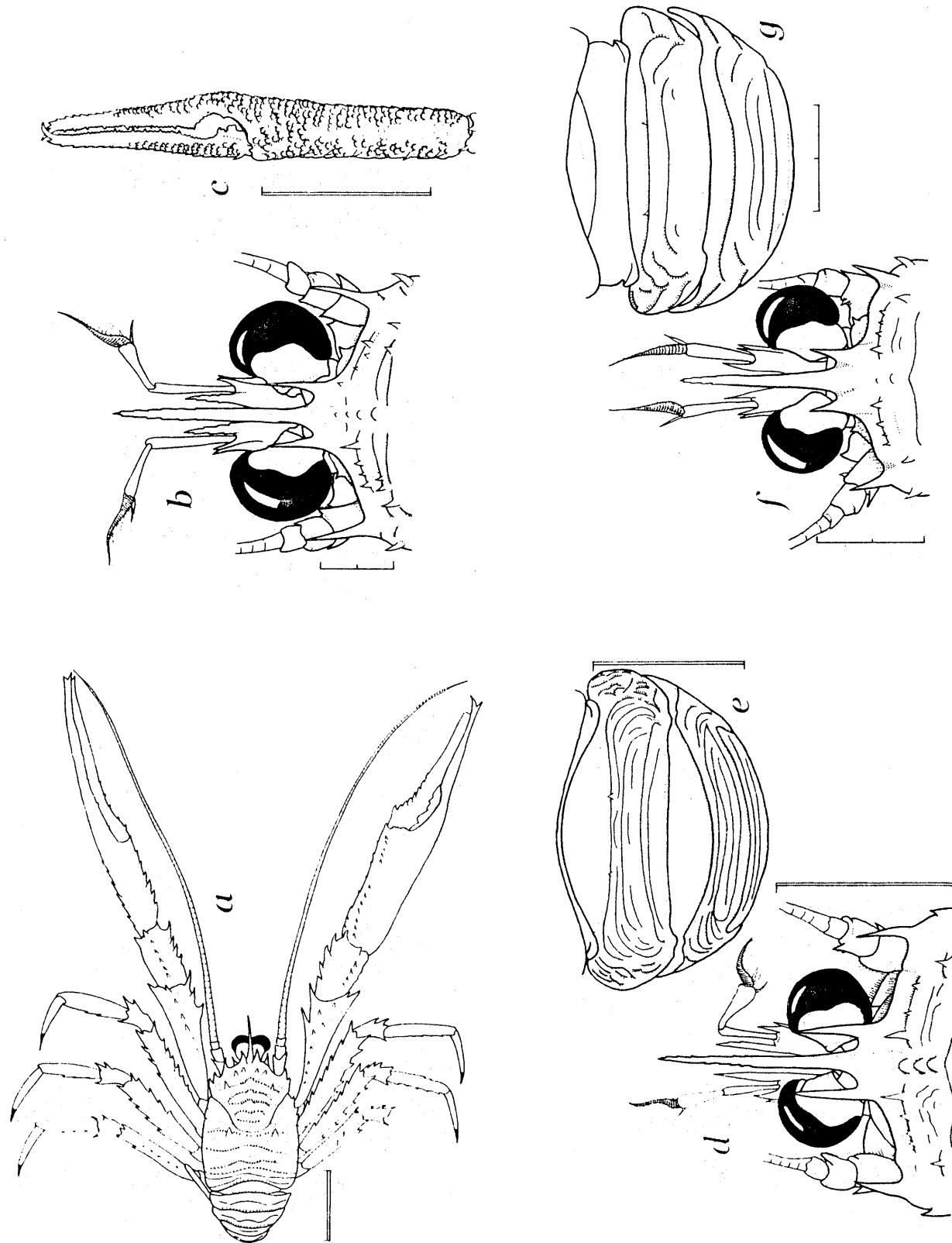
*Munida pusilla*

ovigerous female:

f. frontal region and appendages, dorsal view

g. first, second, and third abdominal somites, dorsal view

(after Williams, 1984)



*Munida angulata*

a. dorsal view

(after Benedict, 1902)

*Munida simplex*

b. dorsal view

(after Benedict, 1902)

*Munida longipes*

c. dorsal view (male)

(after Williams, 1984)

*Munida affinis*

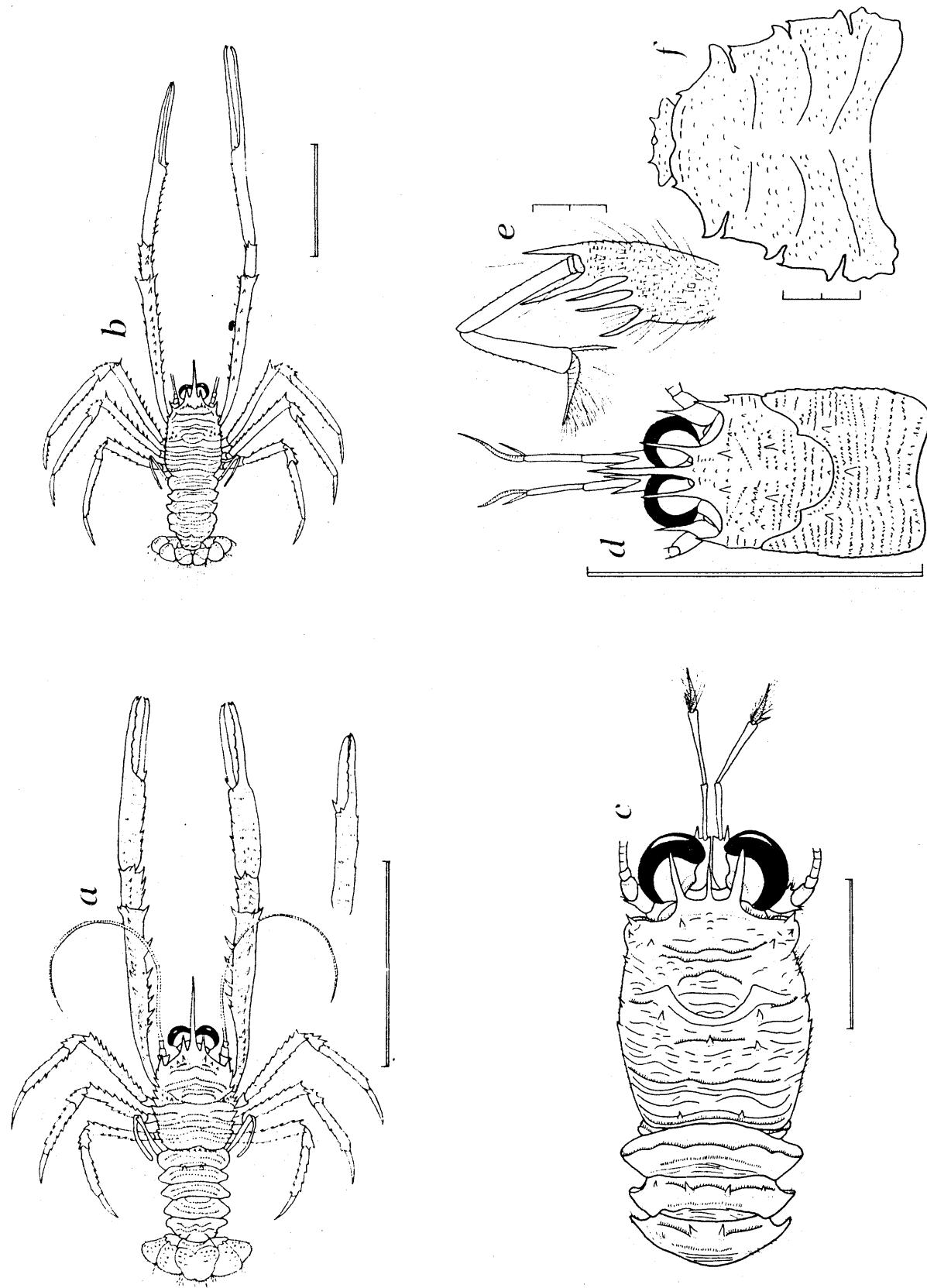
male:

d. frontal region and appendages, dorsal view

e. left antennule

f. sternum

(d, after A. Milne Edwards and Bouvier, 1897;  
e, f, after Chace, 1942b)



*Munida stimpsoni*

male:

a. carapace, dorsal view

b. right antennule

(after Chace, 1942b)

*Munidopsis polita*

male:

c. dorsal view

(after Mayo, 1974)

*Munidopsis planirostris*

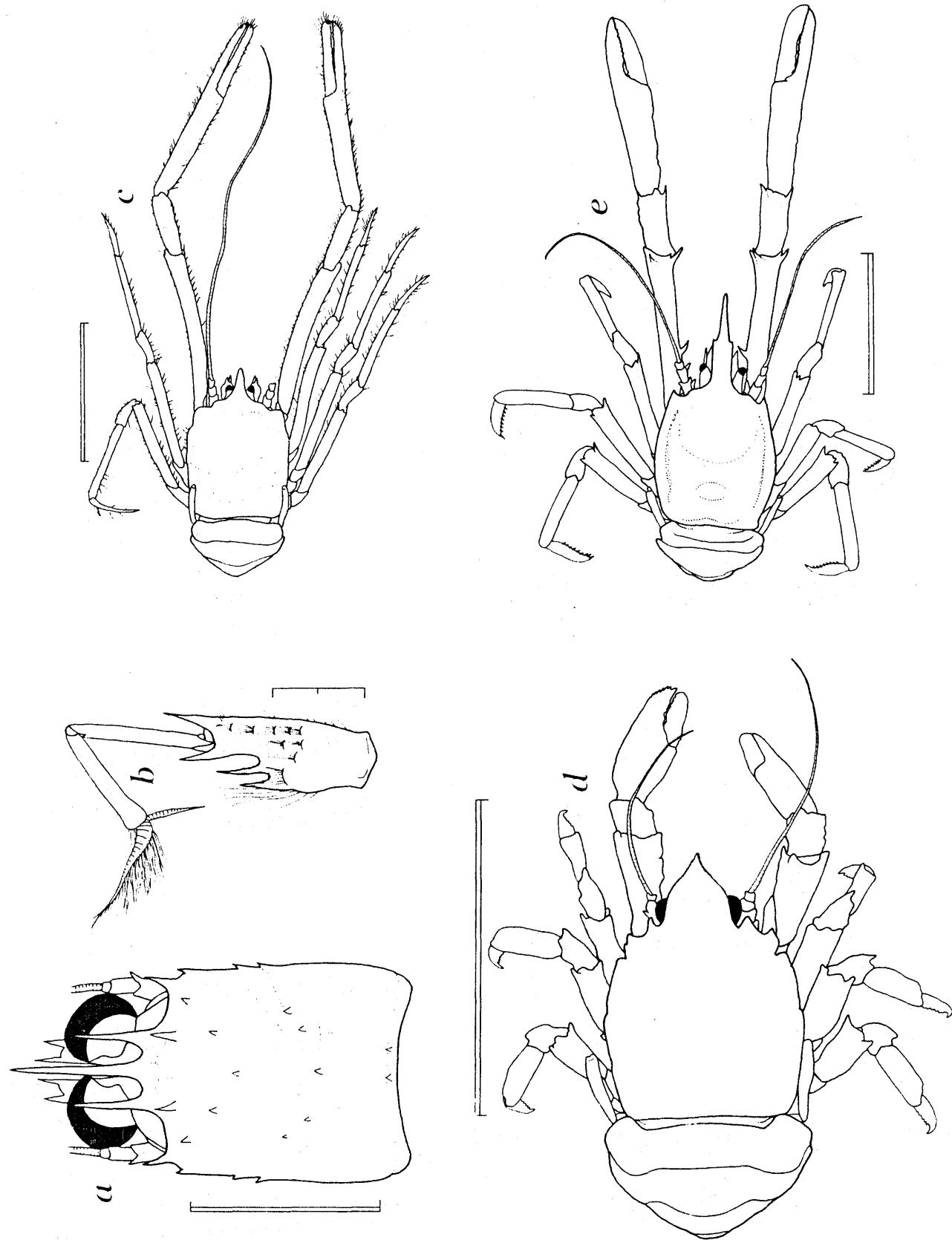
d. dorsal view

(after Mayo, 1974)

*Munidopsis armata*

e. dorsal view

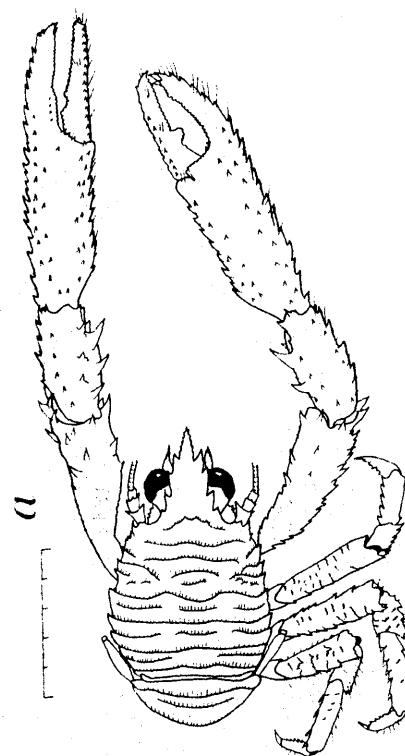
(after Mayo, 1974)



*Galathea rostrata*

a. dorsal view (male)

(after Williams, 1984)



## Family Porcellanidae

Key to genera and species  
[Based on Gore and Abele, 1976]

1. Carapace at least 1.5 times as long as broad; form elongate, "Hippa"-like; large orbit-like concavity on hepatic margin, its outer angle marked by tooth ..... *Euceramus praelongus*
- Carapace less than or nearly 1.5 times as long as broad; form not elongate, or "Hippa"-like; no large orbit-like concavity on hepatic margin ..... 2
2. (1) Basal segment of antennae short, not strongly produced forward to meet anterior margin of carapace, movable segments with free access to orbit ..... 3
- Basal segment of antennae strongly produced forward and broadly in contact with anterior margin of carapace, movable segments thus far removed from orbit ..... 6
3. (2) Posterior portions of side walls of carapace lacking or consisting of one or more small pieces, separated by membranous interspaces behind epibranchial regions ... 4
- Posterior portions of side walls of carapace entire, without small pieces or membranous areas behind epibranchial regions ..... 5
4. (3) Side walls of carapace incomplete; portion posterior to epibranchial or mesobranchial area occupied by membrane ..... *Neopisosoma angustifrons*
- Side walls of carapace consisting of one or more pieces separated by membranous interspaces in epibranchial or mesobranchial area (front triangular or transverse in dorsal view, never with projecting teeth; carapace more or less subquadrate; chelipeds very robust and thick) ..... *Pachycheles*
5. (3) Basal segment of antennule not laterally expanded; basal antennal segment neither produced inward nor forming partial suborbital margin; front triangular, prominent; carapace with distinct frontal, epibranchial and mesobranchial spinules; cheliped with fingers distorted, gaping, deeply grooved along cutting edges, spooned and truncate at tips; telson 7-plated ..... *Parapetrolisthes tortugensis*
- Basal antennular segment as above; basal antennal segment either not produced inward or, if with distinct inward projection, forming only partial suborbital margin; front triangular or trilobate, usually prominent; carapace without mesobranchial spinules; cheliped fingers normal, not grooved along cutting edges or spooned at tips; telson almost invariably 7-plated ..... *Petrolisthes*
6. (2) Dactyli of walking legs ending in 2 or more large, strong, fixed spines; carapace markedly broader than long, front nearly transverse in dorsal view ..... *Polyonyx gibbesi*
- Dactyli of walking legs ending in single spines, usually with accessory movable spinules on posterior margins ..... 7

7. (6) Front prominent, tridentate or trilobate in dorsal view; carapace only slightly longer than broad (lateral margins of carapace unarmed posterior to epibranchial angle; fingers on chelipeds not twisted out of plane with palm, more or less normal) ..... *Porcellana*

Front deflexed, appearing rounded or faintly trilobate in dorsal view; carapace about as broad as long (basal segments of antennules very small, recessed behind front, latter projecting shelflike over antennules) ..... *Megalobrachium*

### Genus *Megalobrachium* Stimpson, 1858

Key to species  
[Adapted from Gore and Abele, 1976]

Telson of abdomen with 5 plates (carapace, chelipeds, and walking legs tuberculate; lateral margins rounded, dentate; frontal, postfrontal, and protogastric lobes, viewed frontally, appearing low, rounded, indistinct, usually smooth, rarely granular) ..... *M. soriatum*

Telson of abdomen with 7 plates (carapace and chelipeds thickly covered with coarse hairs; chelipeds heavily and evenly granulate; protogastric regions, viewed frontally, appearing distinct and clearly elevated above frontal and hepatic regions; propodi of walking legs more slender, from 2.8 to 3 times longer than wide) ..... *M. poeyi*

### Genus *Pachycheles* Stimpson, 1858

Key to species  
[Adapted from Haig, 1956]

1. Chelipeds thickly covered with stiff bristles..... *P. pilosus*  
No stiff bristles on chelipeds..... 2
2. (1) Chelipeds smooth except for rugosity on outer margin of carpus..... *P. riisei*  
Chelipeds rough over entire surface..... 3
3. (2) Chelipeds with high longitudinal ridges; in between ridges rows of deep pits present ..... *P. rugimanus*  
Chelipeds with longitudinal rows of large flattened tubercles..... 4
4. (3) Fingers of chelipeds neither gaping nor full of pubescence; space between tubercles of chelipeds glabrous or nearly so; tubercles low, rows irregular ... *P. ackleianus*  
Fingers of major cheliped gaping and full of pubescence; space between tubercles filled with pubescence; tubercles heavy, in regular rows ..... *P. monilifer*

**Genus *Petrolisthes* Stimpson, 1858**

Key to species  
[Based on Haig, 1956]

1. Telson of abdomen with 5 plates (3 or 4 teeth on carpus of chelipeds pointed, denticulate; outer margin of manus with longitudinal groove; carapace, chelipeds, and gape of fingers lightly pubescent) ..... *P. jugosus*
- Telson of abdomen with 7 plates..... 2
2. (1) Carpus of cheliped armed with 4 teeth or lobes; no spines (except epibranchial spine) on lateral margins of carapace (carapace very rough with prominent, transverse piliferous rugae) ..... *P. galathinus*  
    Carpus of cheliped armed with 3 low, wide-set, spine-tipped teeth..... 3
3. (2) Carapace transversely rugose; epibranchial spine present ..... *P. armatus*  
    Surface of carapace more or less smooth, not rugose; no epibranchial spine..... *P. politus*

**Genus *Porcellana* Lamarck, 1801**

Key to species  
[Adapted from Haig, 1956]

1. Median lobe of front rounded, not surpassing internal orbital angles; chelae without hairs; length and breadth of carapace about equal ..... *P. stimpsoni*  
    Median lobe of front pointed, surpassing internal orbital angles; chelae with fringe of hairs on outer margin; carapace longer than broad ..... 2
2. (1) Inner angle of carpus of cheliped with broad lobe; epibranchial angle low, rounded, lobe-like, sometimes spine-tipped ..... *P. sayana*  
    Inner angle of carpus with low, spine-tipped lobe; epibranchial angle with sharp spine ..... *P. sigsbeiana*

*Megalobrachium soriatum*

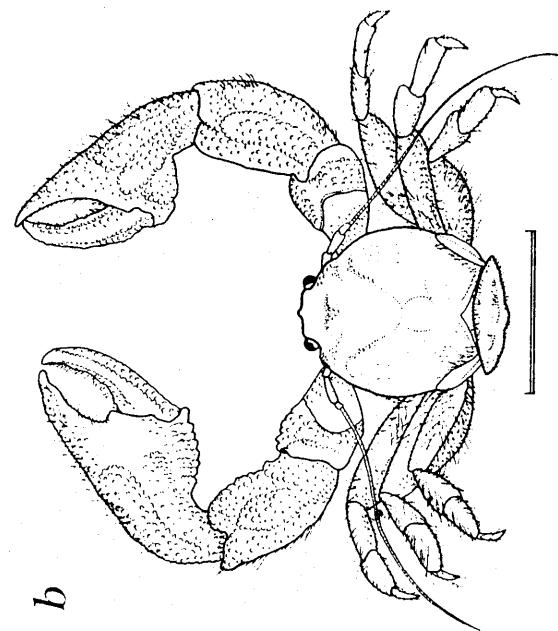
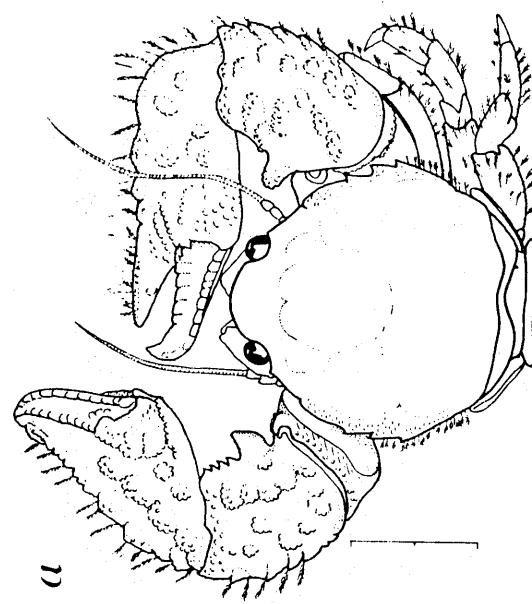
a. dorsal view

(after Williams, 1965a)

*Megalobrachium poeyi*

b. dorsal view

(after Benedict, 1901)

*b**c*

*Pachycheles pilosus*

a. dorsal view

(after Williams, 1965a)

*Pachycheles riisei*

b. dorsal view

(after Benedict, 1901, as *Pisosoma glabra*)

*Pachycheles rugimanus*

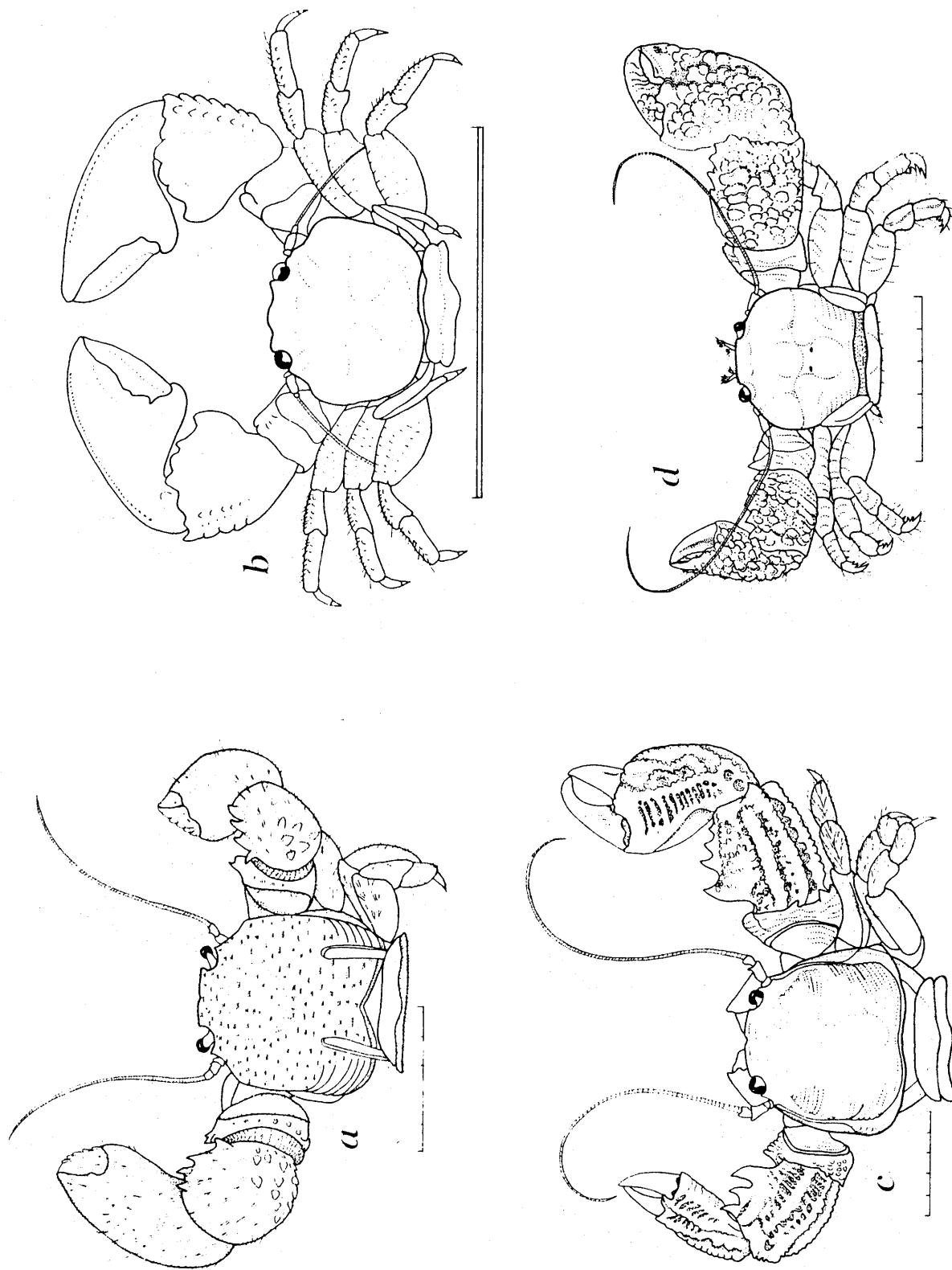
c. dorsal view

(after Williams, 1965a)

*Pachycheles ackleianus*

d. dorsal view (male)

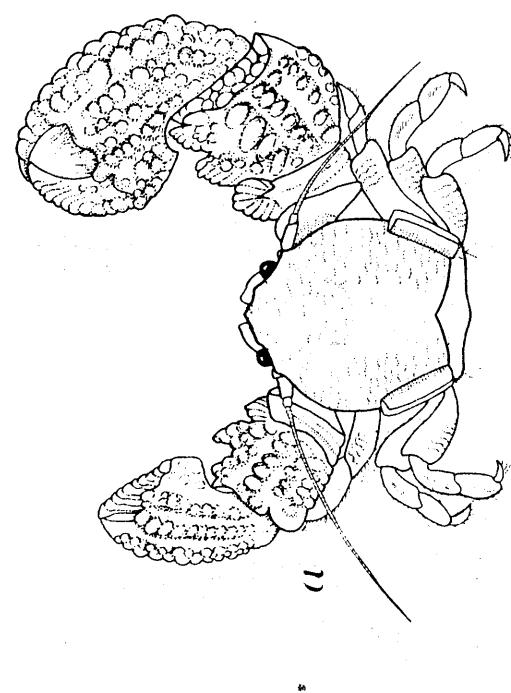
(after Gore, 1974)



*Pachycheles monifer*

a. dorsal view

(after Dana, 1855)



***Petrolisthes jugosus***

a. dorsal view (male)

(after Gore and Abele, 1976)

***Petrolisthes galathinus***

b. dorsal view

(after Williams, 1984)

***Petrolisthes armatus***

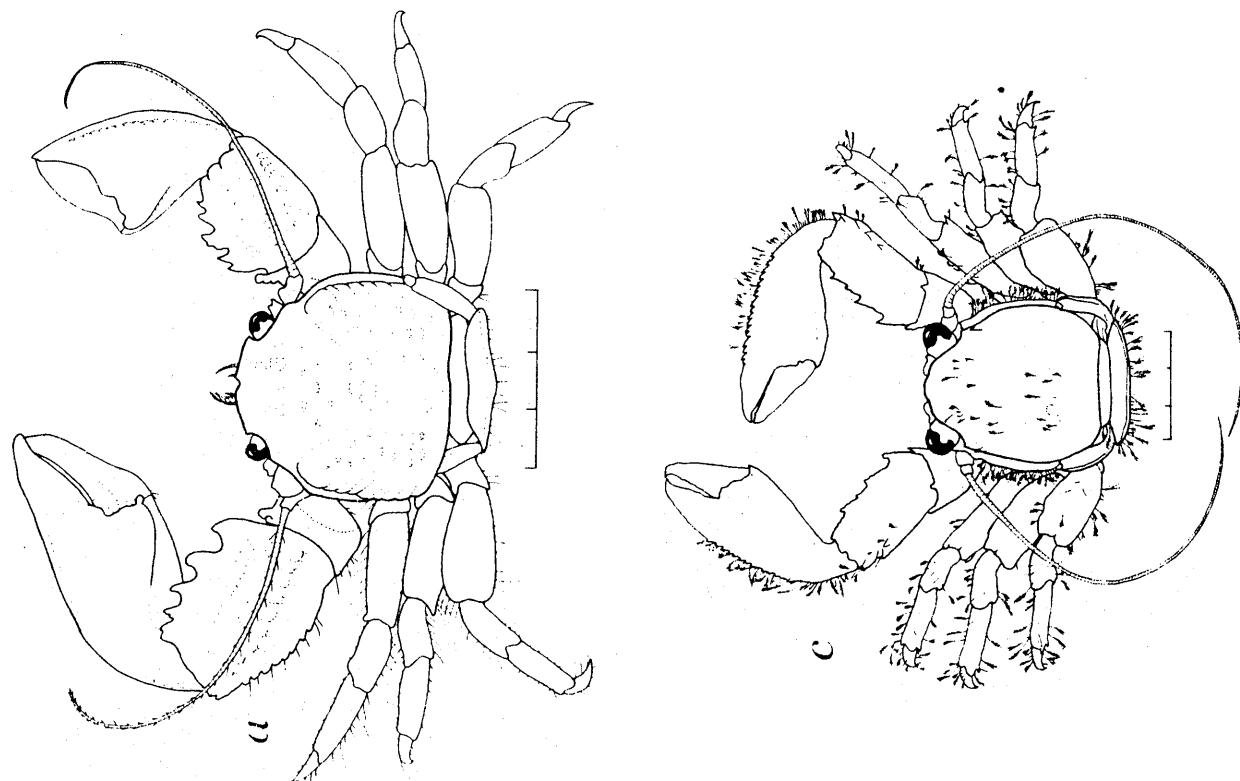
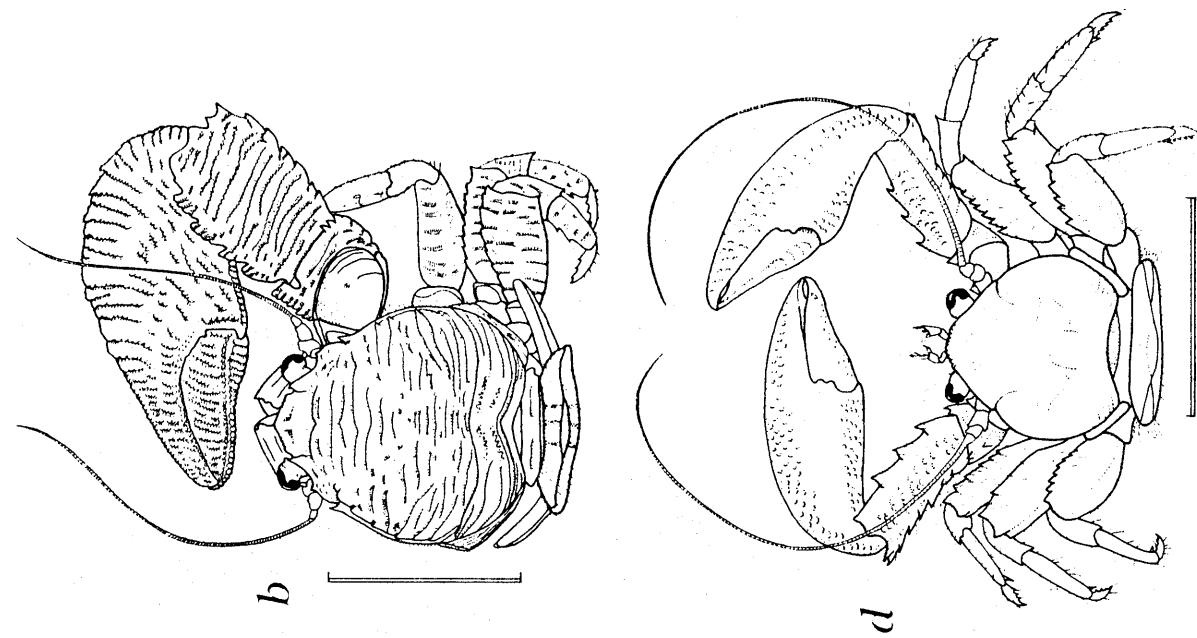
c. dorsal view

(after drawing at SI-NMMNH)

***Petrolisthes politus***

d. dorsal view (ovigerous female)

(after Gore, 1974)



*Porcellana stimpsoni*

a. dorsal view

(after A. Milne Edwards and Bouvier, 1923)

*Porcellana sayana*

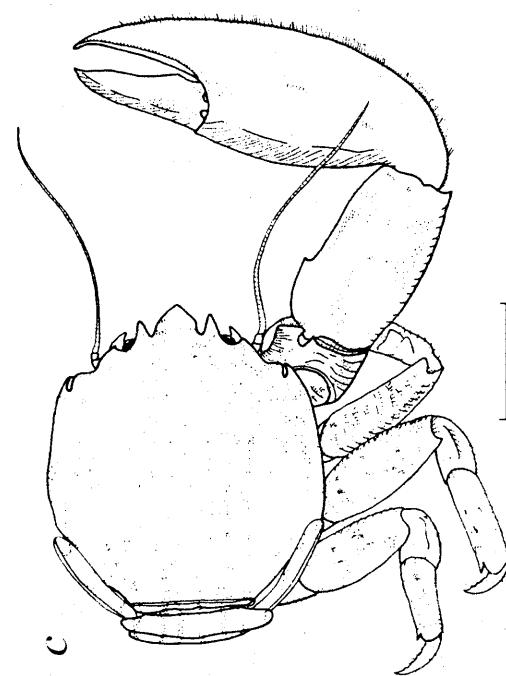
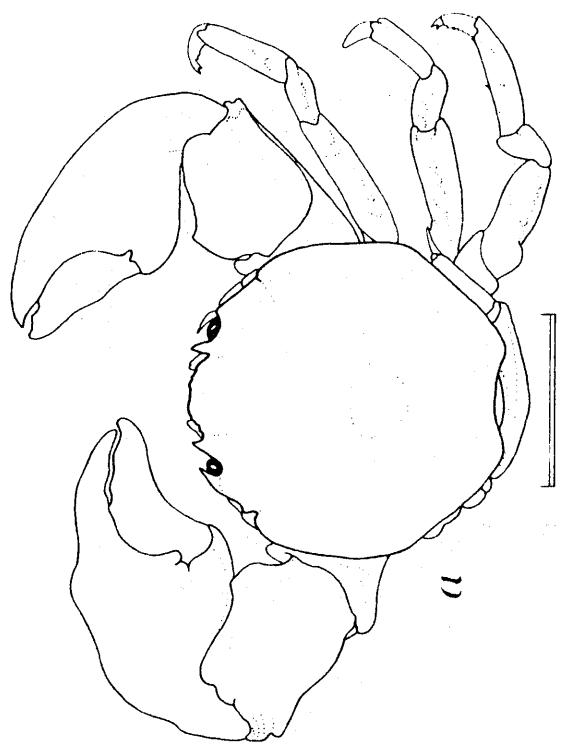
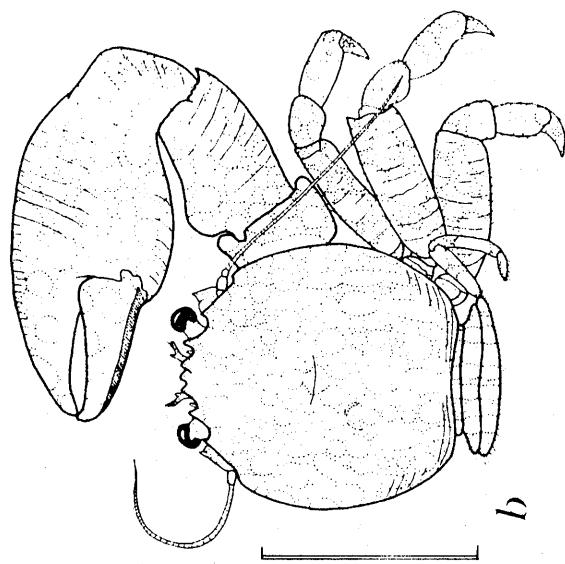
b. dorsal view

(after Williams, 1965a)

*Porcellana signsbeiana*

c. dorsal view

(after Williams, 1965a)



*Euceramus praelongus*

a. dorsal view

(after Williams, 1965a)

*Neopisosoma angustifrons*

b. dorsal view

(after Benedict, 1901)

*Parapetrolistes tortugensis*

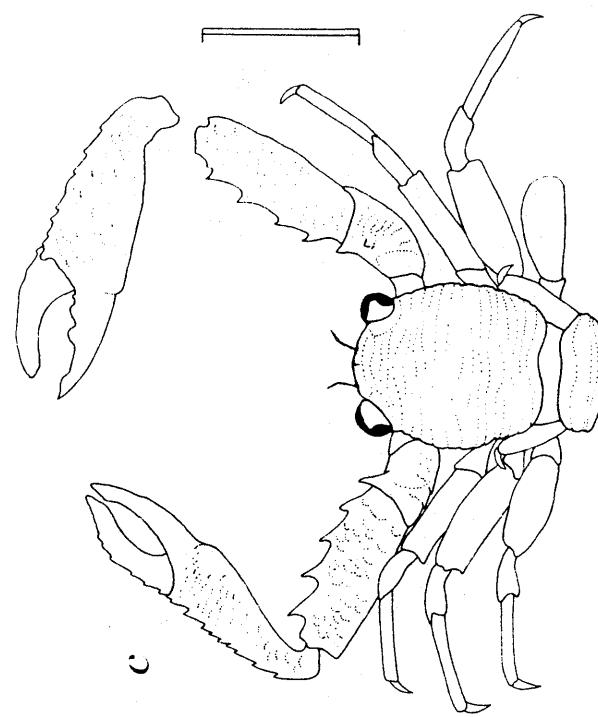
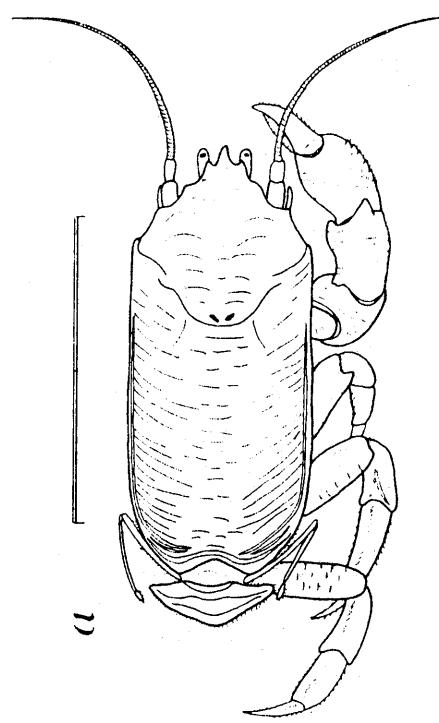
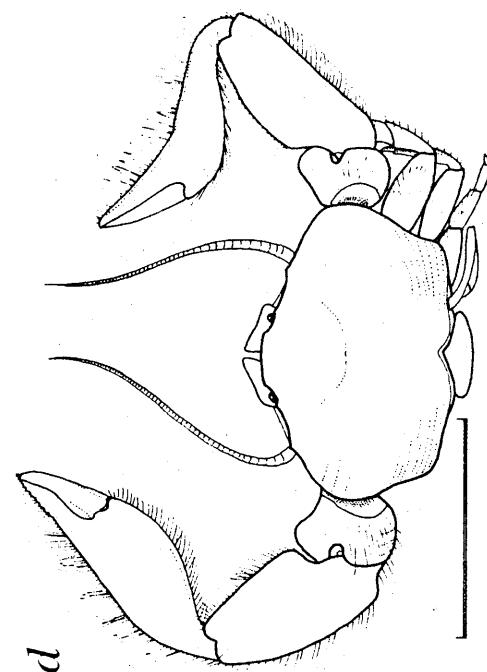
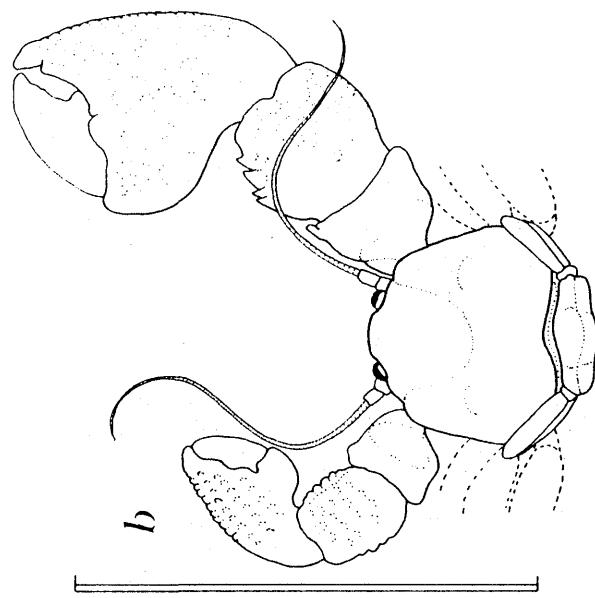
c. dorsal view

(after Glassell, 1945)

*Polyonyx gibbesi*

d. dorsal view (female)

(after Williams, 1984)





**Family Albuncidae**

## Key to genera and species

1. Eyestalks small and fused together; anterior margin of carapace with two submedian teeth separated by concavity ..... *Zygopa michaelis*
- Eyestalks elongate or broad, separate from each other; anterior margin of carapace with single median tooth (rostrum) ..... 2
2. (I) Eyestalks narrow, triangular..... *Albunea*  
    Eyestalks broad, oval..... *Lepidopa*

**Genus *Albunea* Weber, 1795**

## Key to species

[Adapted from Williams, 1984]

- Dactyli of second and third pereopods with blunt, rectangular lobes at bases of anterior borders ..... *A. gibbesii*
- Dactyli of second pereopods with asymmetrically mucronate spurs, third pereopods with acute, falciform spurs at bases of anterior borders ..... *A. paretii*

**Genus *Lepidopa* Stimpson, 1858**

## Key to species

- Eye-plates squarish, distal edge carrying many teeth (20 or more in large individuals), teeth close together, almost touching ..... *L. benedicti*
- Eye-plates roundish, distal edge rounded and smooth ..... *L. websteri*

*Albunea gibbesii*

a, b, c. dactyli of second to fourth pereopods  
(after Williams, 1984)

*Albunea paretii*

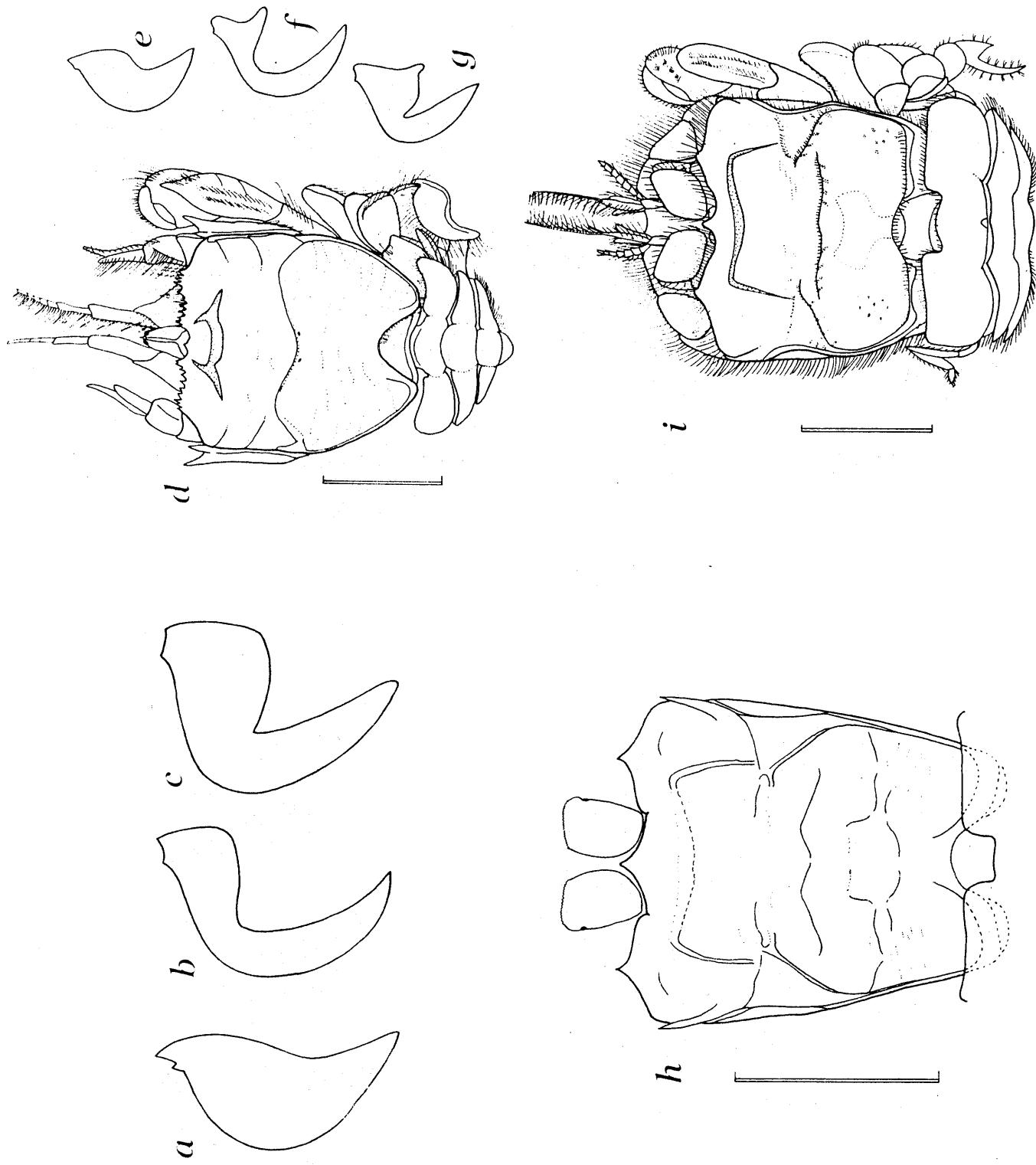
d. dorsal view  
e, f, g. dactyli of second to fourth pereopods  
(after Williams, 1984)

*Lepidopa benedicti*

h. carapace and eyes, dorsal view  
(after Holthuis, 1960)

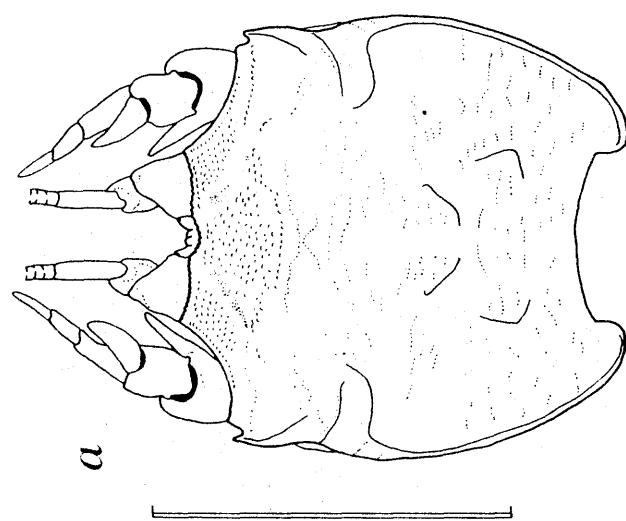
*Lepidopa websteri*

i. dorsal view  
(after Williams, 1965a)



*Zygopa michaelis*

a. carapace and anterior region, dorsal view  
(after Holthuis, 1960)





## Family Hippidae

Key to genera and species  
[Adapted from Haig, 1974]

- Antennal flagella very long; dactyli of first pereopods oval and lamellate... *Emerita*  
Antennal flagella short; dactyli of first pereopods styliform, not multiarticulate.....  
..... *Hippa cubensis*

## Genus *Emerita* Scopoli, 1777

Key to species  
[From Felder, 1973]

1. Dactyli of first thoracic pereopods rounded or obtuse distally..... *E. talpoida*  
Dactyli of first pereopods subacute or sharply pointed distally..... 2
2. (1) Lateral epimeral expansion of carapace (lower postero-lateral area) marked to inferior margin with transverse lines continued from posterior dorsum of carapace ..  
..... *E. benedicti*  
Lateral epimeral expansion of carapace smooth and punctate, light traces of transverse lines of dorsum showing only on upper part of epimeral expansion ..... *E. portoricensis*

*Emerita talpoida*

a. lateral view (female)

(after Williams, 1984)

*Emerita benedicti*

b. lateral view (female)

(after Williams, 1984)

*Emerita portoricensis*

c. carapace, lateral view

(after Felder, 1973)

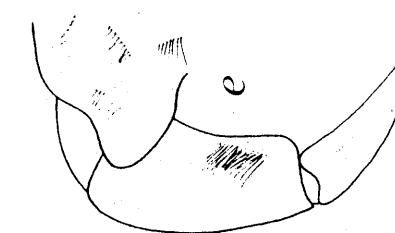
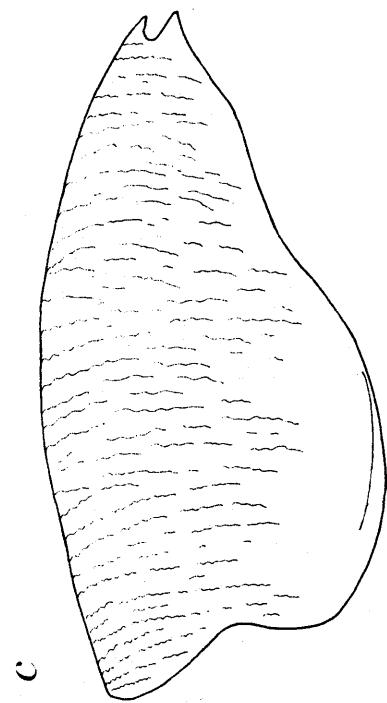
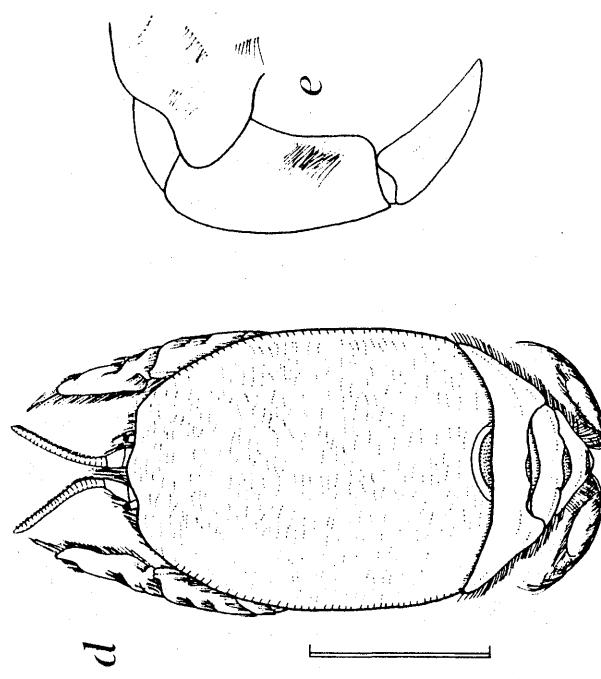
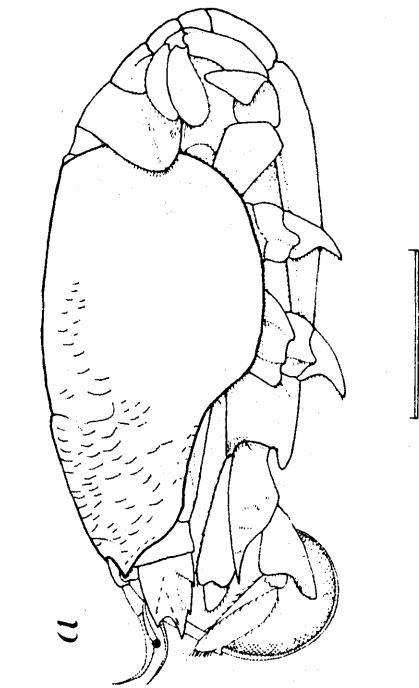
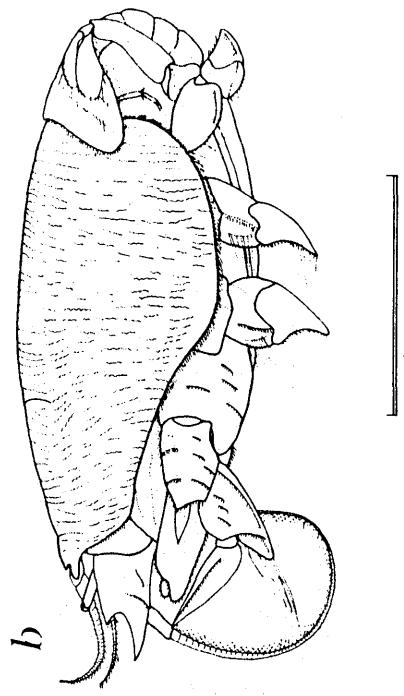
*Hippa cubensis*

female:

d. dorsal view

e. left first pereopod

(after Monod, 1956)





**Infraorder Brachyura****Family Dromiidae**

Key to genera and species  
[Adapted from Felder, 1973]

1. Carapace dorsally firm, hard and covered with short hairs..... 2
- Carapace with soft, membranous, naked or sparsely haired mid dorsal area..... *Hypoconcha*
2. (l) Carapace broader than long; fronto-orbital width in adult 1/3 or less of carapace width ..... *Dromia erythropus*
- Carapace longer than broad; fronto-orbital width in adult 1/2 or more of carapace width ..... *Dromidia antillensis*

**Genus *Hypochoncha* Guérin-Méneville, 1854**

Key to species  
[Adapted from Williams, 1984]

1. Ventral surface of carapace with 3 granulated nodules forming triangle on either side; not hairy ..... *H. sabulosa*
- Ventral surface of carapace often granulate or spiny but without 3 nodules forming triangle on either side; often hairy ..... 2
2. (l) Ventral surface of carapace visibly granulate; posterior side of orbit raised but never conspicuously spined ..... *H. arcuata*
- Ventral surface of carapace with scattered, sharp granules or spines often partly or wholly concealed by thick pubescence; posterior side of orbit surmounted by strong spine ..... *H. spinosissima*

*Hypoconcha sabulosa*

a. anterior part, ventral view

(after Williams, 1984)

*Hypoconcha arcuata*

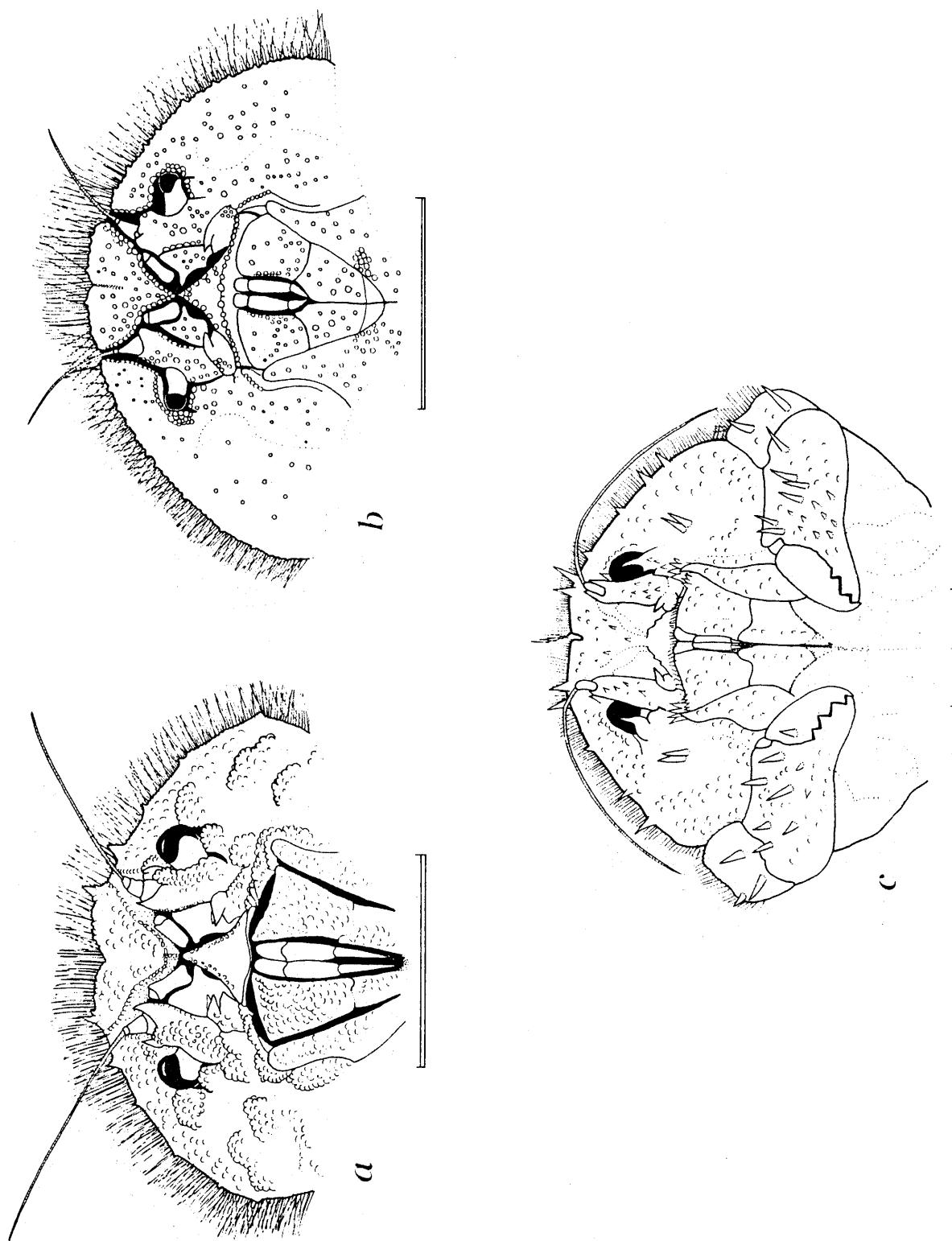
b. anterior part, ventral view

(after Williams, 1984)

*Hypoconcha spinosissima*

c. ventral view (holotype female)

(after Rathbun, 1937)



*Dromia erythropus*

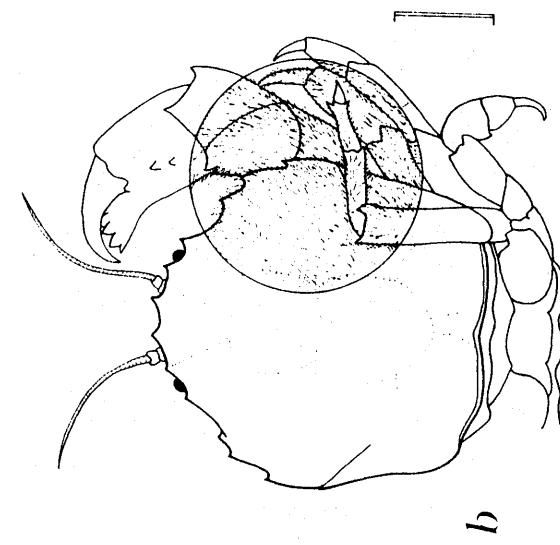
a. outline of carapace and eyes, dorsal view (male)

(after Rathbun, 1937)

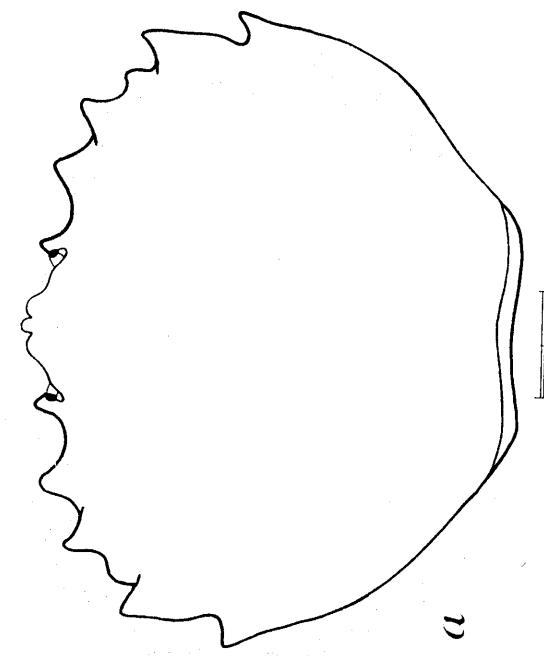
*Dromidia antillensis*

b. dorsal view (male)

(after Williams, 1984)



b



a



**Family Homolodromiidae****Genus *Dicranodromia* A. Milne Edwards, 1880**

Carapace ovoid; antennules folding under rostral teeth; walking legs short; eyes large and deep in orbital cavity; last two pairs of pereopods subcheliform, propodus not forming a distinct digit [from Rathbun, 1937] ..... *D. ovata*

**Family Cymonomidae**

Key to genera and species  
[Adapted from Rathbun, 1937]

Eyes without pigment; antennules large, unconcealed; merus of outer (third) maxilliped produced forward far beyond carpal articulation ..... *Cymonomus quadratus*

Eyes normally developed; antennules folding under front; merus of outer maxilliped not overreaching palp ..... *Cymopolus agassizi*

*Dicranodromia ovata*

a. dorsal view

(after A. Milne Edwards and Bouvier, 1902)

*Cymonomus quadratus*

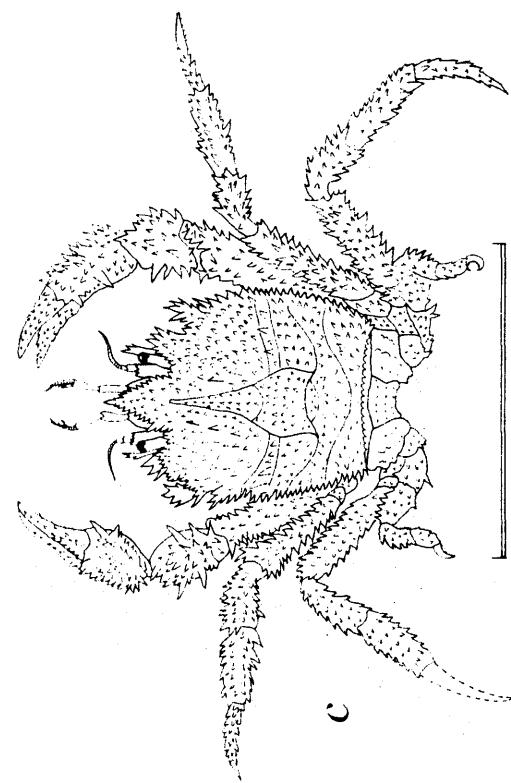
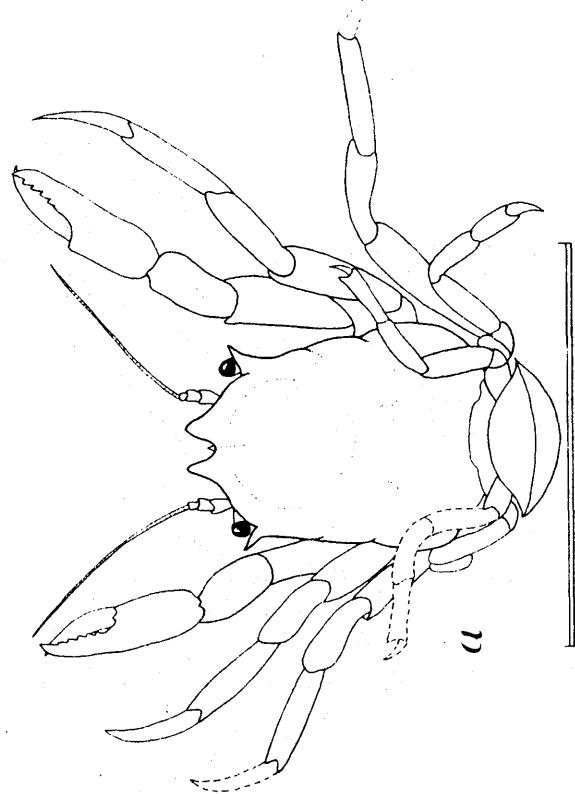
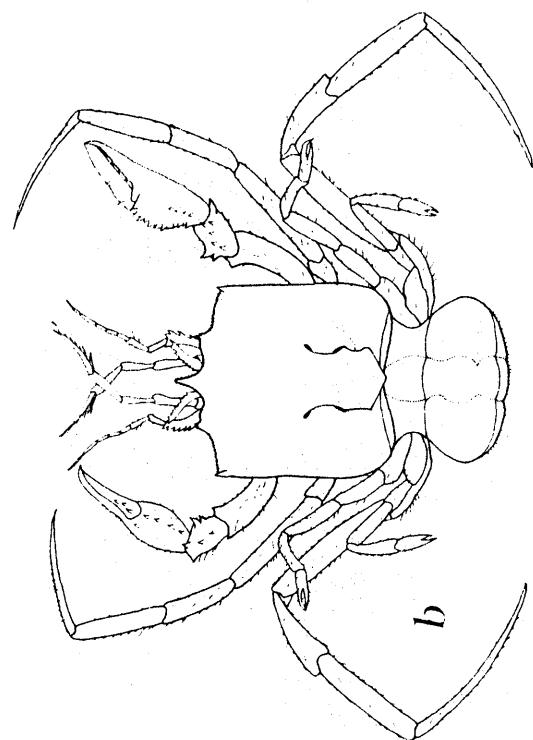
b. dorsal view

(after A. Milne Edwards and Bouvier, 1902)

*Cymopolus agassizi*

c. dorsal view

(after A. Milne Edwards and Bouvier, 1902)





**Family Cyclodorippidae**

## Key to genera and species

Antennules small, completely retractile; antennae very short, with valviform peduncle ..... *Clythrocerus*

Antennules long, incapable of folding into antennular cavity; antennae with narrow peduncle ..... *Tymolus antennaria*

**Genus *Clythrocerus* A. Milne Edwards and Bouvier, 1899**

## Key to species

[Adapted from Rathbun, 1937]

1. Two lateral teeth or spines behind orbital tooth (distance between lateral spines less than between foremost tooth and orbital tooth; spine present above and between lateral spines; three frontal teeth) ..... *C. stimpsoni*  
Only one lateral tooth or spine behind orbital tooth..... 2
2. (I) Front with two teeth (carapace thick, smooth, and shining)..... *C. nitidus*  
Front with three teeth (carapace and appendages densely granulate; margins of carapace spinulous) ..... *C. granulatus*

*Clythrocerus stimpsoni*

- a. outline of carapace, dorsal view (holotype female)  
(after Rathbun, 1937)

*Clythrocerus nitidus*

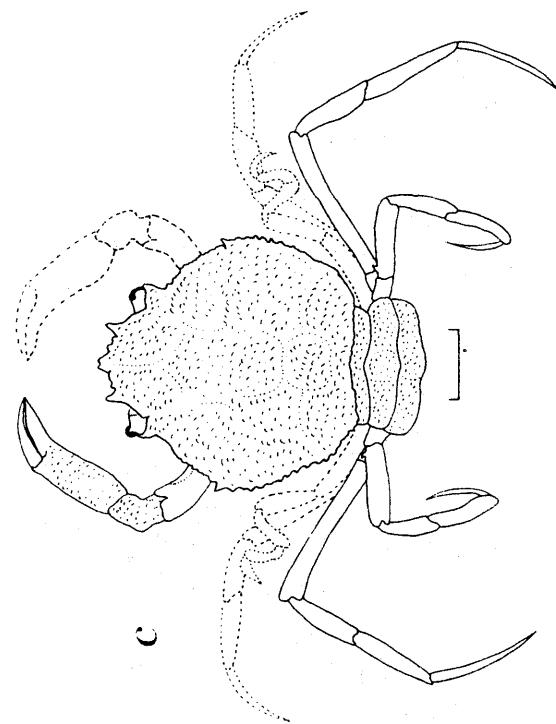
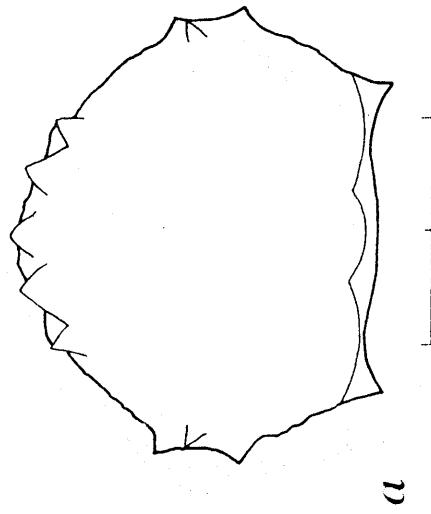
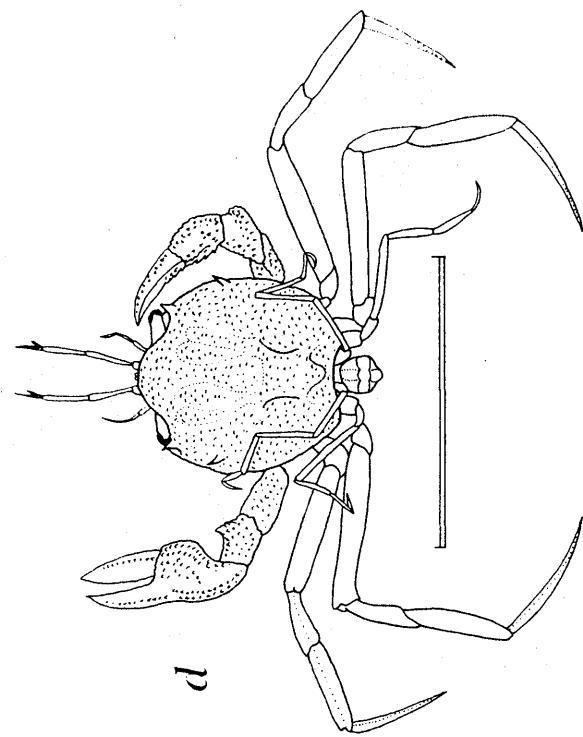
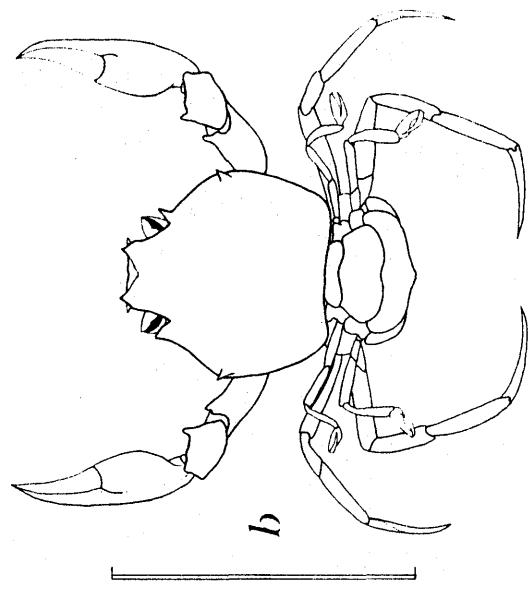
- b. dorsal view (female)  
(after Rathbun, 1937)

*Clythrocerus granulatus*

- c. dorsal view (holotype female)  
(after Rathbun, 1937)

*Tymolus antennaria*

- d. dorsal view  
(after A. Milne Edwards and Bouvier, 1902)





**Family Homolidae****Genus *Homola* Leach, 1815**

Carapace broadest anteriorly; second segment of antennal peduncle with antero-external spine; rostrum bidentate [from Rathbun, 1937] ..... *H. barbata*

**Family Latreilliidae****Genus *Latreillia* Roux, 1830**

Each of last pair of pereopods (fourth walking legs) with propodus clearly more than half length of carpus and bearing conspicuous, featherlike row of long hairs along full length of that segment on each side; dorsal spine absent on "neck"; last pereopod with propodus decidedly shorter than carpus; dactylus closing against subdistal spinules to form subchela; propodus of last pereopod 0.44-0.61 length of carpus; length of carapace about 1/3 length of merus of walking leg [from Williams, 1982] ..... *L. manningi*

*Homola barbata*

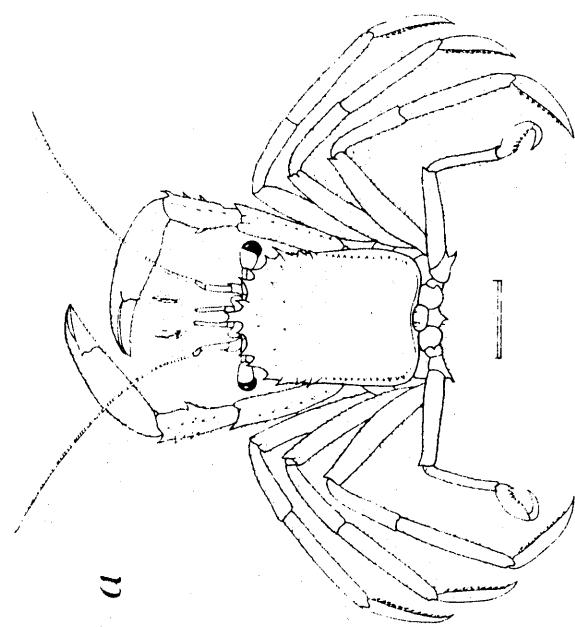
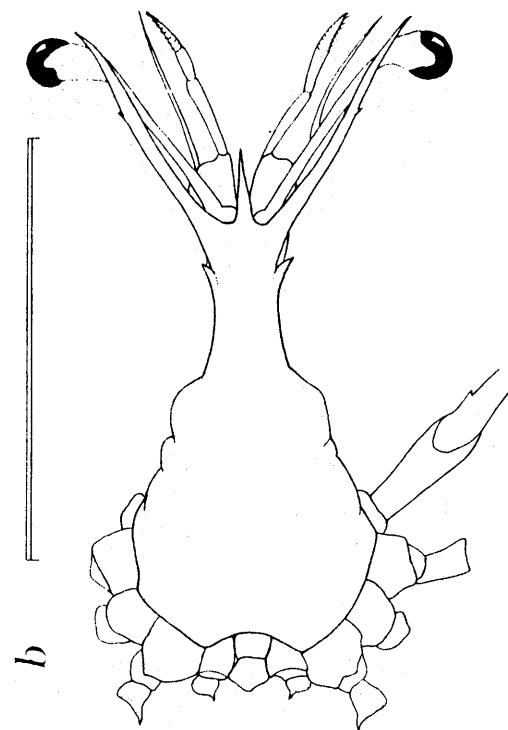
a. dorsal view

(after Williams, 1984)

*Latrellia manningi*

b. dorsal view (male)

(after Williams et al., 1968)





## Family Raninidae

Key to genera and species  
[Based on Rathbun, 1937, and Williams, 1984]

1. Fronto-orbital border more than half width of carapace..... 2
- Fronto-orbital border less than half width of carapace..... 3
2. (l) Orbita of moderate size, slightly oblique and situated on anterior border of carapace, ocular peduncle folded almost transversely or longitudinally; last pair of pereopods slender ..... *Raninoides*  
Orbits large, deep cavities in lower side of carapace forming inverted V with point at rostrum, ocular peduncles folded strongly and obliquely downward and backward; last pair of pereopods not slender ..... *Ranilia*
3. (l) Carapace smooth; chelae broad and flat..... *Lyreidus nitidus*  
Carapace eroded; chelae elongate, manus swollen, fingers long and slender..... *Symethis variolosa*

### Genus *Ranilia* H. Milne Edwards, 1837

Key to species  
[Adapted from Williams, 1984]

- Hand of cheliped with spine on upper margin..... *R. muricata*
- Hand of cheliped without spine on upper margin..... *R. constricta*

### Genus *Raninoides* H. Milne Edwards, 1837

Key to species  
[Based on Rathbun, 1937]

- Spine at distal end of merus of cheliped; four spines on lower margin of manus..... *R. loevius*
- No spine at distal end of merus of cheliped; five or six spines on lower margin of manus ..... *R. louisianensis*

*Ranilia muricata*

a. dorsal view (ovigerous female)

(after Williams, 1965a)

*Ranilia constricta*

female:

b. dorsal view

c. right cheliped and first walking leg

(after Williams, 1984)

*Raninoidea loewis*

d. anterior part of carapace, dorsal view

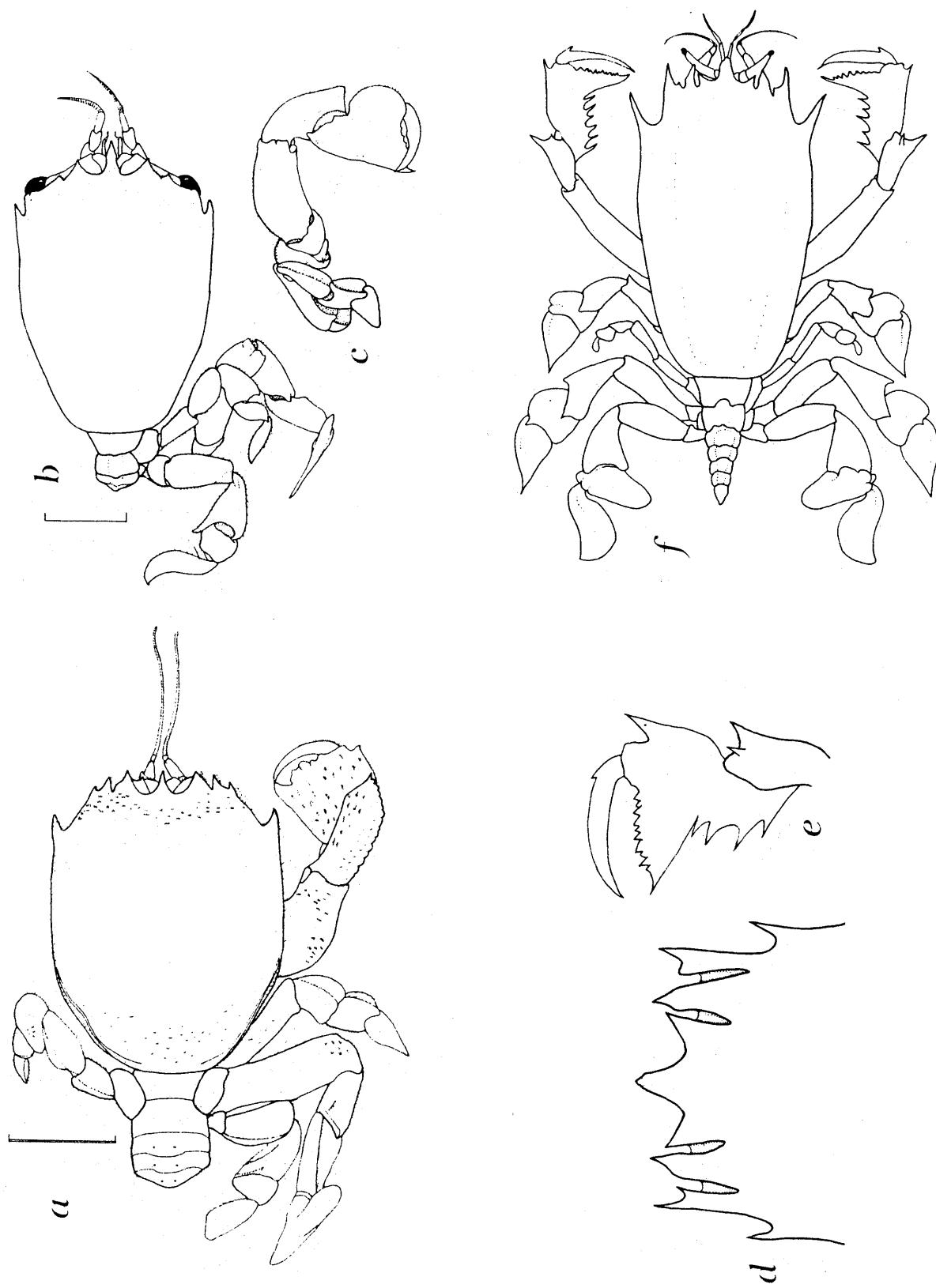
e. distal half of right cheliped, upper surface

(after Rathbun, 1937)

*Raninoidea louisianensis*

f. dorsal view (holotype male)

(after Rathbun, 1937)



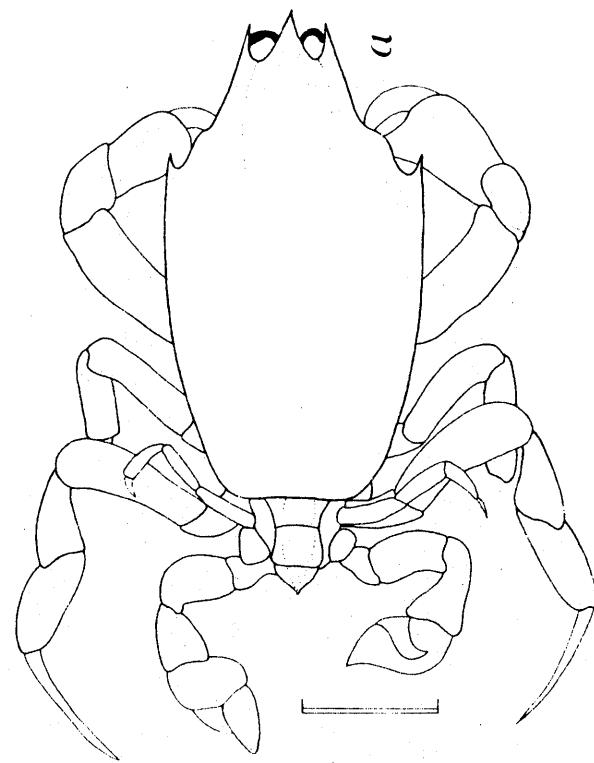
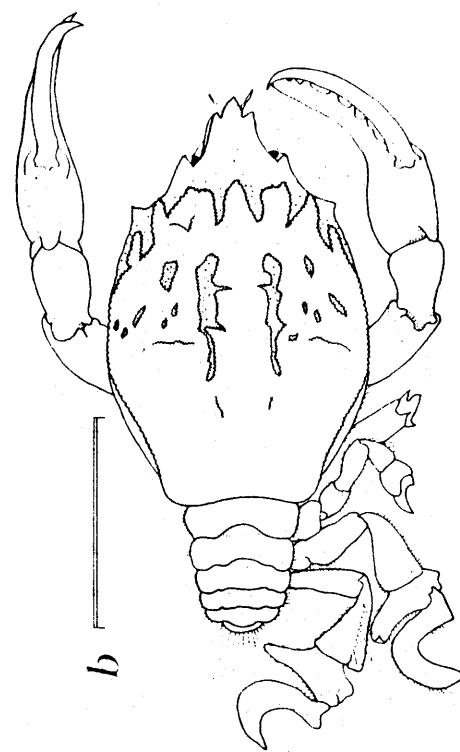
*Lyreidus nitidus*

a. dorsal view (male)

(after Rathbun, 1937, as *L. bairdii*)*Symethis variolosa*

b. dorsal view (female)

(after Williams, 1984)





**Family Dorippidae****Genus *Ethusa* Roux, 1828**

Key to genera and species  
[Adapted from Rathbun, 1937]

1. Eyestalks long, extending laterally beyond outer orbital spine (outer orbital spine directed obliquely forward) ..... *E. mascarone americana*
- Eyestalks short, not extending beyond outer orbital spine..... 2
2. (1) Dactyli of first and second walking legs not flattened..... *E. tenuipes*
- Dactyli of first and second walking legs flattened above..... 3
3. (2) Carapace as broad as, or broader than, long..... *E. microphthalmia*
- Carapace longer than broad..... *E. truncata*

*Ethusa mascarone americana*

a. dorsal view

(from Abele's personal drawing)

*Ethusa tenuipes*

b. dorsal view (female)

(after Williams, 1984)

*Ethusa microphthalmia*

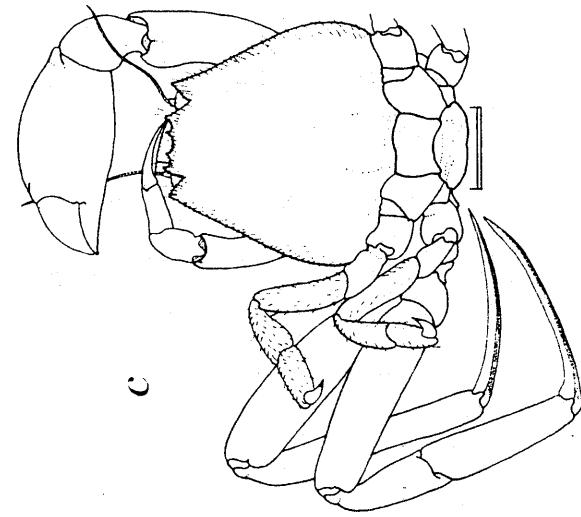
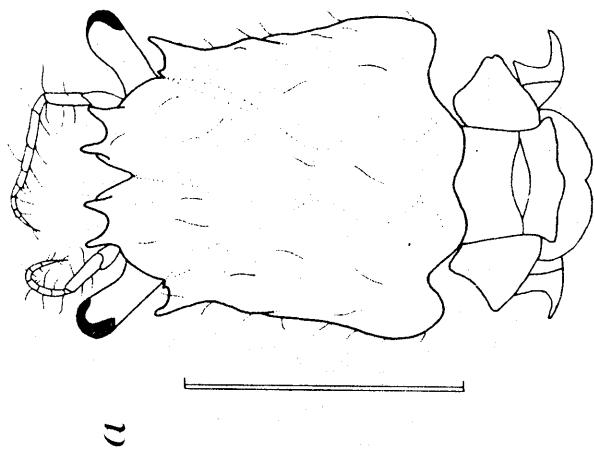
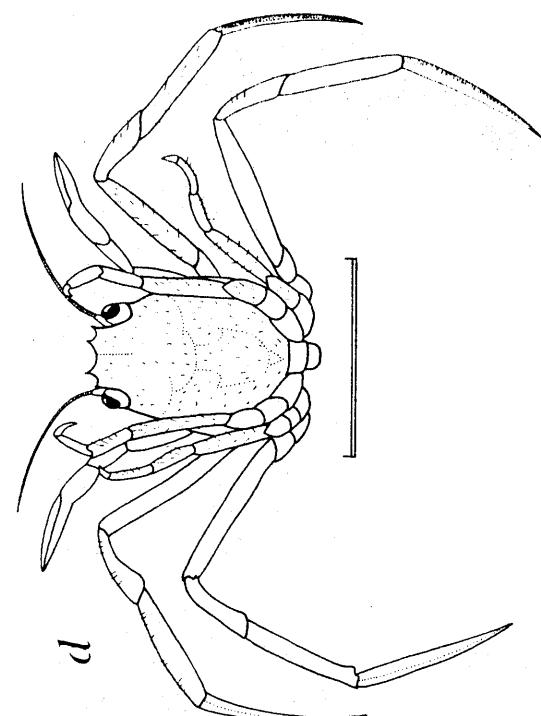
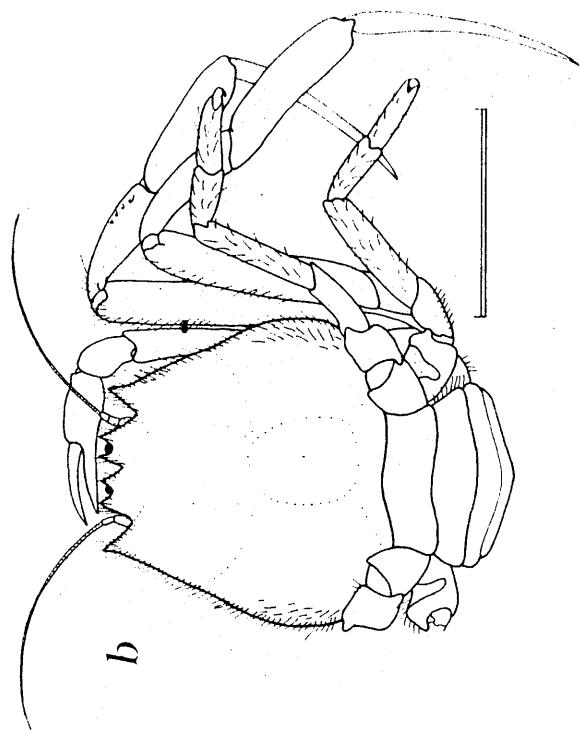
c. dorsal view (male)

(after Williams, 1984)

*Ethusa truncata*

d. dorsal view (male)

(after Rathbun, 1937)





## Family Calappidae

Key to genera and species  
[Based on Williams, 1984]

1. Chelae dissimilar; large tooth on dactylus and pair of protuberances on propodus of major chela ..... 2
- Chelae essentially symmetrical, no unusually enlarged teeth or protuberances..... 4
2. (1) Posterolateral region of carapace expanded into dentate, winglike projection..... *Calappa*  
Posterolateral region of carapace not expanded into dentate, winglike projection.... 3
3. (2) Merus of cheliped with very long, outstanding spine..... *Acanthocarpus*  
Merus of cheliped without long spine; carapace subcircular, small spine at lateral angle ..... *Cycloes bairdii*
4. (1) Carapace considerably broader than long, regularly convex above..... *Hepatus*  
Carapace nearly as long as broad, dorsal surface uneven..... *Osachila*

### Genus *Acanthocarpus* Stimpson, 1871

Key to species  
[Adapted from Rathbun, 1937]

- Carapace narrowing in posterior half; short spine on posterolateral margin..... *A. alexandri*
- Carapace subcircular; long spine on posterolateral margin..... *A. bispinosus*

### Genus *Calappa* Weber, 1795

#### Key to species

[Based on Williams, 1984, and Rathbun, 1937]

1. Orbita completely separated from antennular sockets (surface quite rough, covered with rounded protuberances and granulate) ..... *C. angusta*
- Orbita not separated from antennular sockets..... 2
2. (1) Carapace with prominent horizontal tooth at each end of posterior margin (sharp spine at angle of posterolateral wing and another at proximal end of manus) ..... *C. sulcata*  
Carapace without spine at either end of posterior margin..... 3
3. (2) Deep hollow between gastric and hepatic regions (posterior third of carapace covered with short transverse granulated lines) ..... *C. gallus*  
No deep hollow between gastric and hepatic regions..... 4
4. (3) Darker part of color pattern on carapace in interlacing bands on anterior half, becoming obliquely longitudinal stripes and fading somewhat on posterior half ..... *C. flammea*  
Darker part of color pattern on anterior of carapace in becoming reticular in pattern at midlength but fading posteriorly ..... *C. ocellata*

### Genus *Hepatus* Latreille, 1802

#### Key to species

[Adapted from Williams, 1984]

- Carapace covered with large, usually discrete spots (spots may be interconnected or form irregular, transverse stripes, proportionately small in juveniles); front noticeably tuberculate and truncate ..... *H. epheliticus*
- Carapace covered with small spots often aligned in transverse rows; front slightly tuberculate and obtusely bidentate ..... *H. pudibundus*

**Genus *Osachila* Stimpson, 1871**

## Key to species

[Based on Rathbun, 1937]

1. Dorsal surface of carapace wholly eroded; cardiac elevation pointed behind..... *O. antillensis*
- Dorsal surface of carapace partly eroded, including elevations; cardiac elevation rounded behind ..... 2
2. (I) Posterolateral margin of carapace shorter than anterolateral, thickened and raised, bearing 3 lobes including lateral angle, third lobe obsolescent ..... *O. semilevis*  
Posterolateral margin of carapace about as long as anterolateral margin, not thickened and raised, bearing 4 lobes including angle, second lobe smallest ..... *O. tuberosa*

*Acanthocarpus alexandri*

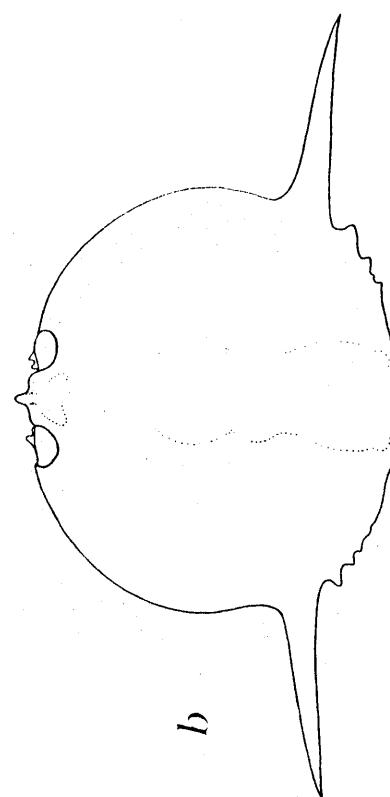
a. dorsal view (male)

(after Williams, 1965a)

*Acanthocarpus bispinosus*

b. carapace, dorsal view (male)

(after Rathbun, 1937)



b



a

*Calappa angusta*

a. dorsal view

(after Williams, 1965a)

*Calappa sulcata*

female:

b. dorsal view

c. major chela, external view

(after Williams, 1965a)

*Calappa gallus*

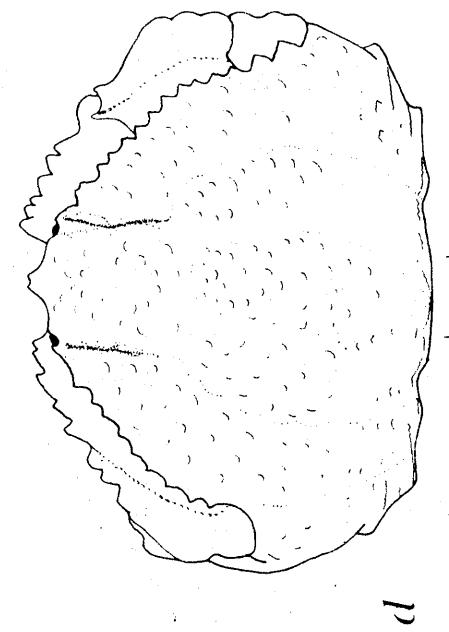
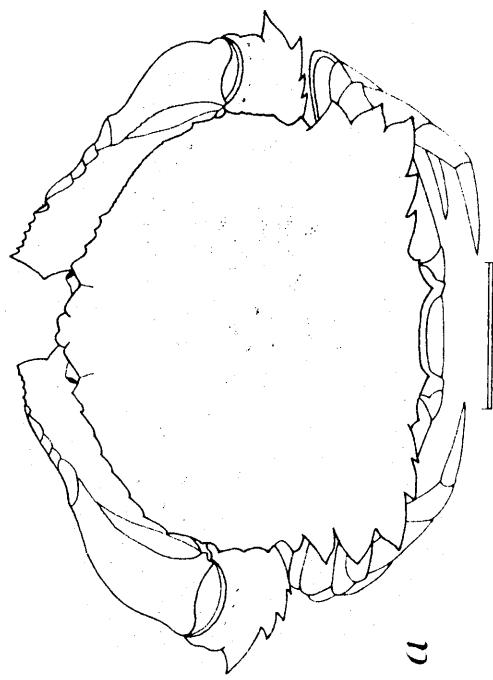
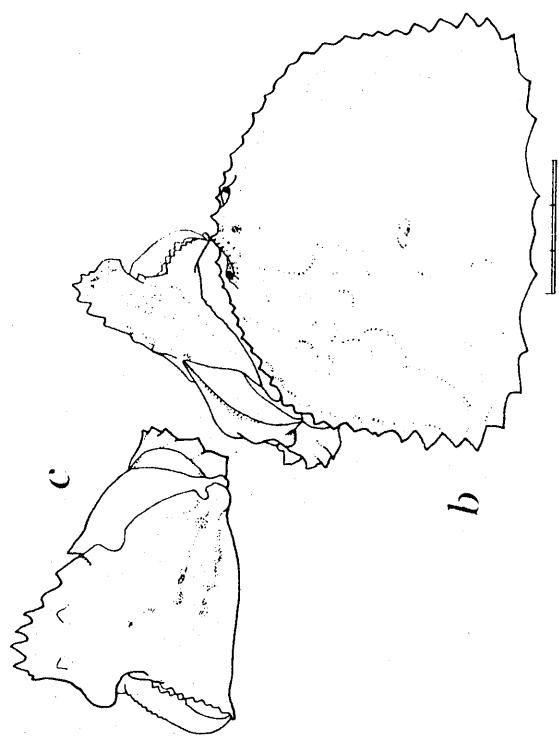
d. dorsal view (male)

(after Rathbun, 1937)

*Calappa flammnea*

e. dorsal view (female)

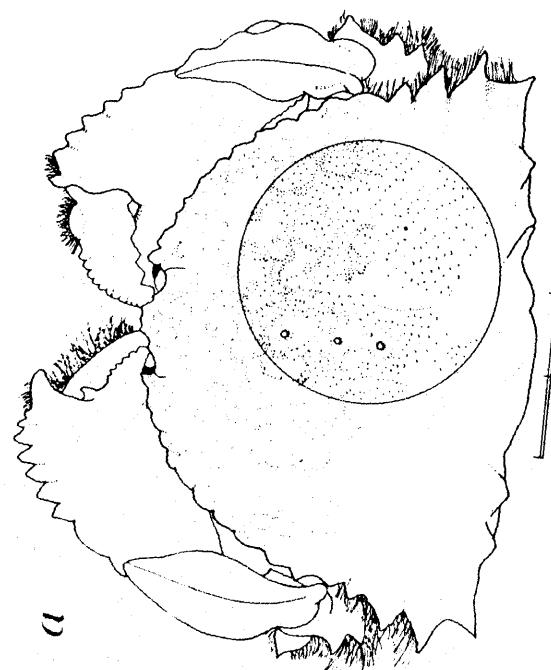
(after Holthuis, 1958)



*Calappa ocellata*

a. dorsal view (male)

(after Holthuis, 1958)

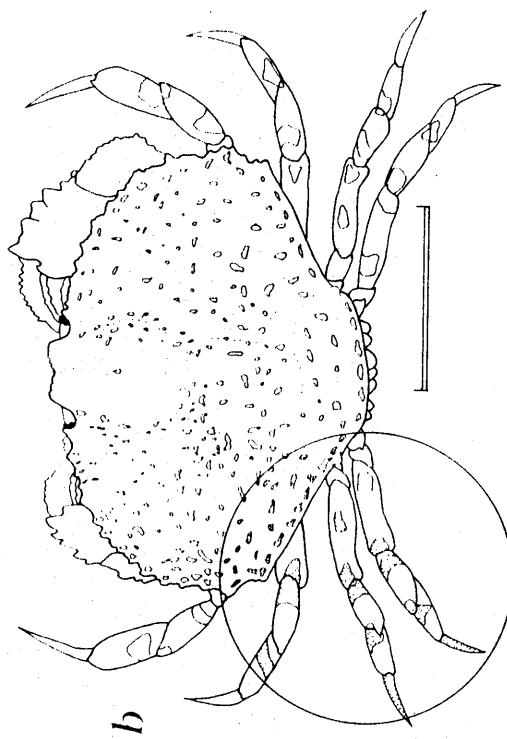


*Hepatus epheliticus*

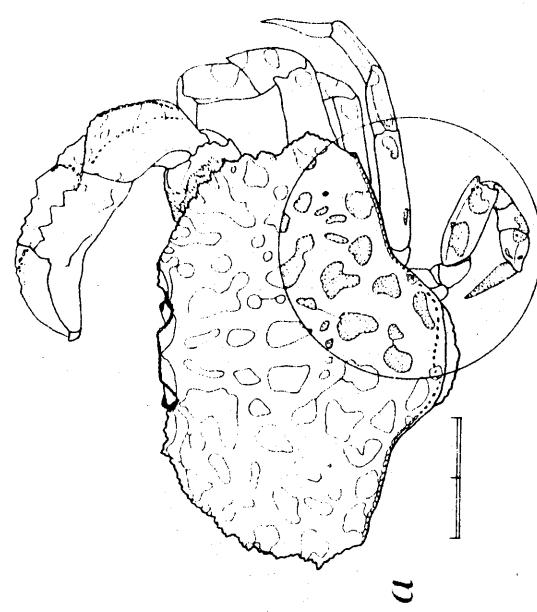
a. dorsal view (male)  
(after Williams, 1965a)

*Hepatus pudibundus*

b. dorsal view (female)  
(after Holthuis, 1959)



b



a

*Osachila antillensis*

a. dorsal view (holotype female)  
(after Rathbun, 1937)

*Osachila semilevis*

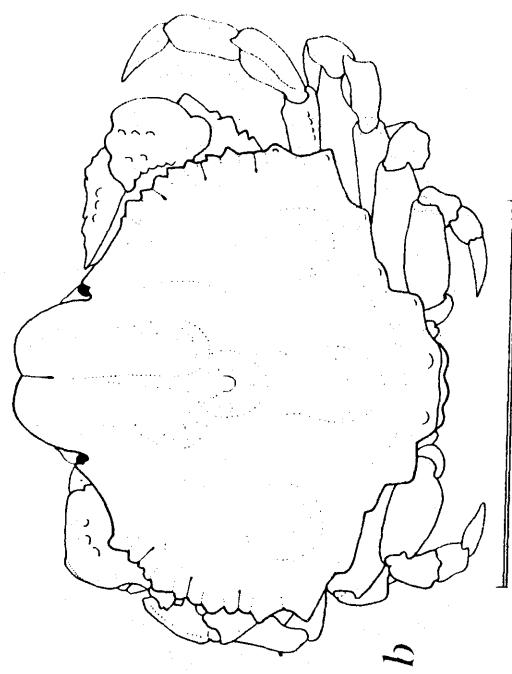
b. dorsal view (male)  
(after Williams, 1984)

*Osachila tuberosa*

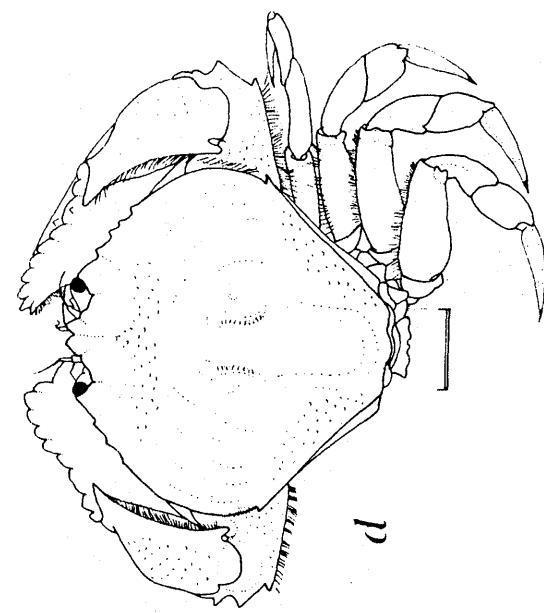
c. dorsal view  
(after Williams, 1984)

*Cycloes bairdii*

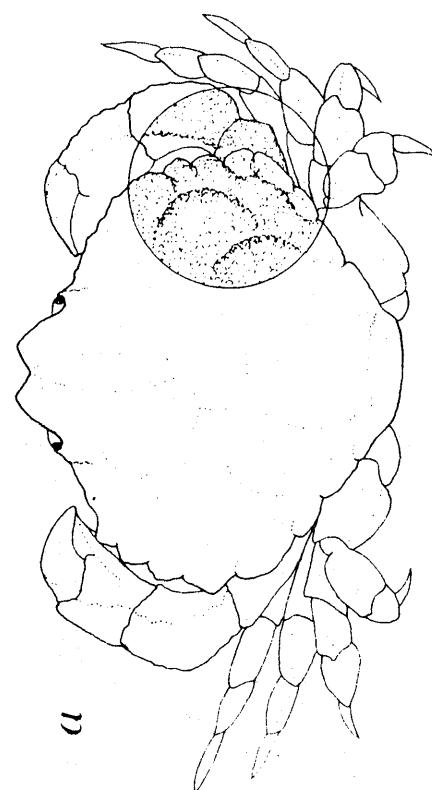
d. dorsal view (male)  
(after Williams, 1984)



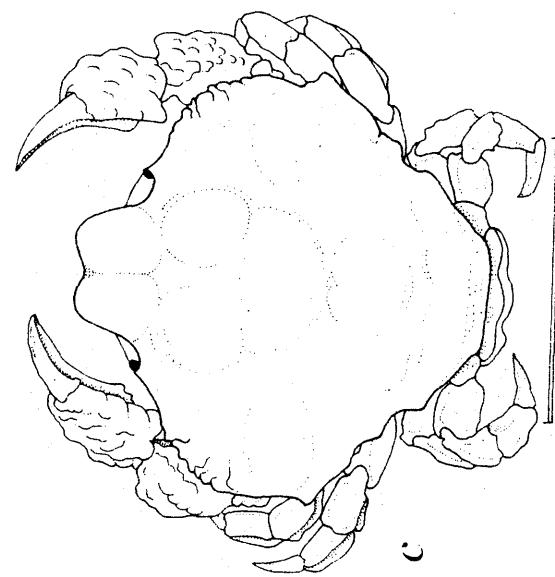
a



d



a



c



## Family Leucosiidae

Key to genera and species  
[Adapted from Rathbun, 1937]

1. Merus of outer (third) maxilliped half or more than half length of ischium measured along inner border; fingers stout, gradually narrowing from base to tip ..... 2  
Merus of outer maxilliped less than half length of ischium measured along inner border; fingers slender, of subequal width throughout ..... 7
2. (1) Pterygostomian margin terminating anteriorly in circular depression behind orbit; surface of carapace uneven; chelipeds of moderate length ..... 3  
Pterygostomian margin not terminating in circular depression and often obscure; carapace almost hemispherical, surface only slightly uneven; chelipeds often elongate ..... 6
3. (2) Carapace broadly elliptical, sides expanded ..... *Uhlia limbatus*  
Carapace narrower, pentagonal to octagonal, surface very uneven ..... 4
4. (3) Deep hollows or caves within posterior half of carapace ..... *Speloeophorus*  
No deep hollows or caves within posterior half of carapace ..... 5
5. (4) Upper surface of carapace deeply excavate ..... *Lithadia*  
Upper surface of carapace uneven but not deeply excavate ..... *Ebalia*
6. (2) Chelipeds rather massive; abdominal segments 3-5 fused in male ..... *Persephona*  
Chelipeds long and slender; abdominal segments 3-6 fused in male; cardiac and intestinal regions indicated ..... *Myropsis quinquespinosa*
7. (1) Posterior half of carapace with seven spines; anterior half of carapace with three spines on each side ..... *Callidactylus asper*  
Posterior half of carapace with three spines; anterior half of carapace with no spines or with one spine on each side ..... *Iliacantha*

### Genus *Ebalia* Leach, 1817

Key to species  
 [Adapted from Williams, 1984]

- Carapace octagonal..... *E. cariosa*
- Carapace hexagonal or subglobular..... *E. stimpsonii*

### Genus *Iliacantha* Stimpson, 1871

Key to species  
 [Adapted from Rathbun, 1937]

- 1. Short, blunt spine on subhepatic margin (posterior margin between lateral spines invisible in dorsal view; carapace with many large granules) ..... *I. sparsa*  
     No spine on subhepatic margin..... 2
- 2. (1) Fingers of chela about half as long as palm..... *I. intermedia*  
     Fingers longer than palm..... 3
- 3. (2) Spines of posterior margin subtriangular, blunt..... *I. subglobosa*  
     Spines of posterior margin conical, acute..... *I. liodactylus*

### Genus *Lithadia* Bell, 1855

Key to species  
 [Adapted from Rathbun, 1937]

- Anterior median carina present on carapace (branchial region almost entirely swollen; rostrum slightly concave) ..... *L. cadaverosa*
- No anterior median carina (highest point a small branchial pyramid either side in line with widest part of carapace) ..... *L. granulosa*

**Genus *Persephona* Leach, 1817**

Key to species  
[Adapted from Felder, 1973]

Carapace with several tubercles or enlarged granules on each side, one at widest part of carapace, another less than half way from there to hepatic protuberance, and usually one on subhepatic protuberance (less obvious in females than in males); coarse granules on lateral areas of carapace not arranged in single marginal line; fresh specimens usually with carapace uniform blue-gray color ..... *P. crinita*

Carapace without singularly enlarged granules or tubercles on sides, but with distinct single line of coarse granules defining lateral margin; fresh specimens usually with red blotches and patterns on cream-colored carapace ..... *P. mediterranea*

**Genus *Speloeophorus* A. Milne Edwards, 1865**

Key to species  
[Adapted from Rathbun, 1937]

1. Deep cavity of carapace with only 2 openings, not visible dorsally; carapace hexagonal ..... *S. nodosus*
- Deep cavity of carapace with 4 openings, visible dorsally; carapace octagonal..... 2
2. (1) Dorsal pair of openings small; carapace highest at anterior end of branchial elevation ..... *S. pontifer*
- Dorsal pair of openings large; carapace highest near middle of branchial elevation, narrower than in *S. pontifer* ..... *S. elevatus*

*Ebalia cariosa*

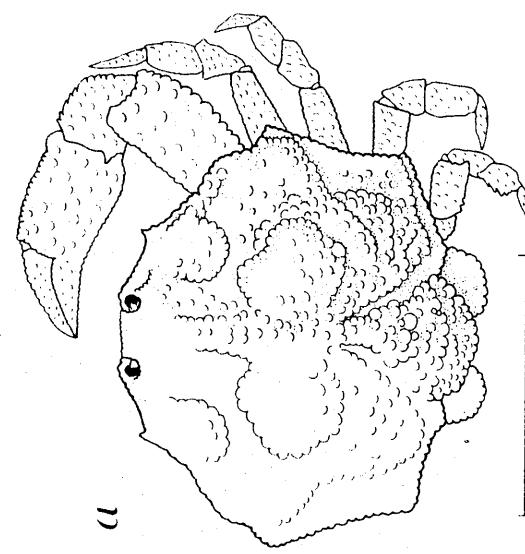
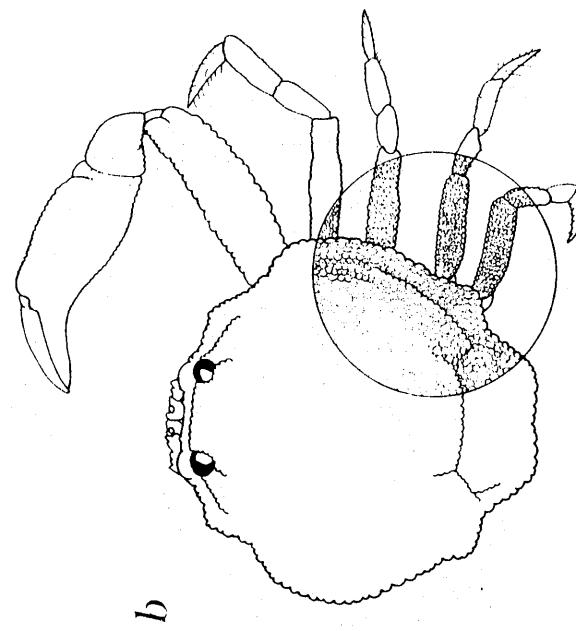
a. dorsal view

(after Williams, 1984)

*Ebalia stimpsonii*

b. dorsal view (female)

(after Williams, 1984)



*Iliacantha sparsa*

a. dorsal view (male)

(after Rathbun, 1937)

*Iliacantha intermedia*

b. dorsal view (male)

(after Williams, 1965a)

*Iliacantha subglobosa*

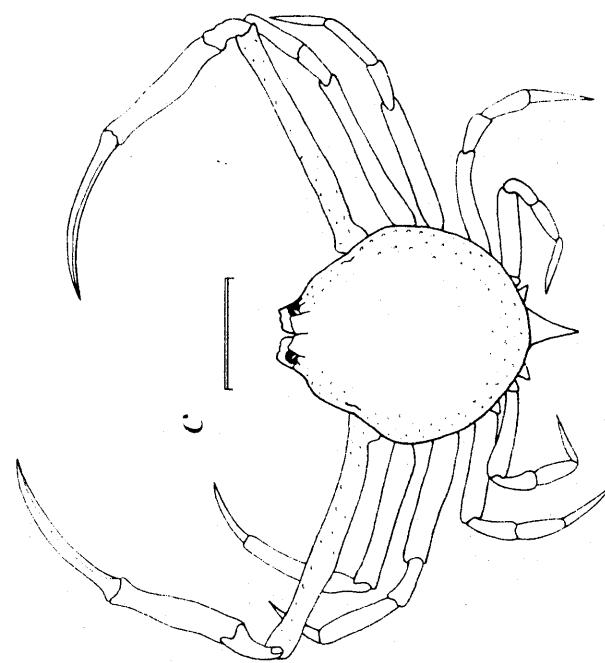
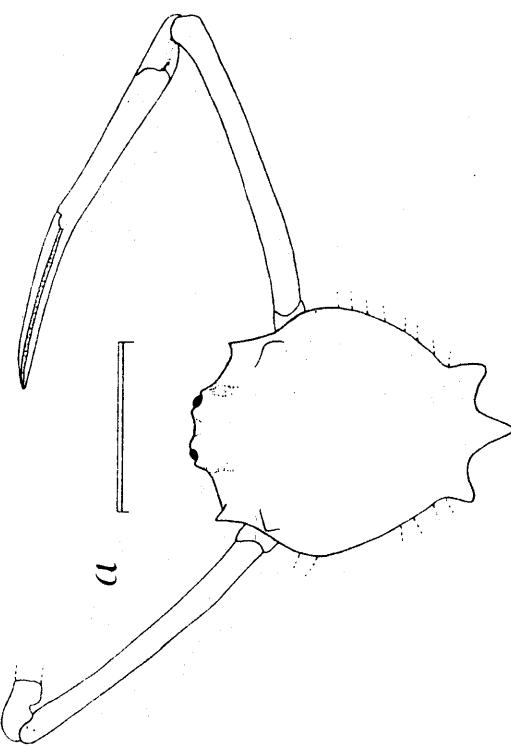
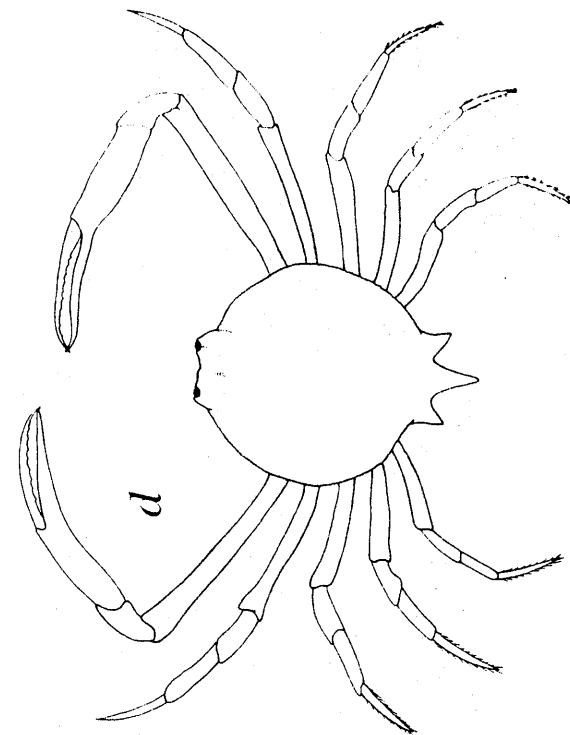
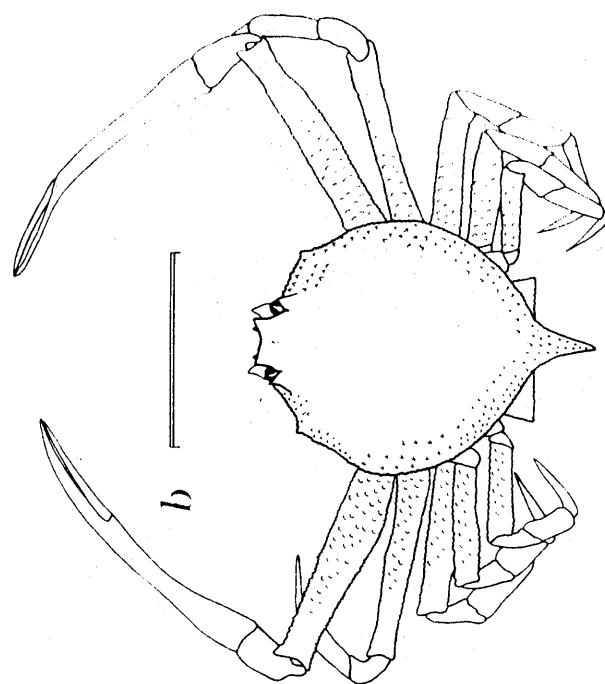
c. dorsal view (female)

(after Williams, 1965a)

*Iliacantha iodactylus*

d. dorsal view (male)

(after Rathbun, 1937)



*Lithadia cadaverosa*

a. dorsal view

(after drawing at SI-NMNH)

*Lithadia granulosa*

female:

a. dorsal view  
b. carapace, dorsal view

c. left cheliped, external view

d. first right walking leg

(after Rathbun, 1937)

*Persephona crinita*

e. dorsal view

f. left outer (third) maxilliped

g. right chela, external view

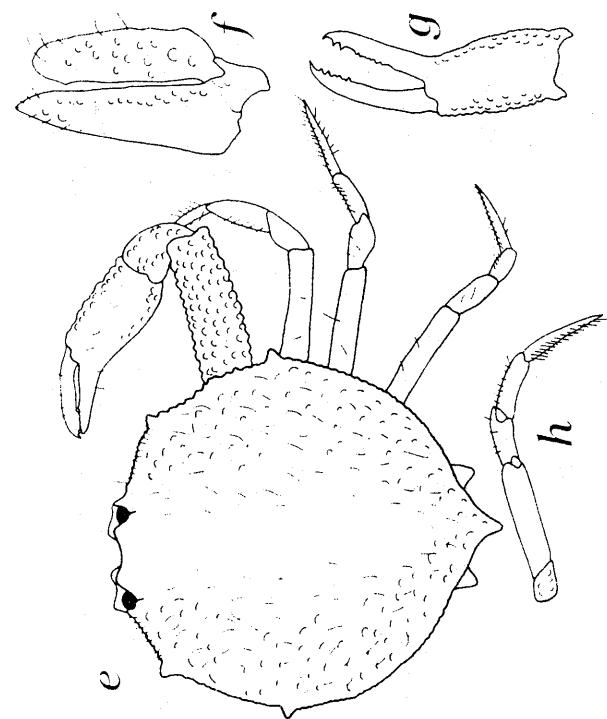
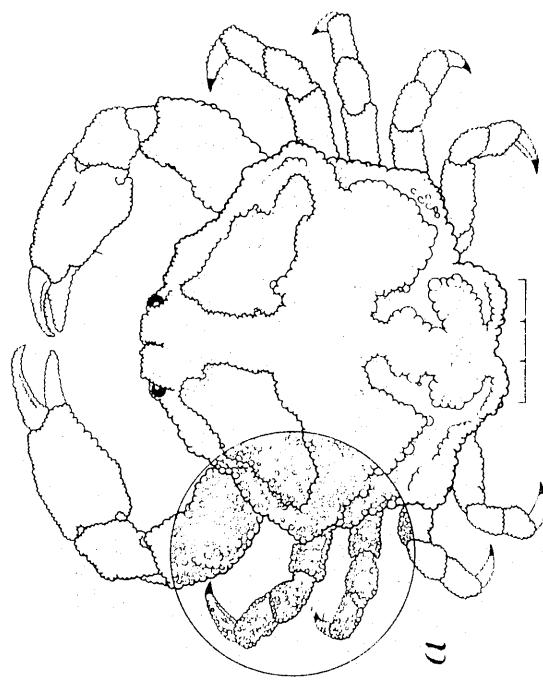
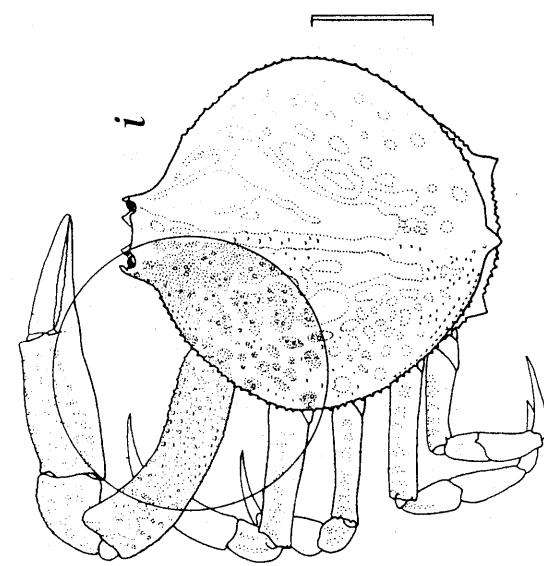
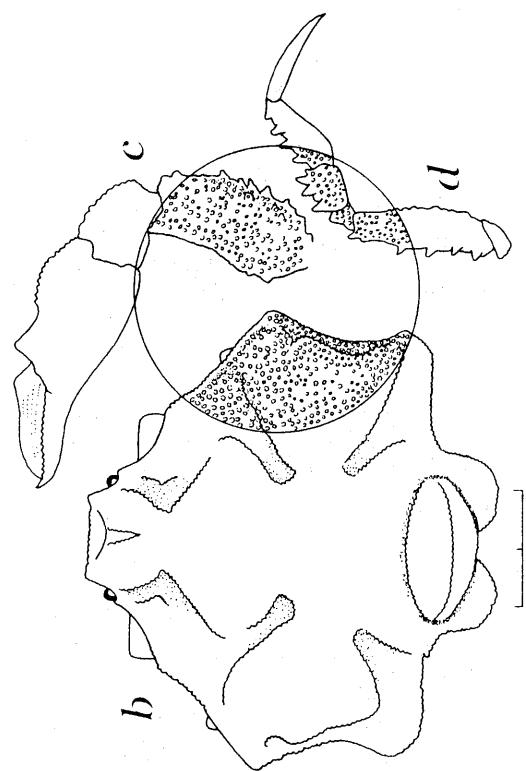
h. walking leg, external view

(from Abele's personal drawings)

*Persephona mediterranea*

i. dorsal view

(after Williams, 1965a)



*Spelaeophorus nodosus*

a. dorsal view

(after Williams, 1965a)

*Spelaeophorus pontifer*

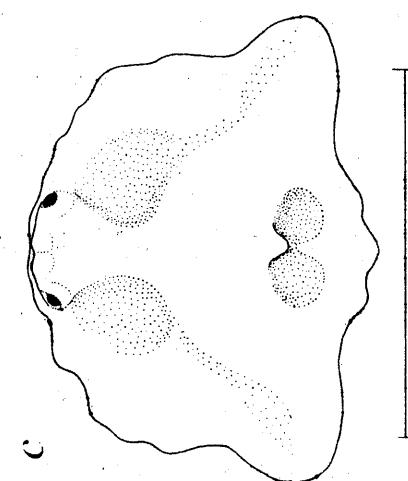
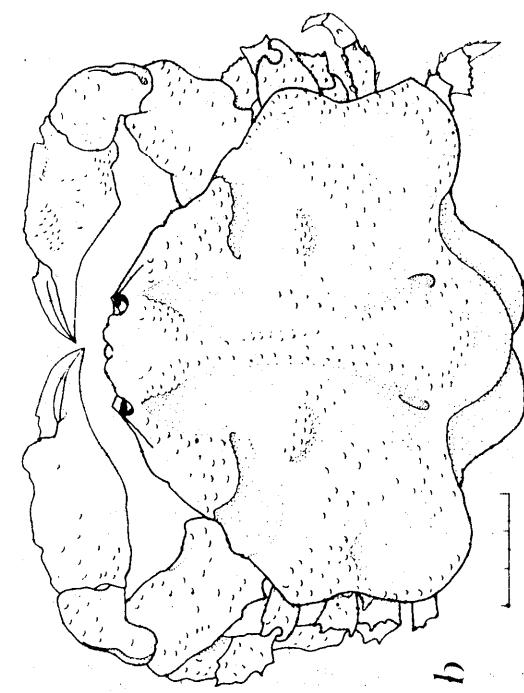
b. dorsal view (female)

(after Williams, 1965a)

*Spelaeophorus elevatus*

c. carapace, dorsal view (male)

(after Rathbun, 1937)



*Callidacylus asper*

a. dorsal view (male)

(after Williams et al., 1968)

*Myropsis quinquespinosa*

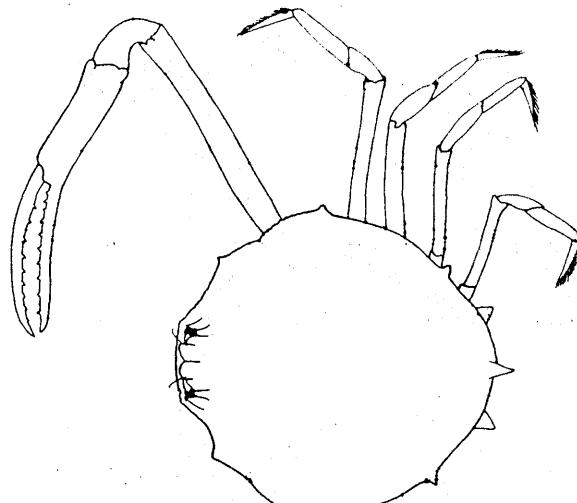
b. dorsal view (female)

(after Williams et al., 1968)

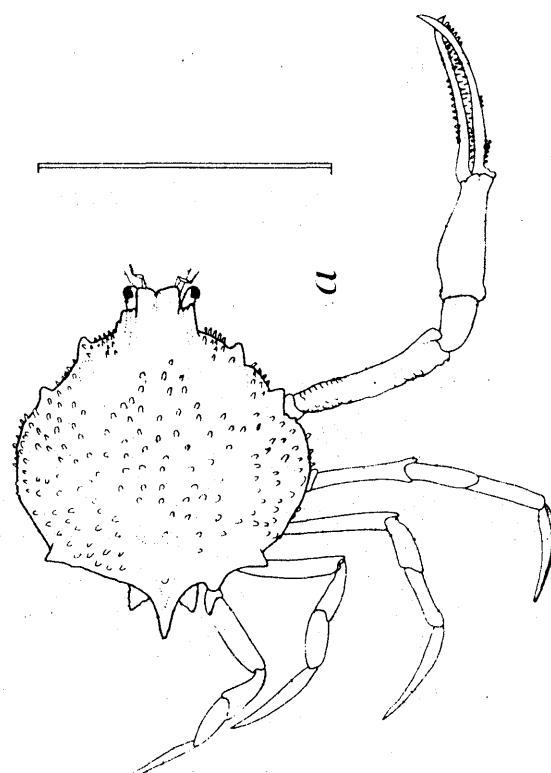
*Ulias limbatus*

c. carapace, dorsal view (female)

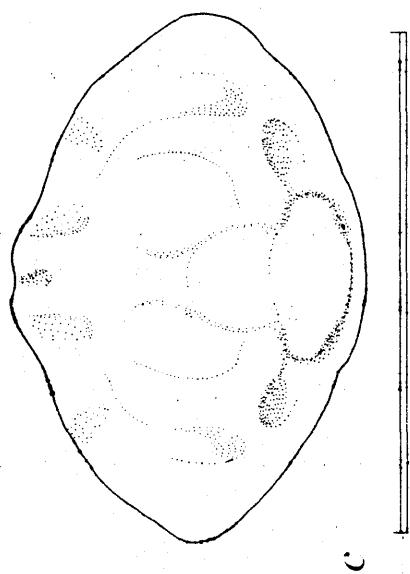
(after Rathbun, 1937)



b



c



c



## Family Majidae

### Key to genera and species

[Based on Garth, 1958, and Rathbun, 1925]

1. Eyes either without orbits or with incomplete or commencing orbits..... 2  
Eyes with nearly complete or complete orbits; basal antennal segment very broad.... 28
2. (1) Eyes without orbits; eyestalks generally long, either nonretractile or retractile against sides of carapace or against acute postocular spine affording no concealment; basal antennal segment extremely slender and usually long ..... 3  
Eyes with incomplete or commencing orbits; basal antennal segment not extremely slender ..... 15
3. (2) Spine intercalated between pre- and postorbital spines..... *Achaeopsis thomsoni*  
No spine intercalated between pre- and postorbital spines..... 4
4. (3) Seven free abdominal segments in both sexes; rostrum double.....  
*Anomalothir furcillatus*  
Six free abdominal segments in male, five in female..... 5
5. (4) Rostrum double..... 6  
Rostrum single..... 10
6. (5) Interantennular spine absent or inconspicuous..... *Collodes*  
Interantennular spine present and conspicuous..... 7
7. (6) Eyestalks slender; 3 erect median spines..... *Arachnopsis filipes*  
Eyestalks not slender..... 8
8. (7) Seven long capitate spines..... *Aepinus septemspinosis*  
Fewer than 7 carapace spines..... 9
9. (8) Spine of basal antennal segment equally advanced with front..... *Euprognatha*  
Spine of basal antennal segment not equally advanced with front.....  
*Batrachonotus fragosus*
10. (5) Merus of outer (third) maxilliped as broad as ischium; palp of moderate size..... 11  
Merus of outer maxilliped often narrower than ischium; palp large and coarse..... 13

11. (10) Postorbital tooth large, curving around eye..... *Pyromaja*  
 Postorbital tooth small or, if large, not curving around eye..... 12
12. (11) Carapace rough with spines and tubercles; legs not subprehensile.....  
 ..... *Anasimus latus*  
 Carapace smooth; legs subprehensile..... *Inachoides forceps*
13. (10) Rostrum considerably less than postrostral length, basal antennal segment often longitudinally sulcate ..... *Podochela*  
 Rostrum approaching or surpassing postrostral length, basal antennal segment not longitudinally sulcate ..... 14
14. (13) Carapace nodulous; long spine at end of merus of each walking leg; rostrum few spined ..... *Metoporhaphis calcarata*  
 Carapace smooth; spines at ends of meri of walking legs no longer than others; rostrum multispinose ..... *Stenorhynchus seticornis*
15. (2) Eyes with commencing orbits having, in addition to supraocular spine, large, cupped postocular process into which eyes retract; eyestalks short..... 16  
 Eyes without true orbits, lacking postocular cup..... 21
16. (15) Intercalated spine present..... 17  
 Intercalated spine absent..... 18
17. (16) First pair of walking legs much longer than remaining pairs..... *Chorinus heros*  
 Walking legs diminishing regularly from first to last pair..... *Nibilia antilocapra*
18. (16) Supraocular eave and postocular process closely approximated..... *Libinia*  
 Supraocular eave and postocular process not closely approximated..... 19
19. (18) Rostrum bifid for not more than half its length or at tip only..... *Pelia mutica*  
 Rostrum bifid for more than half its length..... 20
20. (19) Two rows of spines on walking legs..... *Oplopisa spinipes*  
 Walking legs without two rows of spines..... *Rochinia*
21. (15) Eyestalks long; orbit partially protected by hornlike supraocular spine or by jagged postocular tooth or by both; body often truncate in front ..... 22  
 Eyestalks short, little movable, and either concealed by supraocular spine or sunk in sides of rostrum; basal antennal segment truncate-triangular ..... 25

22. (21) Eyes furnished with orbits completely enclosed, often outstanding and tubular. 23  
 Orbit unprotected below; eyes protected above by lamellate projection consisting of supraocular eave and outgrowth of hepatic region ..... 24
23. (22) Rostrum long, greatly advanced beyond orbits; preocular spine twice length of remainder of orbit; legs filiform; first movable segment of antenna cylindrical ..... *Picroceroides tubularis*  
 Rostrum short, little if at all advanced beyond orbits; preocular spine not long; legs moderately robust; first movable segment of antenna flattened ..... *Pitho*
24. (22) Basal prolongation of exopod of third maxilliped curving forward and usually lodged in groove of ischium of endognath; abdomen 7-segmented in both sexes ...  
 ..... *Tyche emarginata*  
 Basal prolongation of exopod of third maxilliped not recurving; merus of endognath strongly arched, brilliantly glistening, and porcellanous; abdomen of female with segments 4-6 coalesced ..... *Stilbomastax margaritifera*
25. (21) Rostrum double..... 26  
 Rostrum single or secondarily divaricate..... 27
26. (25) Seven free abdominal segments in both sexes..... *Sphenocarcinus corrosus*  
 Six free abdominal segments in both sexes; legs subchelate.....  
 ..... *Acanthonyx petiverii*
27. (25) Six free abdominal segments in male, five in female..... *Epialtus*  
 Five free abdominal segments in male..... *Mocosoa crebripunctata*
28. (1) Intercalated spine present; orbits sometimes projecting beyond general outline of carapace, but never tubular ..... 29  
 Intercalated spine absent; orbits tubular..... 32
29. (28) Orbita not projecting laterally beyond general outline of carapace; carapace subtriangular; legs cristate ..... 30  
 Orbita projecting laterally somewhat beyond general outline of carapace..... 31
30. (29) Carapace very high on median line; basal segment of antenna broader than long....  
 ..... *Hemus cristulipes*  
 Carapace not noticeably high on median line, lobulate; basal segment of antenna no broader than long ..... *Thoe puella*

31. (29) Rostrum small; carapace ovate, usually broader than long..... *Mithrax*

Rostrum of good size, usually with two strong horns; carapace broadly pyriform; basal antennal segment armed with prominent spine at anteroexternal angle .....  
..... *Microphrys*

32. (28) Lateral margin of carapace armed with series of strong spines; basal antennal segment very broad ..... 33

Lateral margin of carapace not armed with series of strong spines, but with spine, usually strong, at lateral angle of carapace ..... 34

33. (32) Basal antennal segment quadridentate; postocular tooth large, quadrangular, armed with two teeth or spines ..... *Coelocerus spinosus*

Basal antennal segment with fewer than four spines or teeth; postocular tooth of moderate size, triangular, armed with only one spine ..... *Stenacionops*

34. (32) Orbita strongly projecting; rostral horns short; carapace broad... *Macrocoeloma*

Orbita little projecting; rostral horns long and slender; carapace narrow.....  
..... *Leptopisa setirostris*

**Genus *Collodes* Stimpson, 1860**

## Key to species

[Adapted from Rathbun, 1925]

1. Carapace with median spines..... 2
- Carapace without median spines..... 4
2. (1) Rostrum simple, not bifid (basal antennal segment with inner crest armed with three spiniform teeth) ..... *C. obesus*  
Rostrum bifid..... 3
3. (2) Walking legs hairy (granules evenly distributed on branchial region).....  
..... *C. trispinosus*  
Walking legs naked..... *C. nudus*
4. (1) Interantennular spine advanced as far as rostrum; chelipeds slender.....  
..... *C. leptochelus*  
Interantennular spine not advanced as far as rostrum (carapace mostly granulate; basal antennal segment with conspicuously dentate crests) ..... *C. robustus*

**Genus *Epialtus* H. Milne Edwards, 1834**

## Key to species

[Adapted from Rathbun, 1925]

1. Rostrum simple, margin entire or nearly so..... 2  
Rostrum either bilobed or bidentate..... 4
2. (1) Rostrum dorsally carinate; carapace widest at hepatic regions; cardiac region conical.  
..... *E. kingsleyi*  
Rostrum not dorsally carinate..... 3
3. (2) Carapace with very shallow sinus between lateral lobes; hand of male high;  
preorbital angles obtuse; tip of rostrum rounded ..... *E. bituberculatus*  
Carapace with deep sinus between lateral lobes; hand of male elongate; preorbital  
angles sharp (rostrum very narrow, sides parallel, tip subtruncate, with faint  
indication of two lobes) ..... *E. longirostris*
4. (1) Rostrum short; carapace in front of anterior margin of hepatic lobe much shorter  
than behind same region; hepatic lobe much larger than branchial lobe (hepatic lobe  
not directed forward; rostrum narrowing anteriorly; tuft of hair present on propodi  
of legs) ..... *E. dilatatus*  
Rostrum long; hepatic and branchial lobes more nearly equal; tuft of hair present on  
propodi of legs (carapace widest across branchial regions; length in front of hepatic  
lobes nearly as great as behind same line) ..... *E. dilatatus forma elongata*

**Genus *Euprognatha* Stimpson, 1871**

## Key to species

[Adapted from Rathbun, 1925]

Interantennular spine very short; sternum forming wide border around posterolateral portions of carapace ..... *E. gracilipes*

Interantennular spine long; sternum forming narrow border around posterolateral portions of carapace; antennal spines diverging anteriorly; immovable finger without noticeably enlarged tooth ..... *E. rastellifera*

**Genus *Libinia* Leach, 1815**

## Key to species

[Adapted from Rathbun, 1925]

1. Median line of carapace with about 9 spines, 5 behind cervical groove..... *L. emarginata*

Median line of carapace with about 6 spines..... 2

2. (I) Fork of rostrum in adult shallow, tips of horns blunt; lateral marginal spines in young of good size, subequal ..... *L. dubia*

Fork of rostrum in young deeper than in *L. dubia*. horns acute, curved toward each other; lateral marginal spines in young small except very long and slender posterior one ..... *L. erinacea*

Genus *Macrocoeloma* Miers, 1879

## Key to species

[Adapted from Rathbun, 1925]

1. Carapace with fewer than 7 spines on its posterior half or, if with 7 spines, some of them small ..... 2
- Carapace with 7 strong spines on its posterior half ..... 8
2. (1) Basal antennal segment armed with only one spine or sharp tubercle ..... 3
- Basal antennal segment armed with 2 or more spines; orbits elongate-tubular ..... 7
3. (2) Rostral horns separated by interspace; interspace narrow or pointed at base ..... 4
- Rostral horns separated by interspace; interspace broad and rounded at base ..... 6
4. (3) Posterolateral projections narrow, spinelike ..... *M. trispinosum trispinosum*  
Posterolateral projections broad, bladelike ..... 5
5. (4) Posterolateral projections very broad, their margins continuous with marginal lines of carapace ..... *M. trispinosum nodipes*  
Posterolateral projections less broad, their margins making angle with marginal lines of carapace ..... *M. trispinosum variety*
6. (3) Carapace deeply sculptured or areolated between two posterolateral spines; rostral spines short and stout (posterolateral spines directed obliquely backward) ..... *M. subparallelum*  
Carapace not unusually sculptured between epibranchial spines; rostral horns longer and slenderer ..... *M. diplacanthum*
7. (2) Rostral spines separated by U-shaped sinus ..... *M. eutheca*  
Rostral spines separated by V-shaped sinus; basal antennal segment armed with 2 spines forming oblique line, outer spine more or less distant from orbital margin ..... *M. laevigatum*
8. (1) Basal antennal segment armed with only one spine ..... *M. cinctocerum*  
Basal antennal segment armed with two spines in transverse line ..... *M. septemspinum*

**Genus *Microphrys* H. Milne Edwards, 1851**

## Key to species

[Adapted from Williams, 1984]

- Carapace with 2 lateral laminiform processes, 2 strong branchial spines.....  
..... *M. antillensis*
- Carapace without lateral laminiform processes, 1 strong branchial spine.....  
..... *M. bicornutus*

**Genus *Mithrax* Desmarest, 1823**

## Key to species

[Adapted from Rathbun, 1925]

1. Carapace without smooth, oblique, branchial sulci..... 2
- Carapace with smooth, oblique, branchial sulci; rostral horns very short; minor teeth of orbit tuberculiform, inconspicuous ..... 14
2. (1) Palm armed above with spines or spinules..... 3  
      Palm not armed above with spines or spinules..... 7
3. (2) Two spines only on basal segment of antenna..... *M. spinosissimus*  
      Three spines on basal segment of antenna..... 4
4. (3) Carapace paved with flattened granules, concealed by short hair.....  
          *M. verrucosus*, young  
      Carapace not paved with flattened granules..... 5
5. (4) Carapace as wide between tips of third anterolateral spines as between tips of fourth spines; carapace closely granulate and tuberculate and densely pilose .. *M. pilosus*  
      Carapace widest between tips of fourth anterolateral spines (not counting orbital spine) ..... 6
6. (5) Three or four supraorbital spines, exclusive of preorbital and exorbital spines; propodi of legs very long and slender ..... *M. cornutus*  
      Two supraorbital spines only, exclusive of preorbital and exorbital spines; propodi of legs moderate (size small) ..... *M. acuticornis* (over 18 mm long)

7. (2) Rostral horns sharp or acute (rostral horns very short; only two anterolateral spines) ..... *M. holderi*  
     Rostral horns blunt, either subtruncate or tuberculiform..... 8
8. (7) Carapace paved with close-set granules or tubercles..... 9  
     Carapace not paved with close-set granules or tubercles..... 10
9. (8) Carapace paved with convex tubercles, each granulate..... *M. hemphilli*, mature  
     Carapace paved with flat, tessellated granules (lateral margins of carapace spinous; carpus of cheliped nearly smooth above, three tubercles on inner edge) ..... *M. verrucosus*
10. (8) Spine on, or just above, posterolateral margin of carapace..... 11  
     Tuberle, instead of spine, on, or just above, posterolateral margin of carapace... 12
11. (10) Two parallel and nearly transverse rows of well marked tubercles and spines on posterolateral region ..... *M. caribbaeus*, small or medium size  
     One row of not more than two or three well marked tubercles and spines on posterolateral region; prehensile edges of fingers of very old specimens entire; not crenulated, in gape, except on tubercle ..... *M. hispidus*
12. (10) Carapace very wide, anterior, marginal, branchial lobe strikingly protuberant; posterolateral slope of carapace smooth, behind row of two conical tubercles leading obliquely inward from spine at lateral angle; rostral sinus V-shaped ..... *M. tortugae*  
     Carapace narrower, anterior, branchial protuberance not strikingly prominent; posterolateral slope of carapace rough, with few tubercles or granules ..... 13
13. (12) Well marked, posterolateral tubercle present, outermost of transverse row of three, this row having similar row in front of it; prehensile edges of fingers crenulated along gape; rostral sinus U-shaped ..... *M. caribbaeus*, large  
     Almost transverse row of two large tubercles leading inward from spine at lateral angle; tubercles behind and immediately in front of it all very small or granules; rostral sinus V-shaped in young, U-shaped in old ..... *M. pleuracanthus*
14. (1) Carapace longer than broad..... *M. cinctimanus*  
     Carapace broader than long..... 15
15. (14) Anterolateral margins cut into rounded lobes only..... 16  
     Anterolateral margins cut into spines or angular lobes or spines and lobes..... 17

16. (15) Anterolateral margin cut into three lobes (posterior part of carapace nodose, not eroded; inner margin of cheliped not laminate) ..... *M. coryphe*
- Anterolateral margin cut into four lobes; carpus of cheliped smooth, margin not laminate or dentate ..... *M. sculptus*
17. (15) Four anterolateral protuberances behind orbit; carpus of cheliped smooth above and with one inner tooth ..... *M. forceps*
- Three anterolateral protuberances behind orbit; carpus of cheliped obscurely tuberculate (palm without tubercle on outer surface at articulation with carpus) ..... *M. ruber*

### Genus *Pitho* Bell, 1835

Key to species  
[Adapted from Rathbun, 1925]

- 1. Second and third lateral teeth, exclusive of tooth at orbital angle, partially united at base ..... 2
- Second and third lateral teeth not united at base ..... 5
- 2. (1) First movable segment of antenna much wider than long, its outer lobe strongly produced laterally; lateral teeth of carapace blunt-tipped in adult ..... *P. aculeata*  
First movable segment of antenna little, if at all, wider than long, its outer lobe produced as much anteriorly as laterally; lateral teeth of carapace acute ..... 3
- 3. (2) Lateral teeth subequal in size; carapace subcircular, front narrow..... *P. laevigata*  
Lateral teeth not subequal..... 4
- 4. (3) Last two lateral teeth not much, if at all, smaller than others (second lateral tooth very small, much smaller than first and third teeth) ..... *P. anisodon*  
Last two lateral teeth much reduced, at least in male (first movable segment of antennal slightly wider than long; lateral teeth sharper in female than in male, last two teeth more prominent than in male) ..... *P. lheminieri*
- 5. (1) Lateral teeth five (exceptionally four), dentiform, their edges denticulate..... *P. mirabilis*  
Lateral teeth four, long and narrow, spiniform (rostral teeth acutely pointed)..... *P. quadridentata*

**Genus *Podochela* Stimpson, 1860**

## Key to species

[Adapted from Rathbun, 1925]

1. Postorbital protuberance a large lobe..... 2
- Postorbital protuberance a granule or wanting..... 3
2. (1) Supraorbital margin armed with two long spines; sternal segments of male elevated, flat, closely and finely granulate; palm of adult male not inflated; rostrum long, spiniform, arched upward ..... *P. curvirostris*  
Supraorbital margin armed with series of spinules or small spines; sternal segments of male not closely and finely granulate (palm of adult male not inflated; fingers contiguous; sternum of male laminate, each lamina overlapping one behind it; surface sparingly granulate with scattered, pointed granules; prominent lobe behind and below postorbital lobe; rostrum short, pointed) ..... *P. lamelligera*
3. (1) Rostrum long, ending in spine; palm inflated in male (rostrum less than half as long as postrostral portion of carapace; gape between fingers of adult male subtriangular, deep at proximal end; size small, not over 13 mm long) ..... *P. gracilipes*  
Rostrum short, not ending in spine..... 4
4. (3) Rostrum thick, subtriangular, not hollow beneath (propodus of first walking leg four or more times as long as dactylus; propodi of last two legs considerably longer than dactyli and slightly curved) ..... *P. macrodera*  
Rostrum thin, hood-shaped, hollow beneath..... 5
5. (4) Dactyli of last three walking legs curved, short, contained twice, or more than twice, in their respective propodi; cardiac prominence low ..... *P. riisei*  
Dactyli of last three walking legs less curved and longer, those of last two pairs contained less than twice in their respective propodi; cardiac prominence higher and more acute or ending in short spine ..... *P. sidneyi*

### Genus *Pyromaja* Stimpson, 1871

Key to species  
[Adapted from Rathbun, 1925]

Rostrum tapering regularly to tip; chelipeds and walking legs covered with short, soft pubescence; no spines at proximal ends of meri of walking legs ..... *P. cuspidata*

Rostrum triangular at base, then narrowing to slender spine; chelipeds and walking legs not noticeably pubescent; erect spine at proximal end of merus of each walking leg; short fringe of hair on each side of dactyli ..... *P. arachna*

### Genus *Rochinia* A. Milne Edwards, 1875

Key to species  
[Adapted from Rathbun, 1925]

1. Median spines six; gastric spines six; two spines on basal antennal segments..... *R. crassa*
- Median spines or tubercles fewer than six; gastric spines or tubercles fewer than six ..... 2
2. (1) Spines of carapace and rostrum long and slender; spine at angle of buccal cavity.... *R. hystrix*
- Spines or tubercles of carapace short or of moderate length; no spine at angle of buccal cavity ..... 3
3. (2) Dorsal tubercles mostly large and flat-topped..... *R. umbonata*
- Dorsal tubercles or spines acute, not large and flat-topped..... *R. tanneri*

**Genus *Stenacionops* Desmarest, 1823**

## Key to species

[Adapted from Rathbun, 1925]

1. Hepatic region not enlarged or produced beyond general outline of carapace; armed with not more than one large spine ..... 2  
Hepatic region enlarged and produced separately from curve of branchial region.. 4
2. (1) Marginal spines behind orbit three (carapace widest between tips of anterior branchial spines) ..... *S. spinimana*, young  
Marginal spines behind orbit more than three..... 3
3. (2) Dorsal surface almost unarmed except for median intestinal spine.....  
..... *S. furcata furcata*  
Dorsal surface armed with spines; fewer than eight median spines.....  
..... *S. furcata coelata*
4. (1) Median spines of carapace 12 or 13; marginal hepatic spines 3.....  
..... *S. spinimana*, adult  
Median spines of carapace 10; marginal hepatic spines 2..... *S. spinosissima*

*Collodes obesus*

female:

- a. dorsal view
- b. carapace, lateral view  
(after Rathbun, 1925)

*Collodes trispinosus*

male:

- c. dorsal view
- d. tip of right first pleopod (gonopod), sternal view  
(after Williams, 1984)

*Collodes leptochelus*

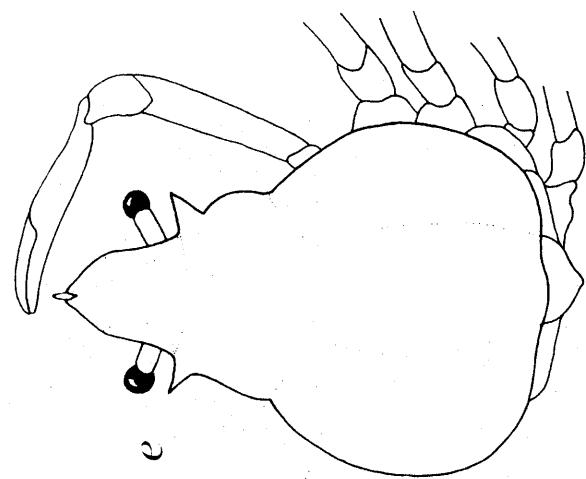
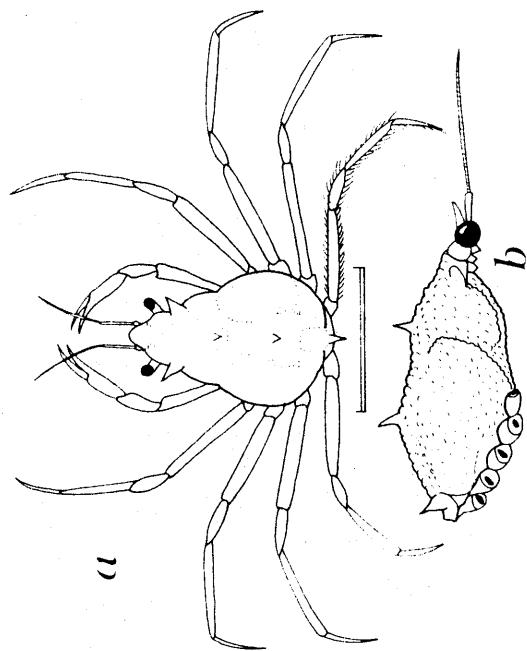
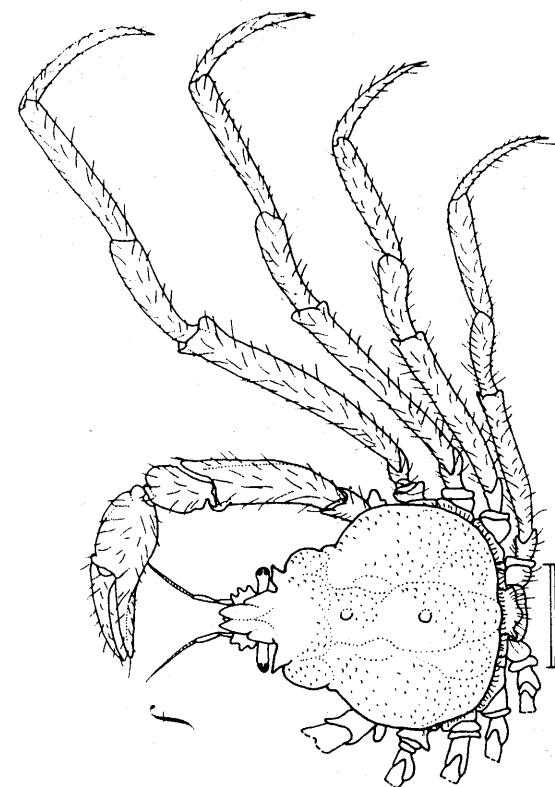
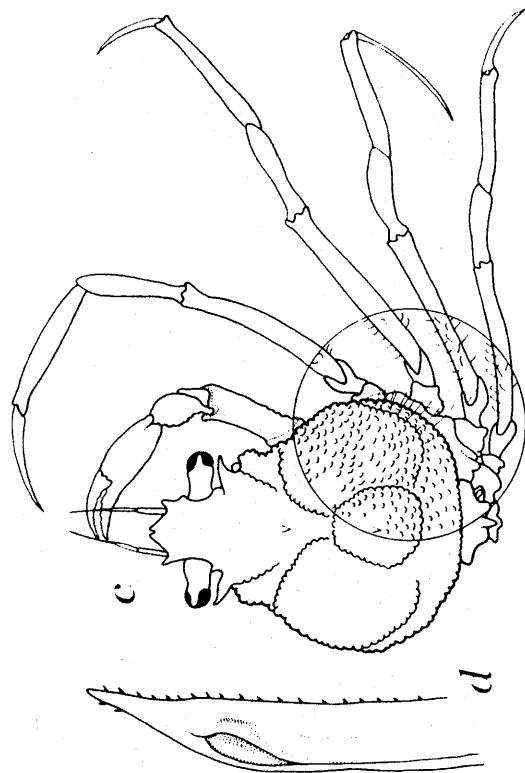
- e. dorsal view

(after Felder, 1973)

*Collodes robustus*

- f. dorsal view (male)

(after Rathbun, 1925)



*Epialtus kingsleyi*

holotype male:

- a. carapace, dorsal view
- b. left cheliped, external view  
(after Rathbun, 1925)

*Epialtus bituberculatus*

c. dorsal view

(after drawing at SI-NMNH)

*Epialtus longirostris*

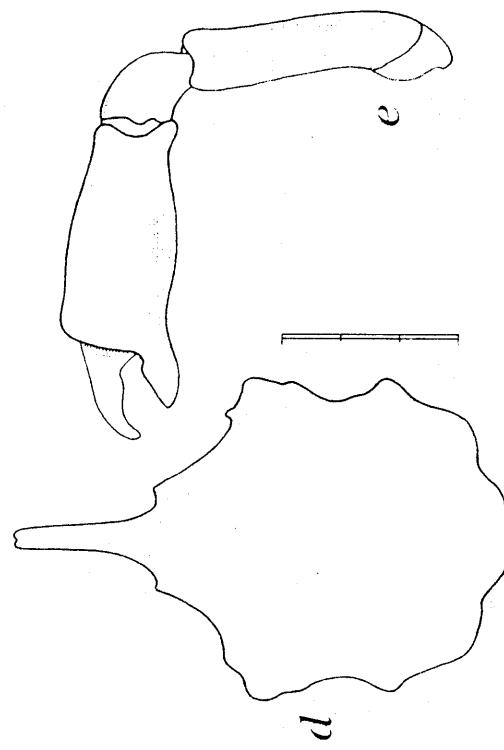
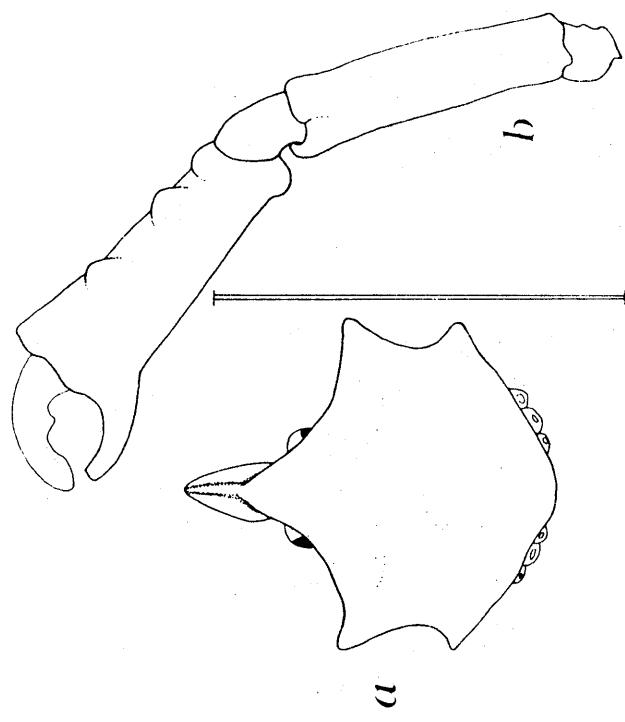
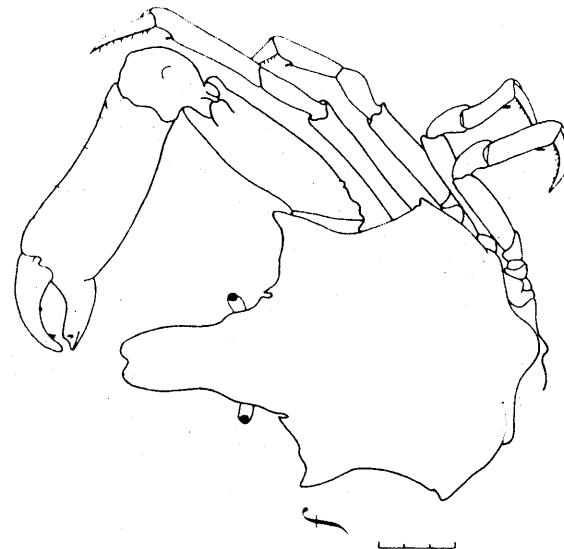
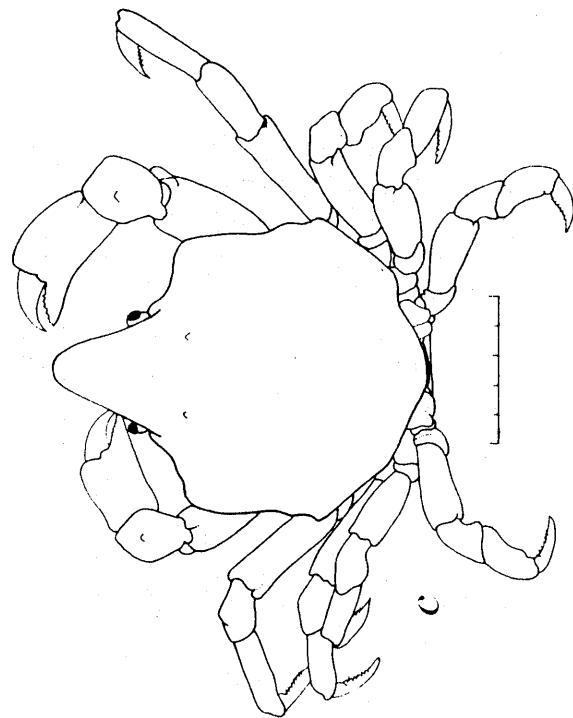
d. carapace, dorsal view (female)

- e. left cheliped (male)  
(after Rathbun, 1925)

*Epialtus dilatatus*

f. dorsal view (male)

(after Williams, 1965a)



*Epialtus dilatatus forma elongata*

- a. dorsal view
- b. dactylus of walking leg
- c. chela, external view

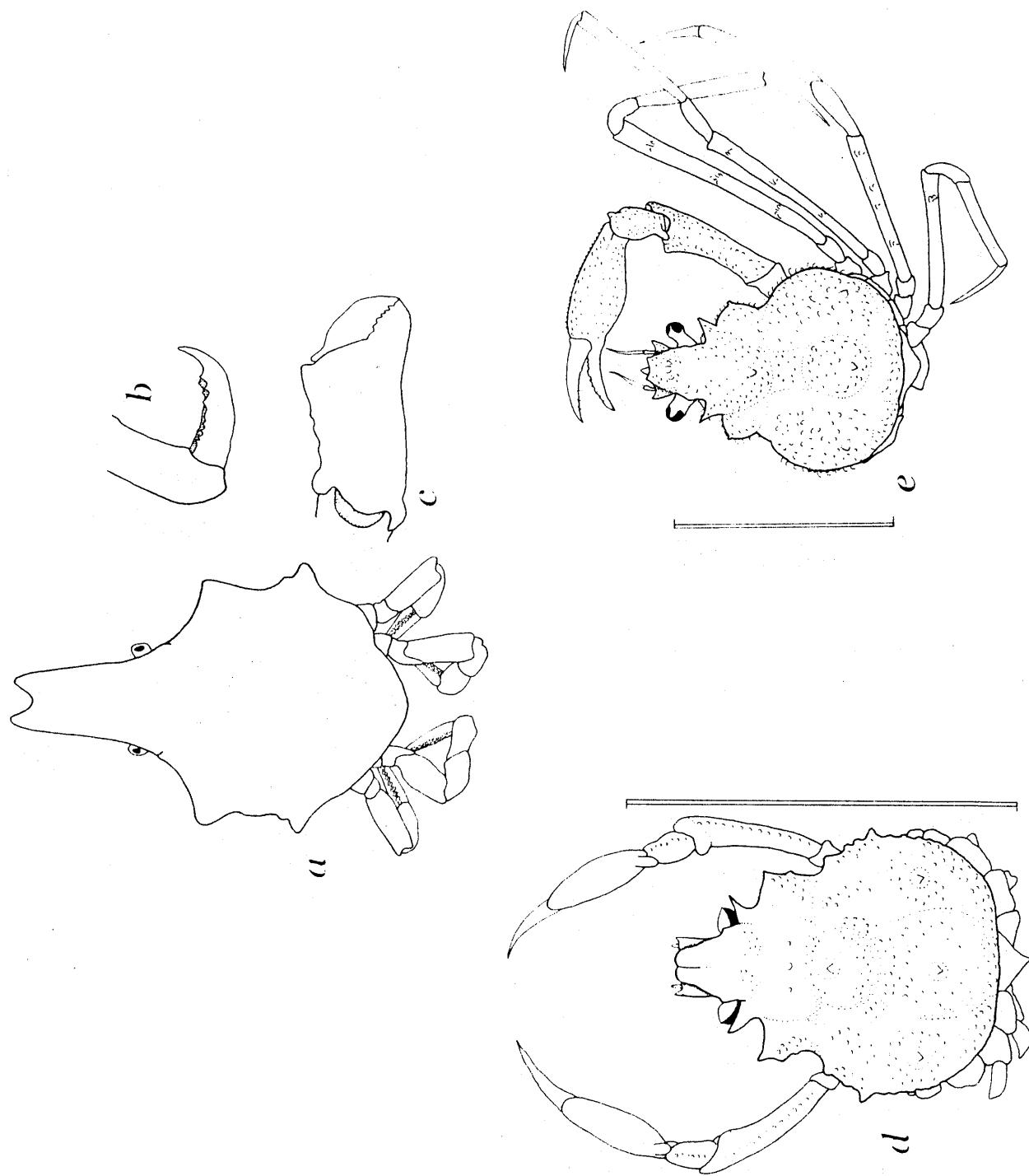
(from Abele's personal drawings)

*Euprognatha rastellifera*

- d. dorsal view (male)
- e. dorsal view (male)

(after Rathbun, 1925)

*Euprognatha gracilipes*



*Libinia emarginata*

male:

a. dorsal view

b. tip of right first pleopod (gonopod), lateral view

(after Williams, 1984)

*Libinia erinacea*

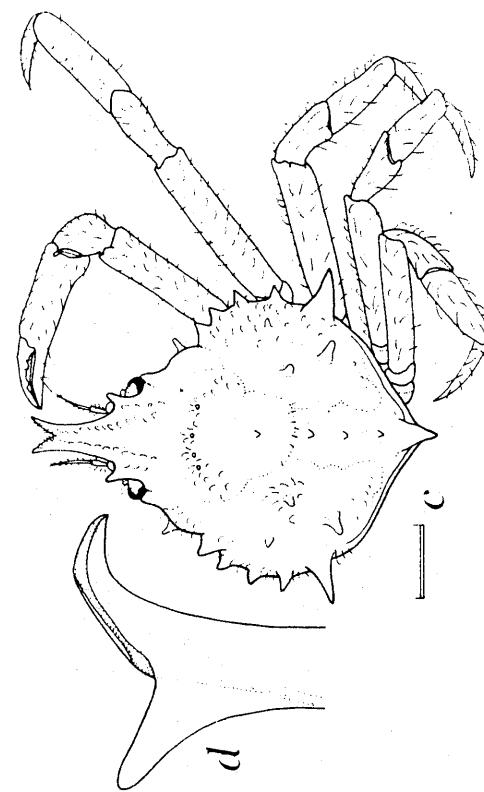
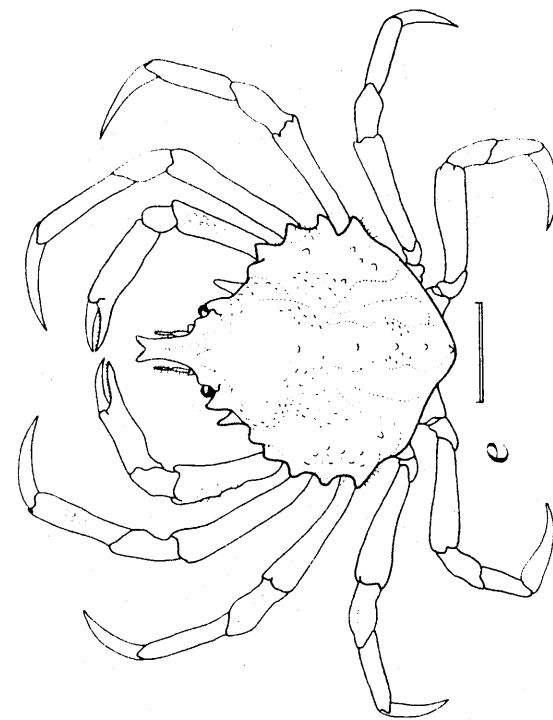
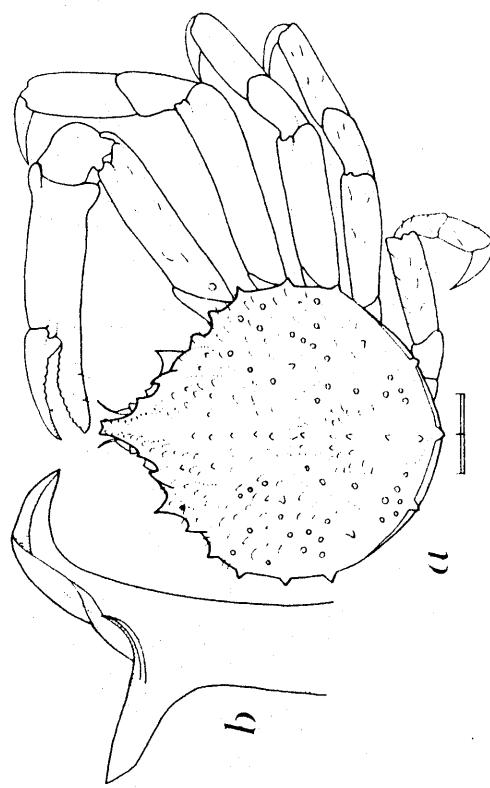
male:

c. dorsal view

d. tip of right first pleopod (gonopod), lateral view

(after Williams, 1984)

*Libinia dubia*e. dorsal view  
(after drawing at SII-NMNH)



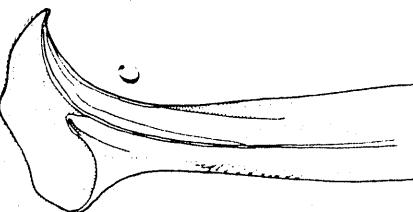
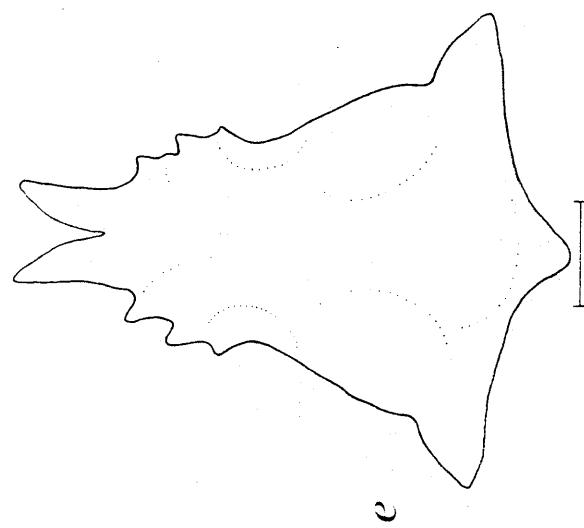
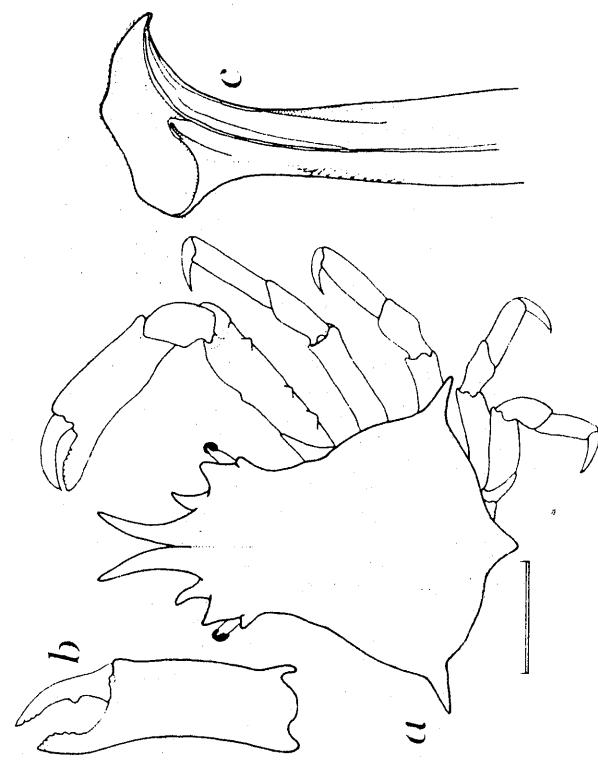
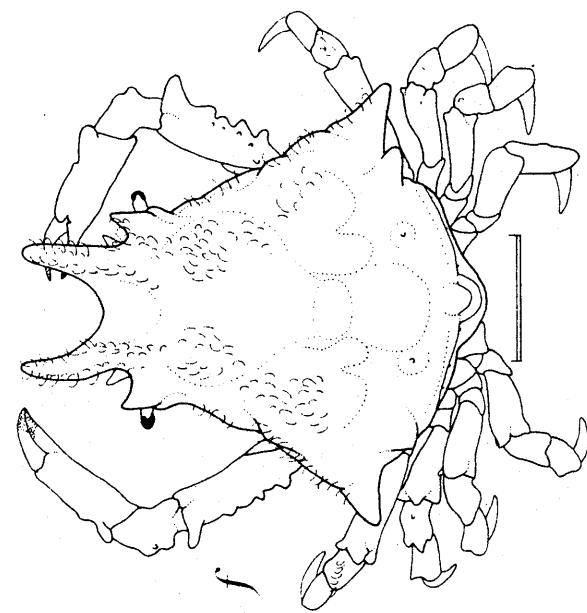
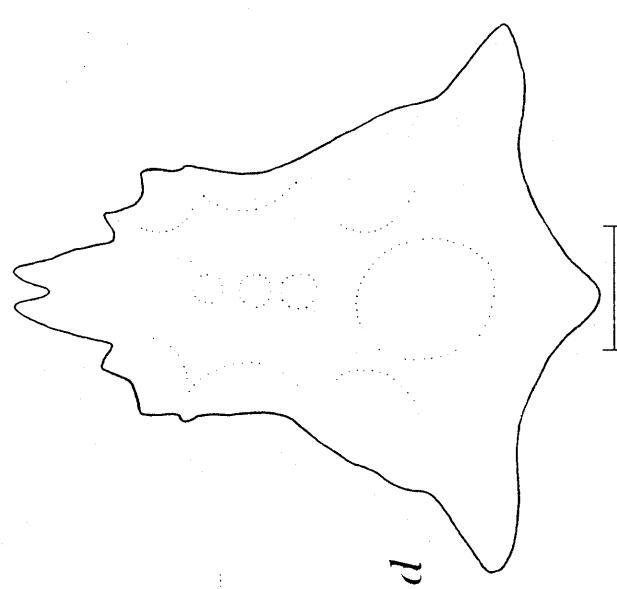
*Macrocoeloma trispinosum trispinosum*

- a. dorsal view (small male)
- b. right chela, external view (adult male)
- c. tip of right first pleopod (gonopod), lateral view (male)  
(after Williams, 1984)
- d. carapace, dorsal view (male)  
(after Rathbun, 1925)

*Macrocoeloma trispinosum nodipes*

- e. carapace, dorsal view (male)  
(after Rathbun, 1925)
- f. dorsal view  
(after drawing at SI-NMNH)

*Macrocoeloma trispinosum, variety**Macrocoeloma subparallelum*



*Macrocoeloma diplacanthum*

a. dorsal view (male)

(after Rathbun, 1925)

*Macrocoeloma eutheca*

male:

b. dorsal view

c. tip of right first pleopod (gonopod), lateral view

(after Williams, 1984)

*Macrocoeloma laevigatum*

d. basal antennal segment (male)

(after Rathbun, 1925)

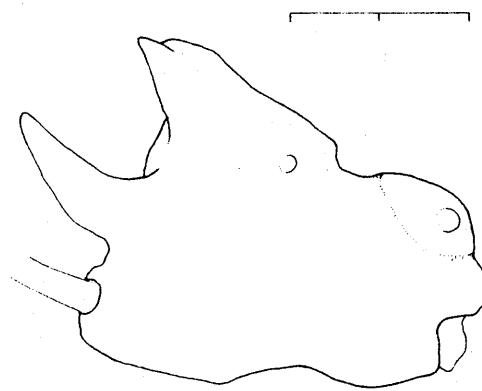
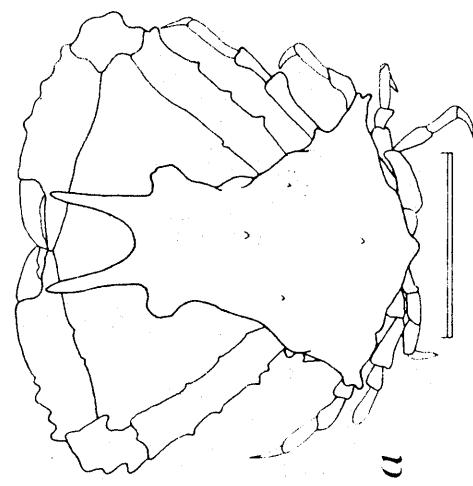
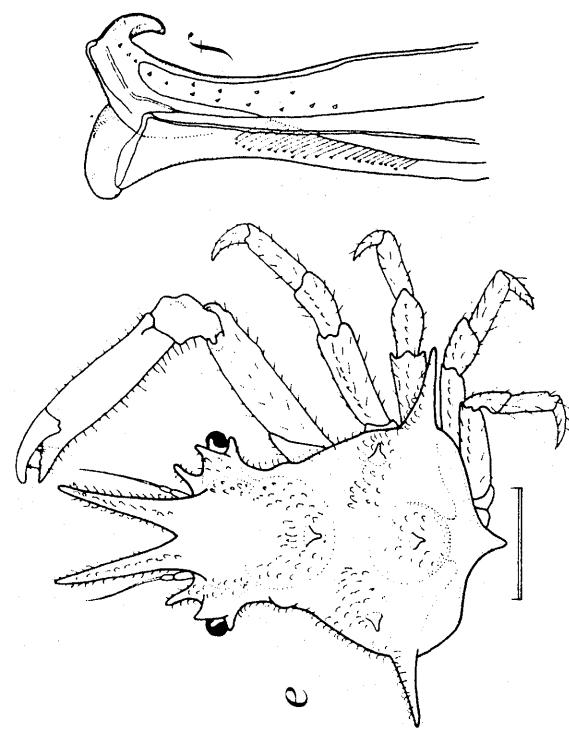
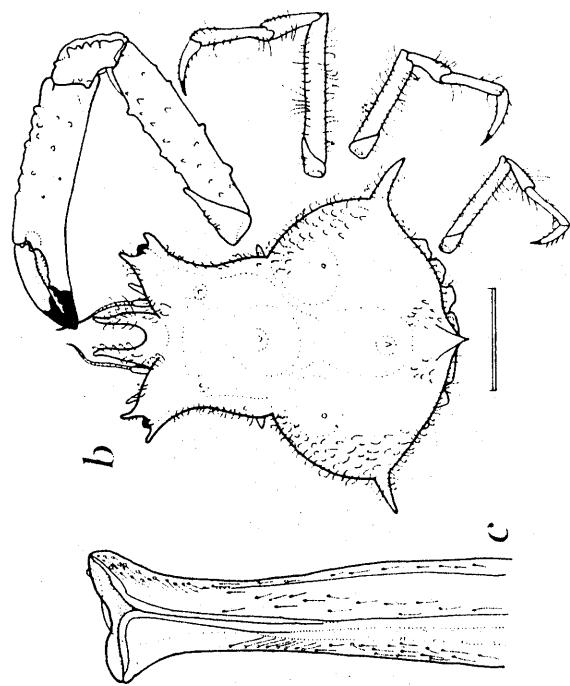
*Macrocoeloma cinctocerum*

male:

e. dorsal view

f. tip of right first pleopod (gonopod), lateral view

(after Williams, 1984)



*Macrocoeloma septemspinosum*

a. dorsal view

(after drawing at SI-NMNH)

*Microphrys antillensis*

male:

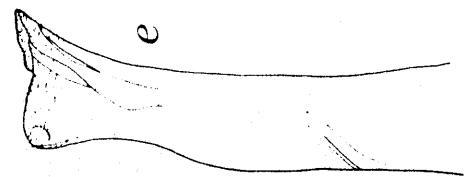
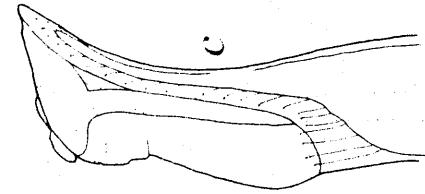
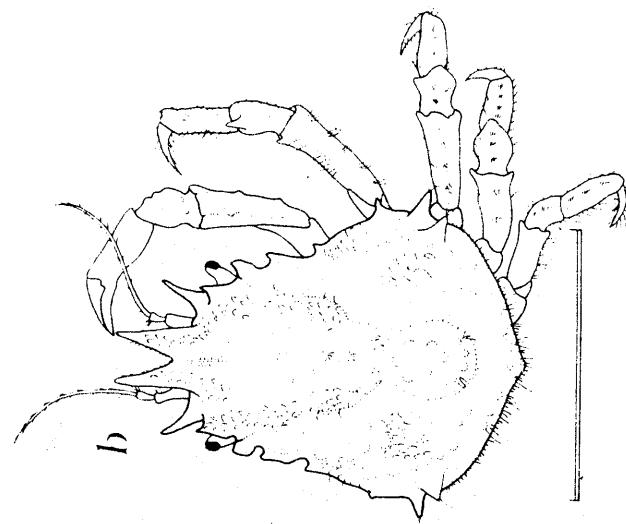
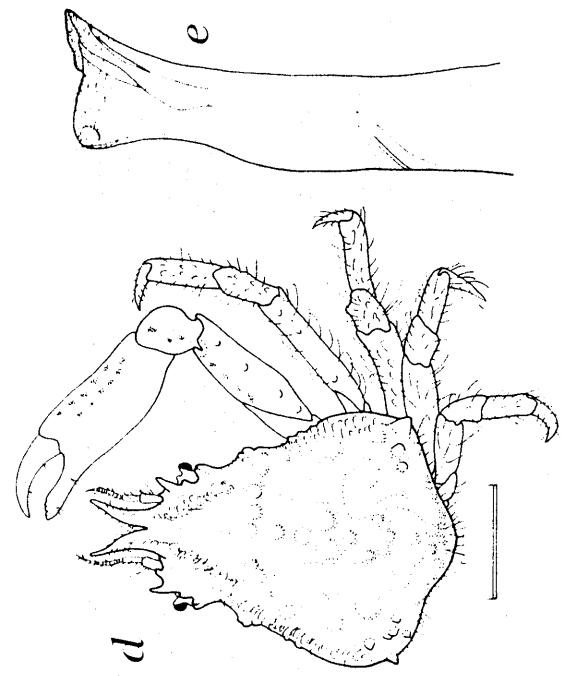
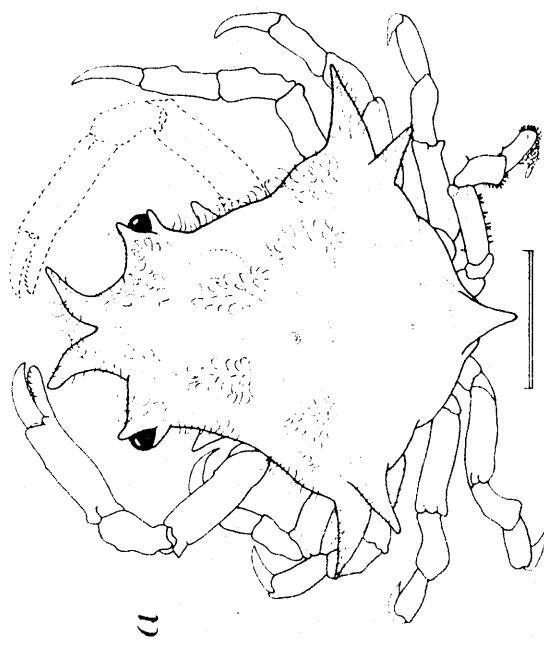
b. dorsal view

c. tip of right first pleopod (gonopod), sternal view  
(after Williams, 1984)*Microphrys bicornutus*

male:

d. dorsal view

e. tip of right first pleopod (gonopod), sternal view  
(after Williams, 1984)



*Mithrax spinosissimus*

male:

a. dorsal view

b. tip of right first pleopod (gonopod), sternal view

(after Williams, 1984)

*Mithrax pilosus*

male:

c. dorsal view (male)  
(after Rathbun, 1925)*Mithrax cornutus*

male:

d. dorsal view

e. anterior part, ventral view

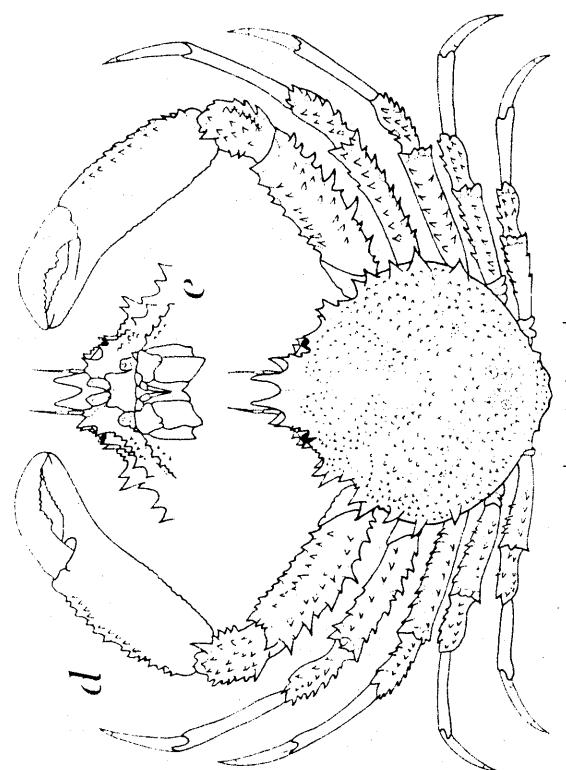
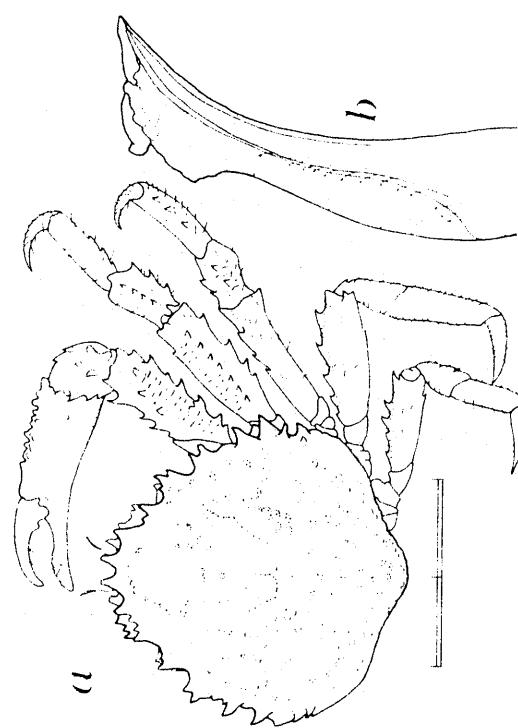
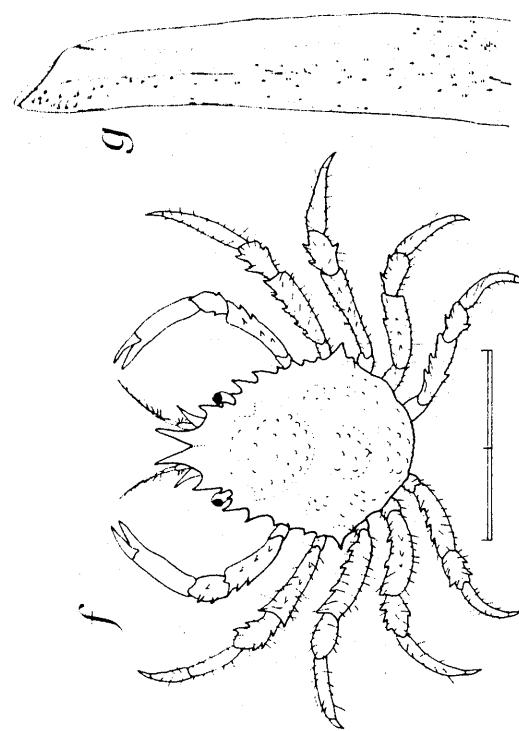
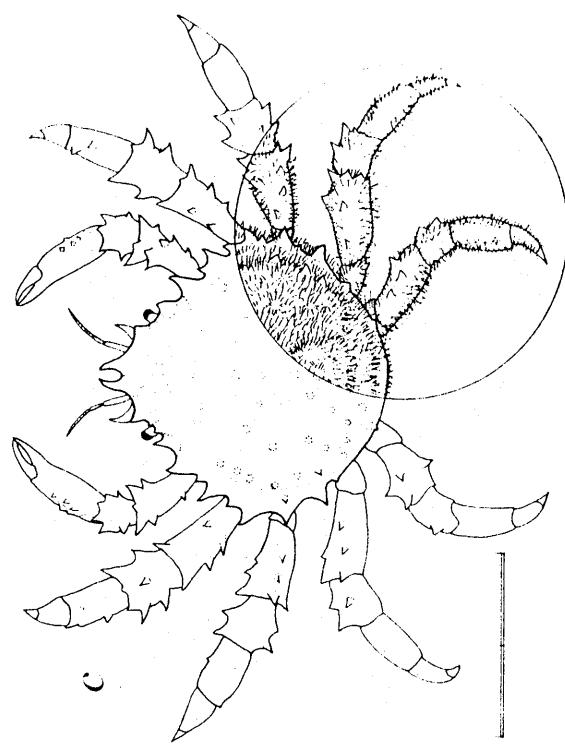
(after Rathbun, 1925)

*Mithrax acuticornis*

male:

f. dorsal view

g. tip of right first pleopod (gonopod),  
sternal view  
(after Williams, 1984)



*Mithrax holderi*

- a. dorsal view (female)  
(after Rathbun, 1925)

*Mithrax hemphilli*

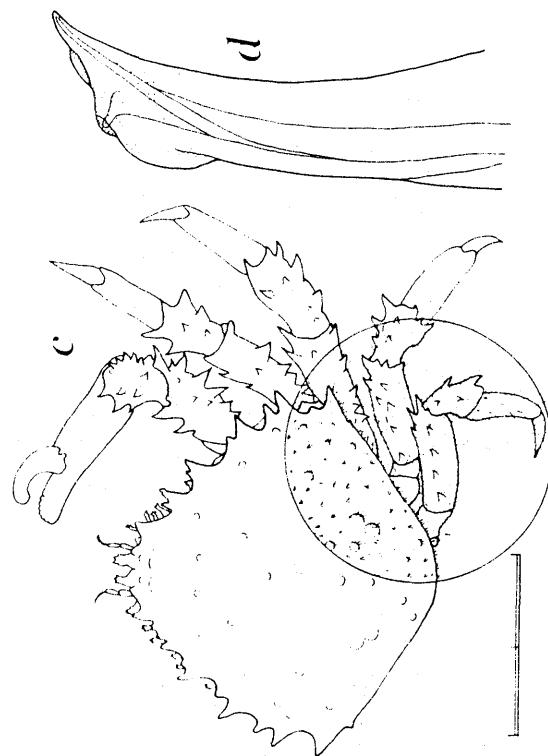
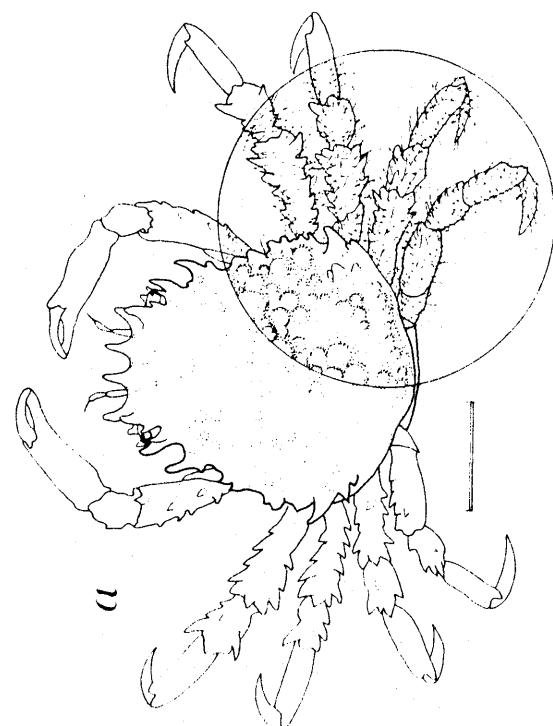
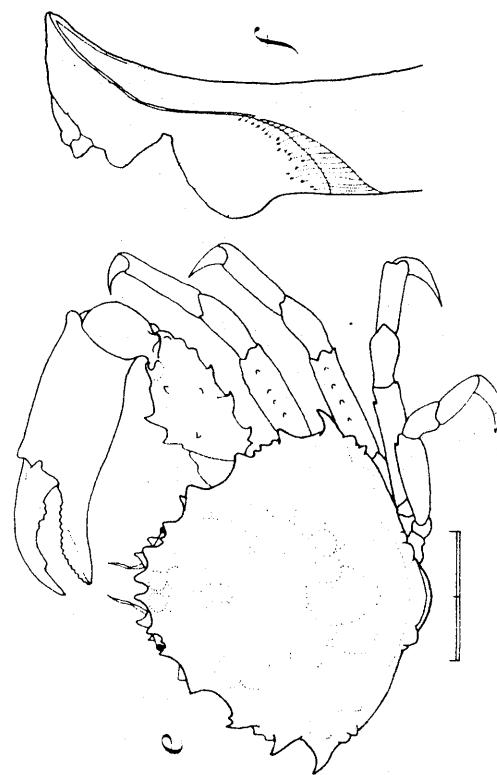
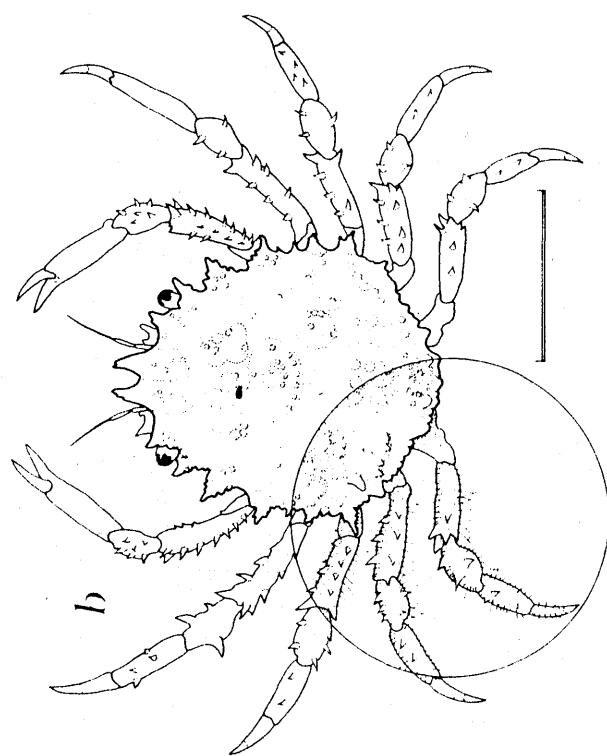
- b. dorsal view (female)  
(after Rathbun, 1925)

*Mithrax verrucosus*

- male:  
c. dorsal view  
d. tip of right first pleopod (gonopod),  
sternal view  
(after Williams, 1984)

*Mithrax hispidus*

- male:  
e. dorsal view  
f. tip of right first pleopod (gonopod),  
sternal view  
(after Williams, 1984)



*Mithrax tortugae*

- a. dorsal view (female)  
(after Rathbun, 1925)

*Mithrax caribbaeus*

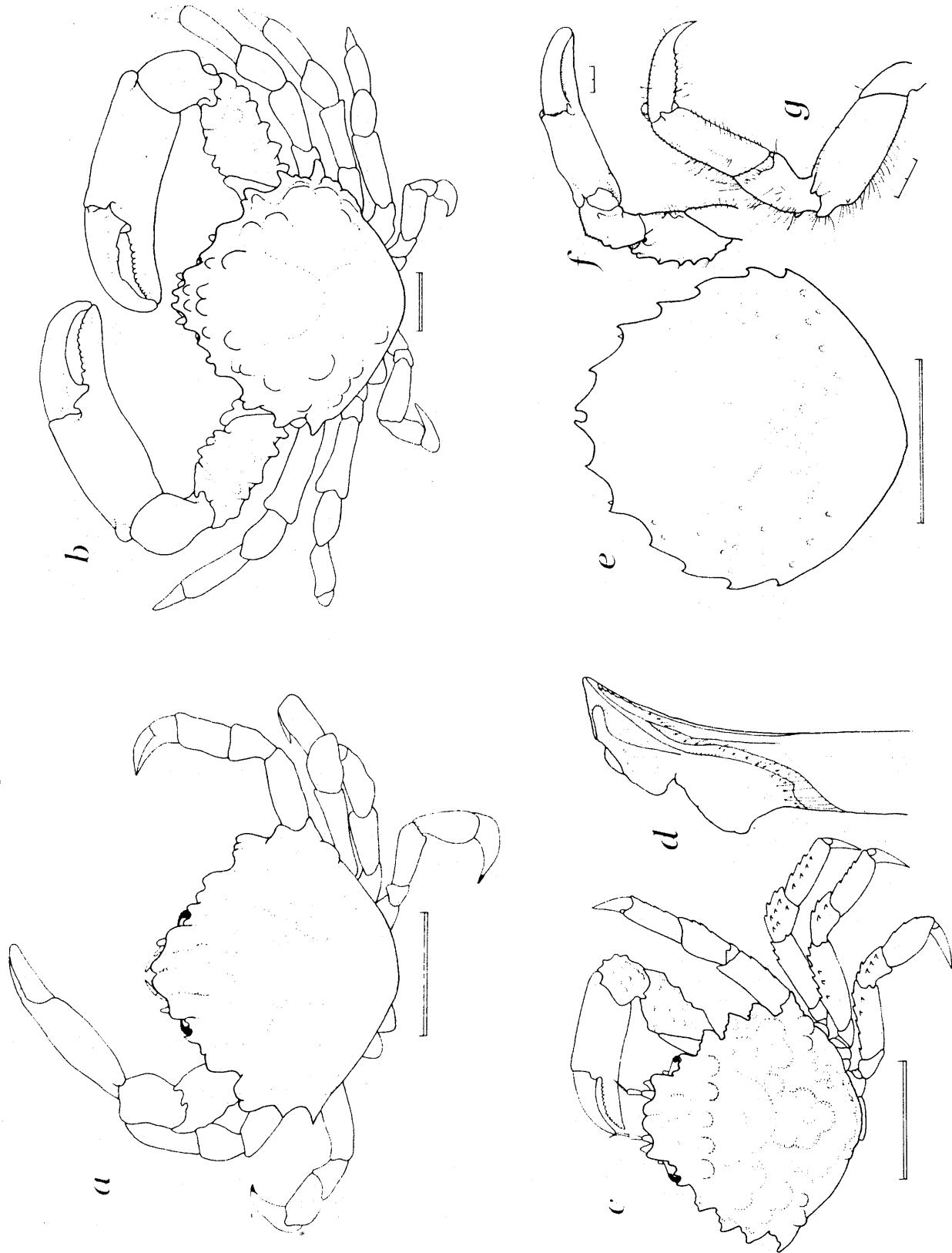
- b. dorsal view (holotype male)  
(after Rathbun, 1925)

*Mithrax pleuracanthus*

- c. dorsal view  
d. tip of right first pleopod (gonopod),  
sternal view (male)  
(after Williams, 1984)

*Mithrax cinctimanus*

- male:  
e. outline of carapace, dorsal view  
f. left cheliped  
g. fifth pereopod  
(e, after Rathbun, 1925; f, g,  
after Manning, 1970)



*Mithrax coryphe*

- a. dorsal view
- b. dorsal view  
(after drawing at SI-NMNH)

*Mithrax sculptus*

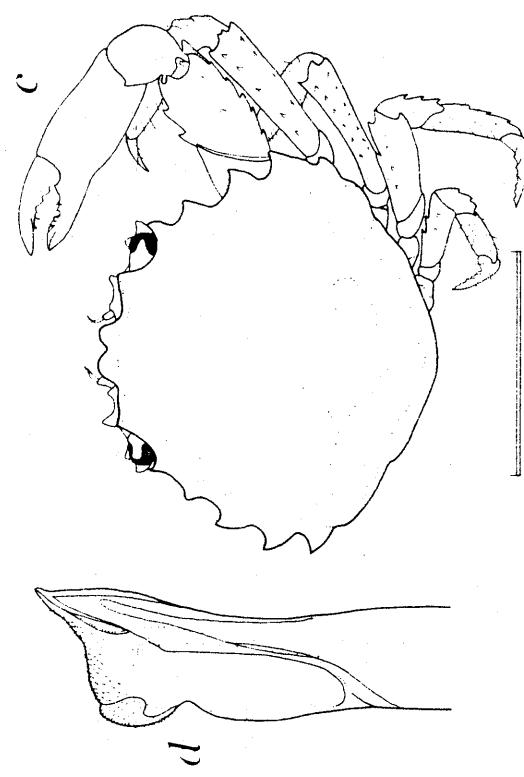
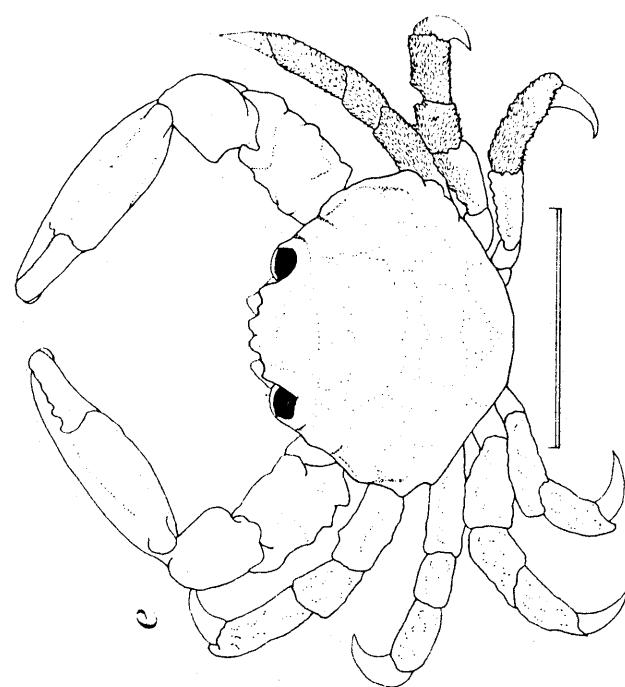
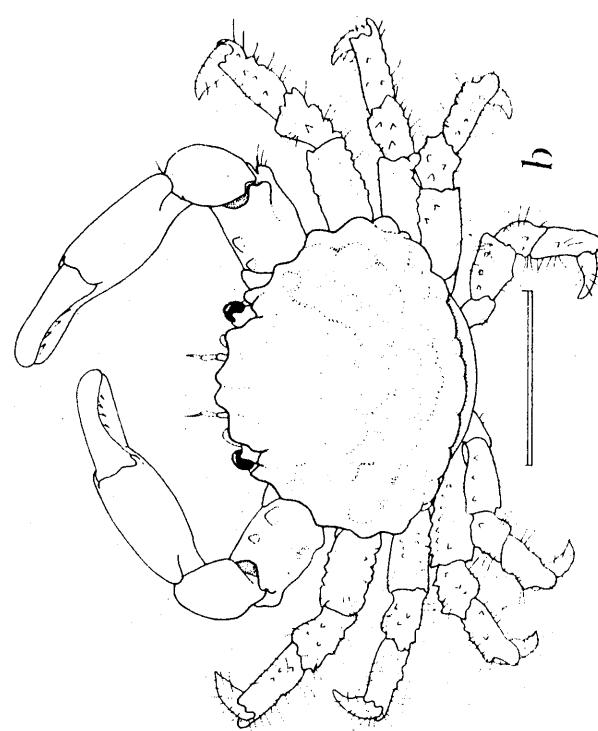
- b. dorsal view
- c. dorsal view  
(after drawing at SI-NMNH)

*Mithrax forceps*

- male:
- c. dorsal view
- d. tip of right first pleopod (gonopod),  
sternal view  
(after Williams, 1984)

*Mithrax ruber*

- e. dorsal view (male)  
(after Rathbun, 1925)



*Pitho aculeata*

- a. dorsal view (male)
- (after Rathbun, 1925)

*Pitho laevigata*

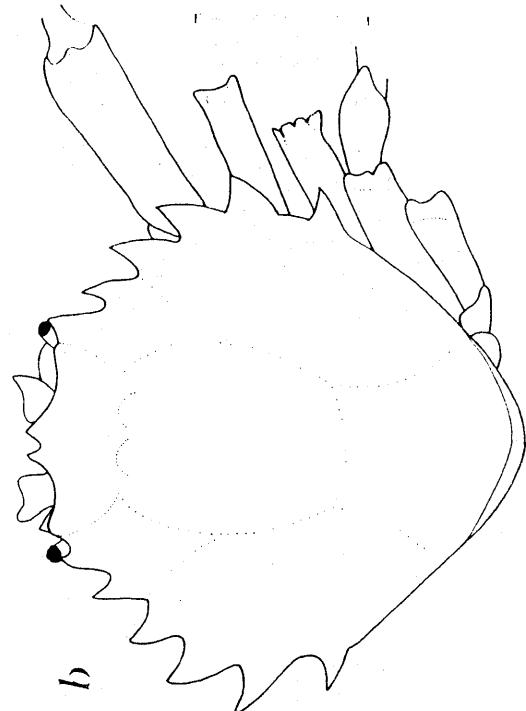
- b. dorsal view (male)
- (after Rathbun, 1925)

*Pitho anisodon*

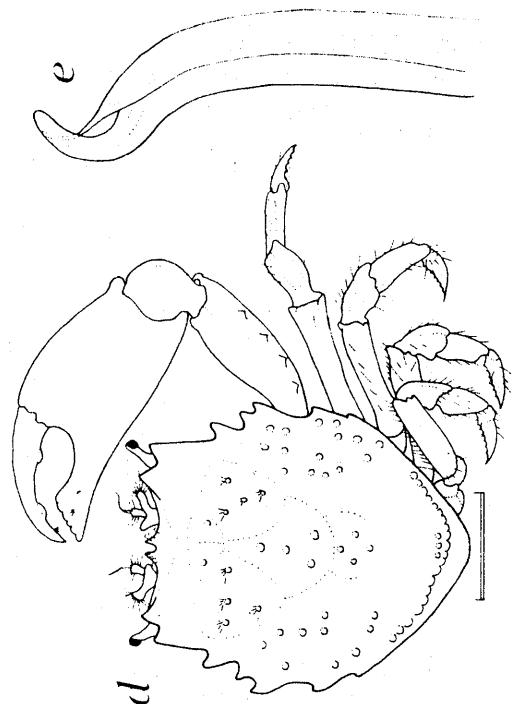
- c. dorsal view (male)
- (after Rathbun, 1925)

*Pitho lheminieri*

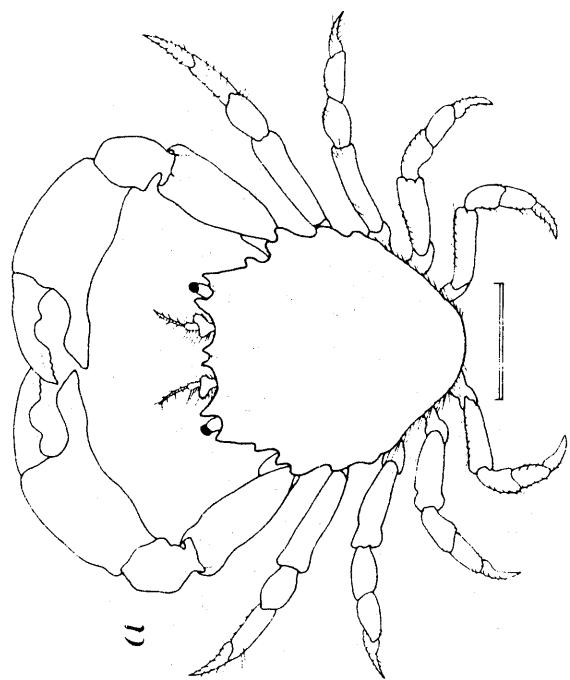
- male:
  - d. dorsal view
  - e. tip of right first pleopod (gonopod),  
abdominal view
- (after Williams, 1984)



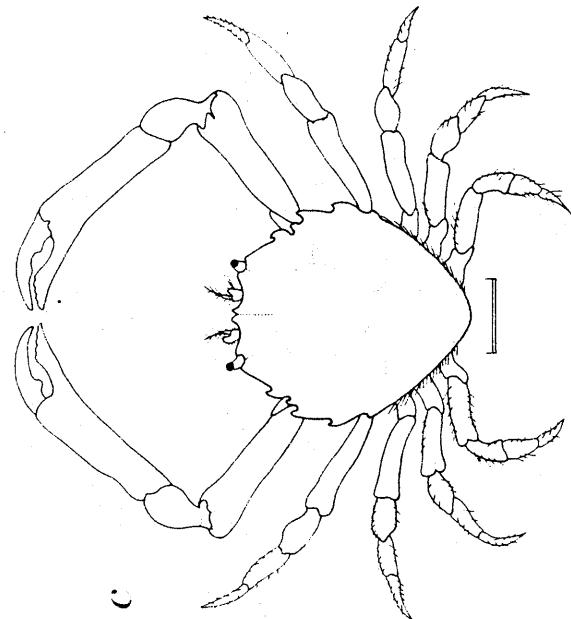
b



e



u



c

*Pitho mirabilis*

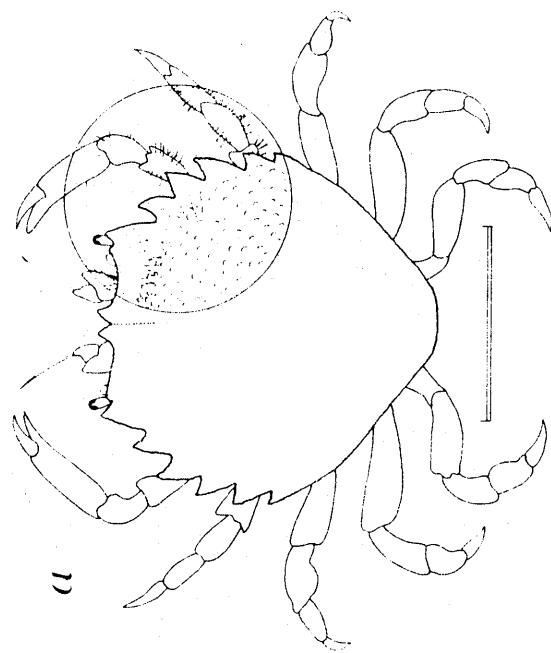
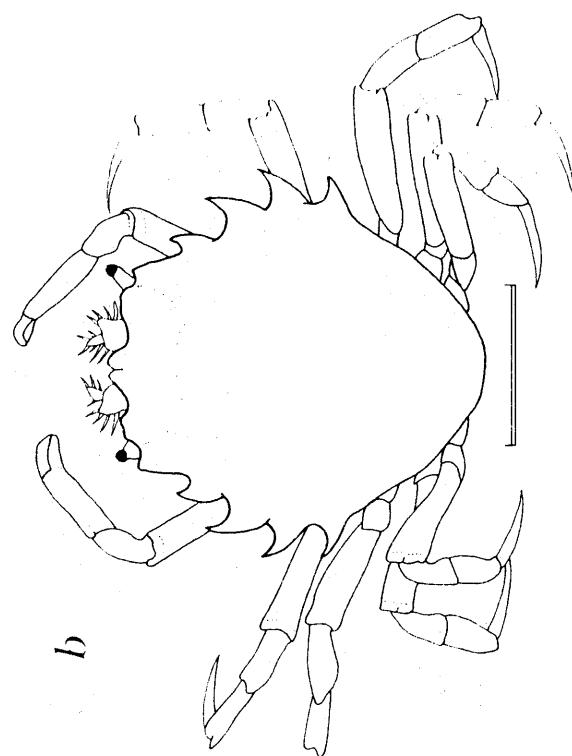
a. dorsal view (female)

(after Rathbun, 1925)

*Pitho quadridentata*

b. dorsal view (male)

(after Rathbun, 1925)



*Podochela curvirostris*

male:

- a. dorsal view
- b. carapace, lateral view
- c. sternum and abdomen

(after Rathbun, 1925)

*Podochela lamelligera*

male:

- d. dorsal view

(after drawing at SIANMNH)

*Podochela gracilipes*

e. dorsal view

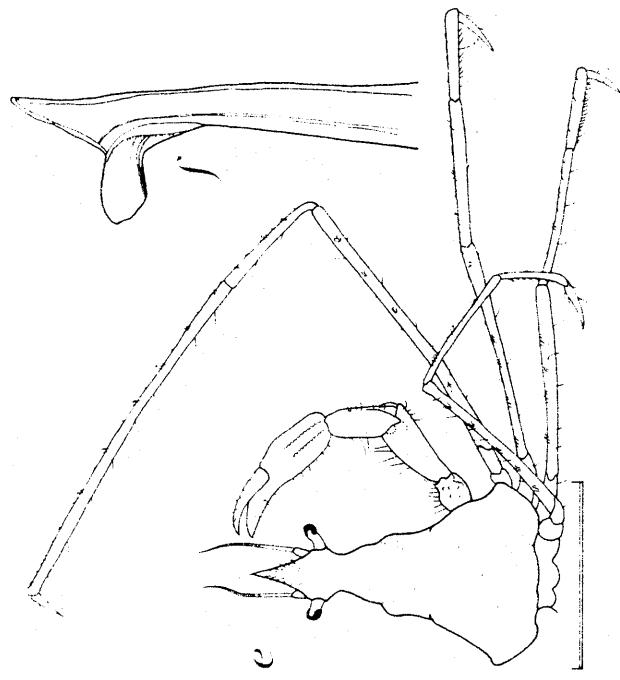
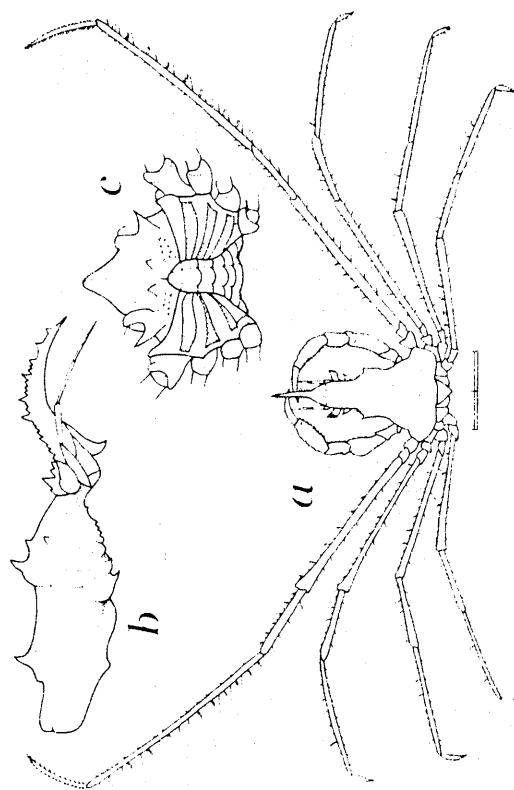
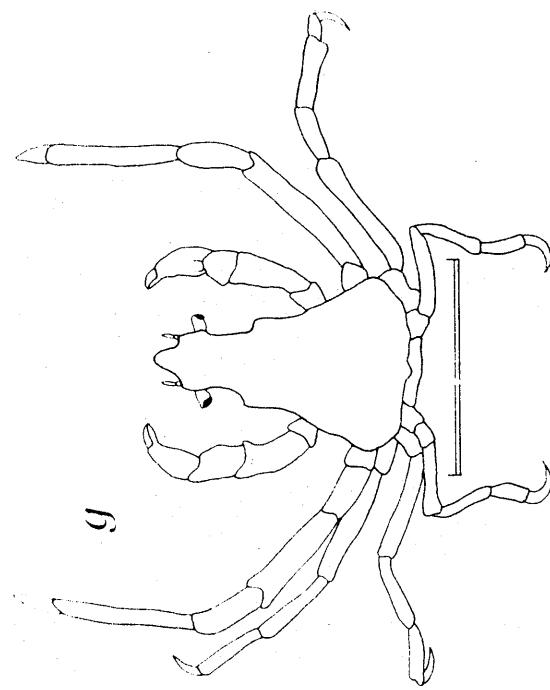
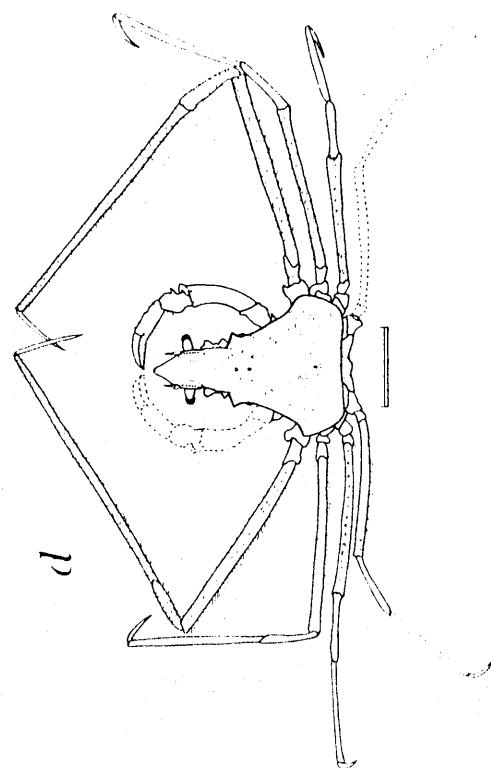
- f. tip of right first pleopod (gonopod),  
sternal view (male)

(after Williams, 1984)

*Podochela macrodera*

g. dorsal view (male)

(after Rathbun, 1925)



*Podochela riisei*

a. dorsal view

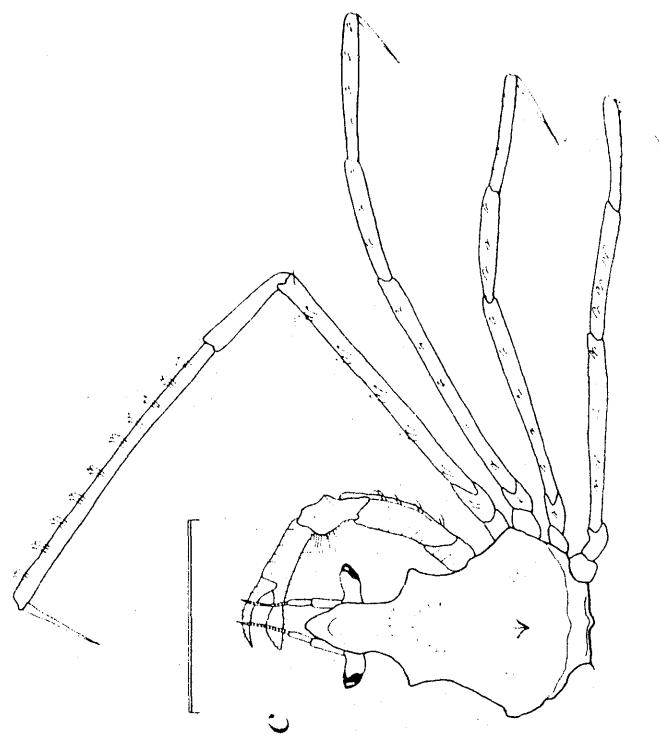
b. tip of right first pleopod (gonopod),  
sternal view

(after Williams, 1984)

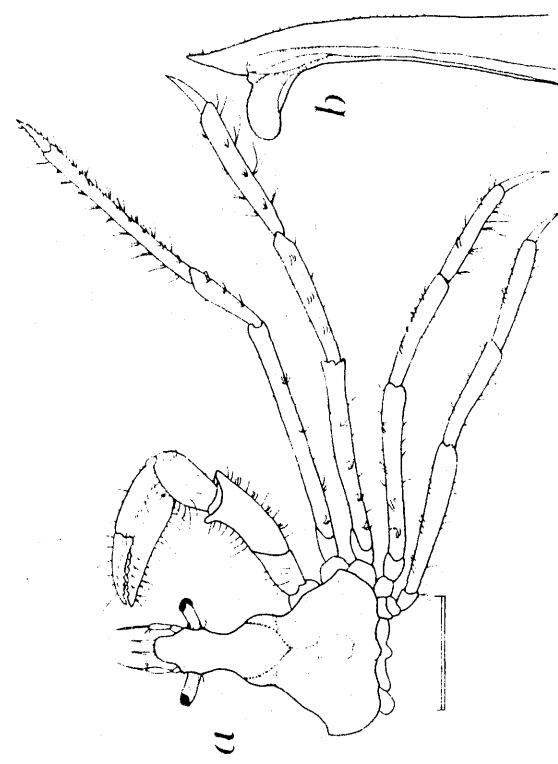
*Podochela sidneyi*

c. dorsal view

(after Williams, 1984)



c



d

*Pyromnia cuspidata*

male:

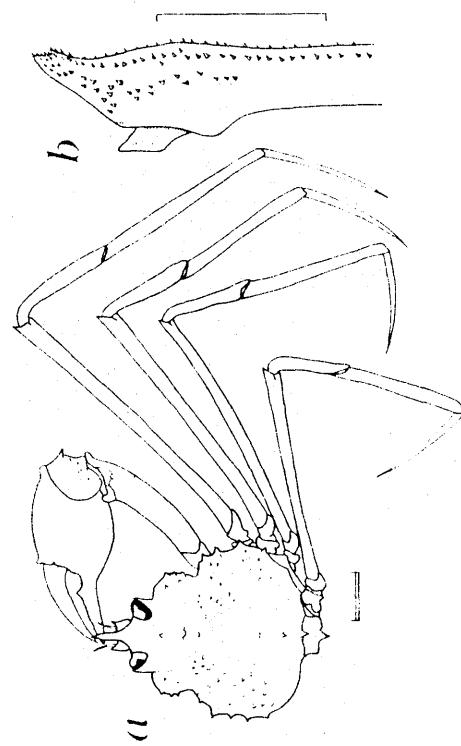
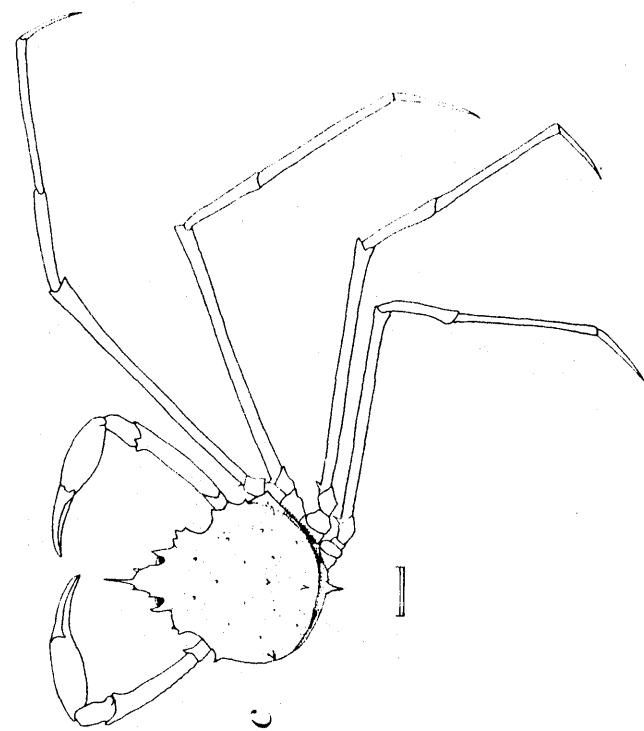
- a. dorsal view
- b. tip of right first pleopod (gonopod),  
sternal view

(after Williams, 1984)

*Pyromnia arachna*

c. dorsal view (holotype male)

(after Rathbun, 1925)



*Rochinia crassa*

- a. dorsal view (female)
  - b. anterior part, ventral view (female)
  - c. tip of right first pleopod (gonopod),  
sternal view (male).
- (after Williams, 1984)

*Rochinia hystrix*

- d. dorsal view (male)
- (after Rathbun, 1925)

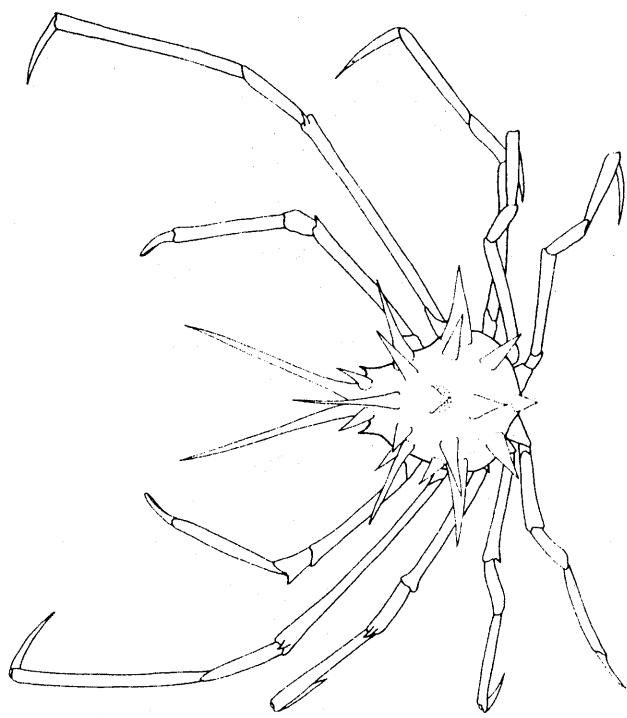
*Rochinia umbonata*

- male:
    - e. dorsal view
    - f. carapace, lateral view
    - g. tip of right first pleopod (gonopod),  
sternal view
  - h. dorsal view
  - i. tip of right first pleopod (gonopod),  
sternal view
- (after Williams, 1984)

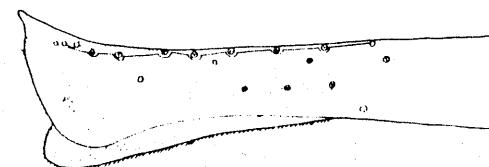
*Rochinia tanneri*

- male:
  - h. dorsal view
  - i. tip of right first pleopod (gonopod),  
sternal view

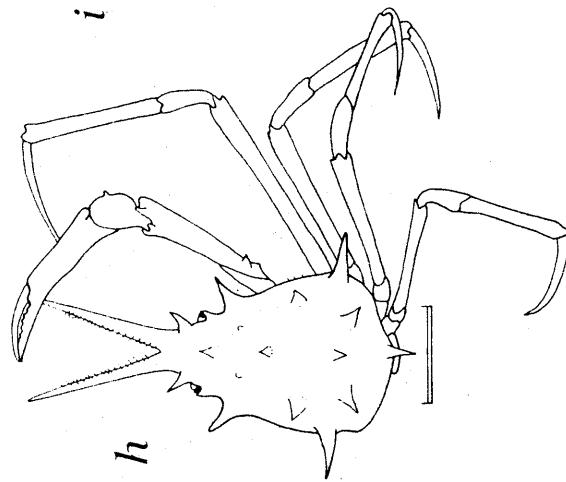
(after Williams, 1984)



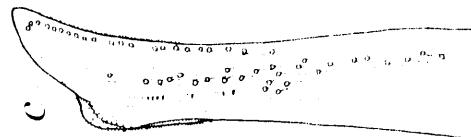
d



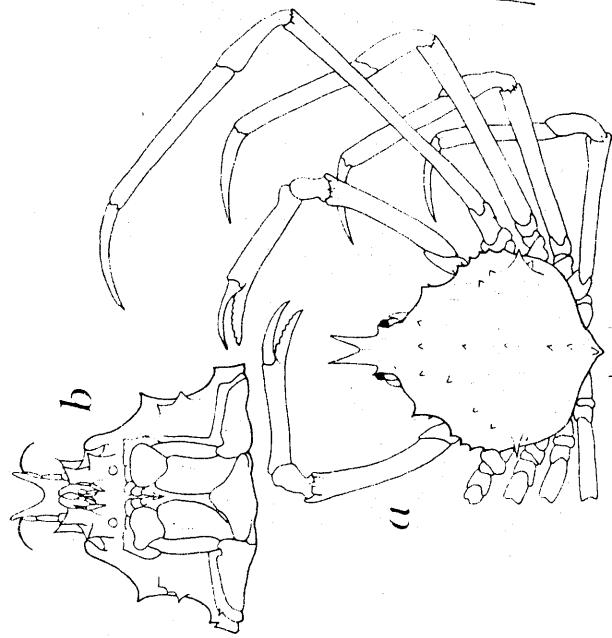
i



h



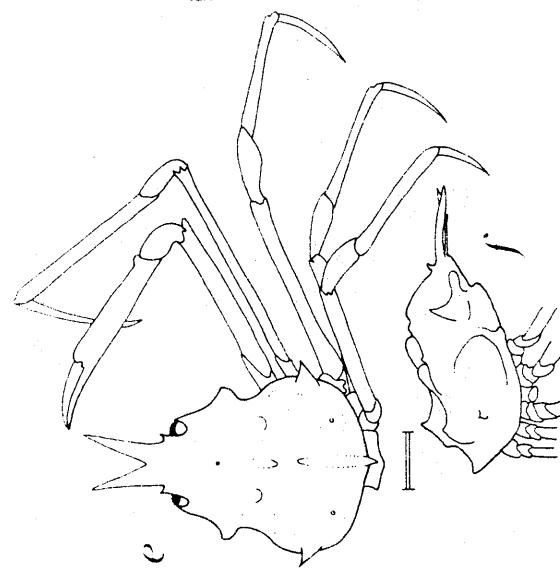
c



b



g



a

e

***Stenocionops furcata furcata***

a. carapace, dorsal view (male)

(after Rathbun, 1925)

***Stenocionops furcata coelata***

male:

b. dorsal view

c. tip of right first pleopod (gonopod),  
sternal view

(after Williams, 1984)

***Stenocionops spinimana***

holotype male:

d. dorsal view

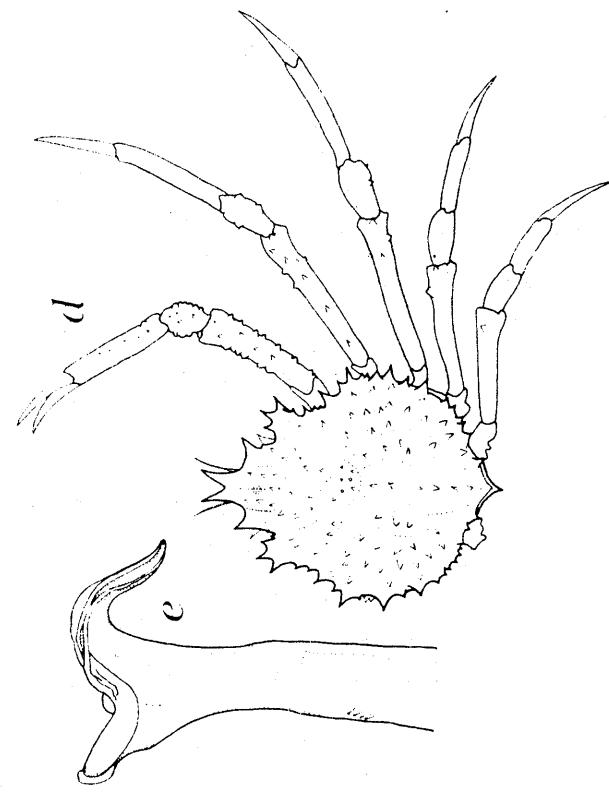
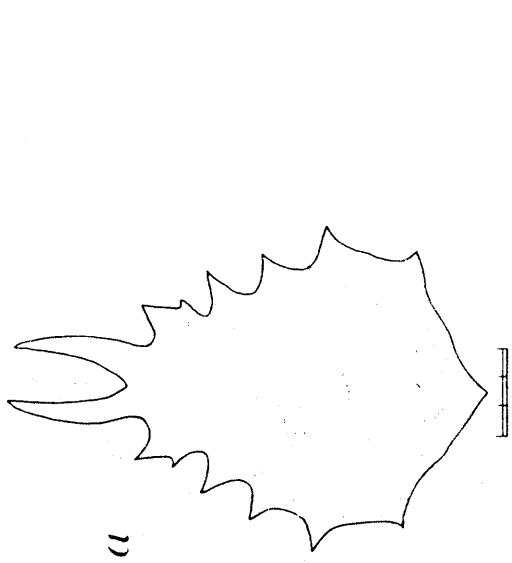
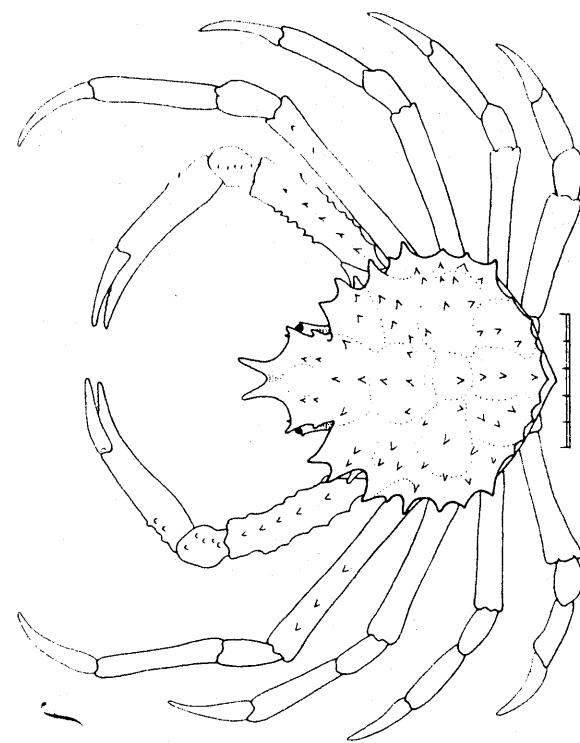
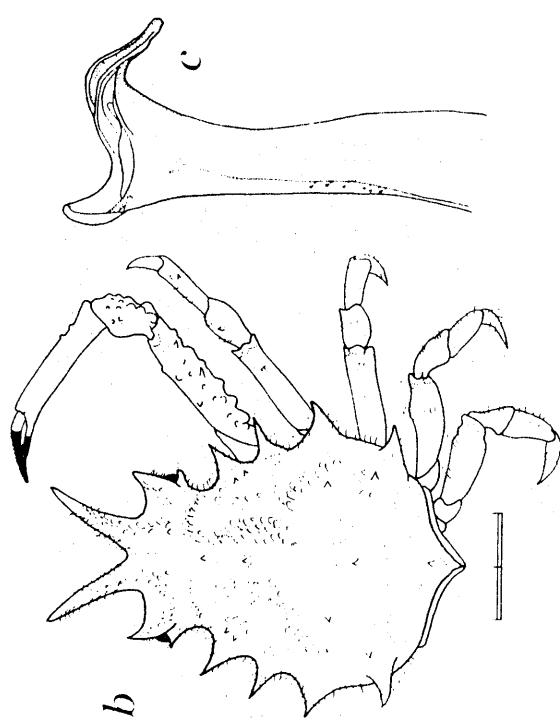
e. tip of right first pleopod (gonopod),  
sternal view

(after Williams, 1984)

***Stenocionops spinosissima***

f. dorsal view (male)

(after Rathbun, 1925)



*Acanthonyx petiverii*

a. dorsal view

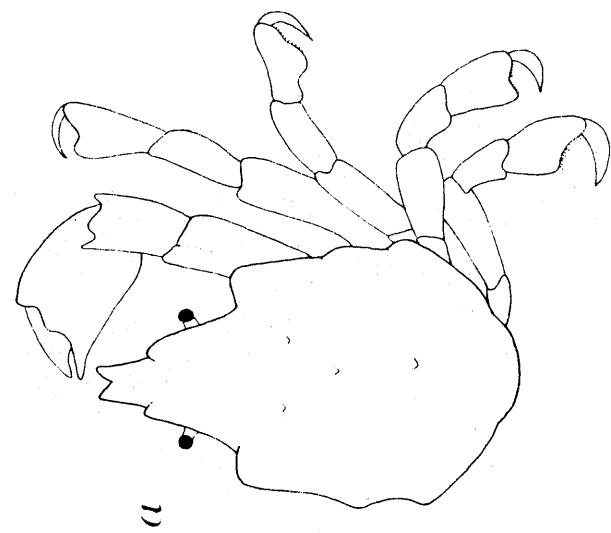
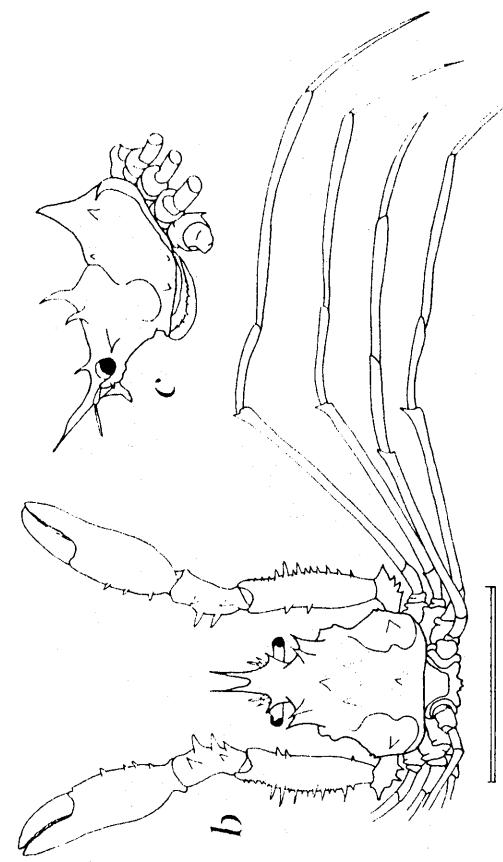
(after Felder, 1973)

*Achaeopsis thomsoni*

b. dorsal view

c. carapace, lateral view

(after Rathbun, 1925)



*Aepinus septemspinosis*

male:

- a. carapace, dorsal view
- b. left chela, external view  
(after Williams, 1984)

*Anasimus latus*

male:

- c. dorsal view (male)  
(after Williams, 1984)

*Anomalothir furcillatus*

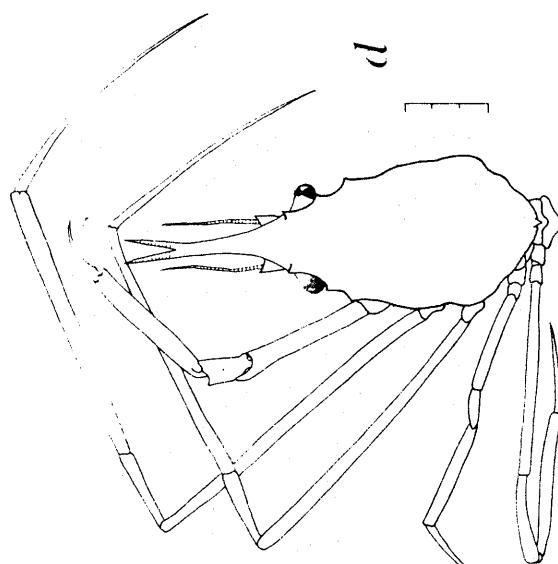
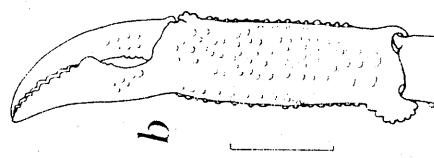
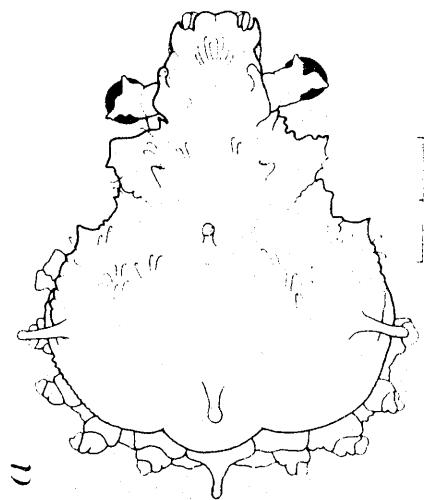
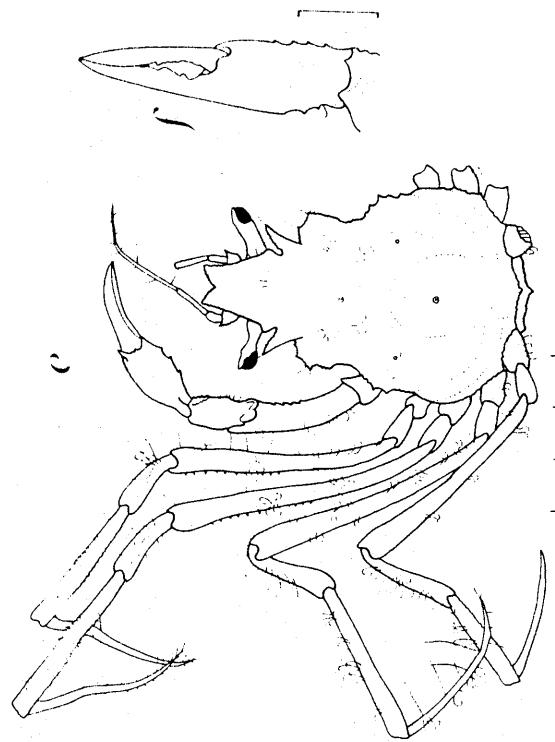
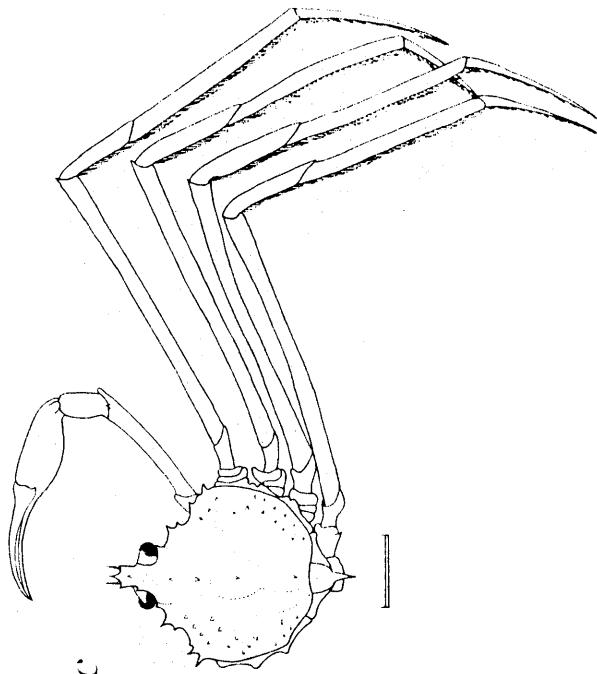
d. dorsal view (female)

- (after Williams, 1984)

*Arachnopsis filipes*

male:

- e. dorsal view  
f. left chela, external view  
(after Williams, 1984)



*Batrachonotus fragosus*

a. dorsal view

(after Williams, 1984)

*Chorinus heros*

b. dorsal view (male)

(after Rathbun, 1925)

*Coelocerus spinosus*

c. dorsal view (female)

d. tip of right first pleopod (gonopod),  
lateral view (male)

(after Williams, 1984)

*Hemus cristulipes*

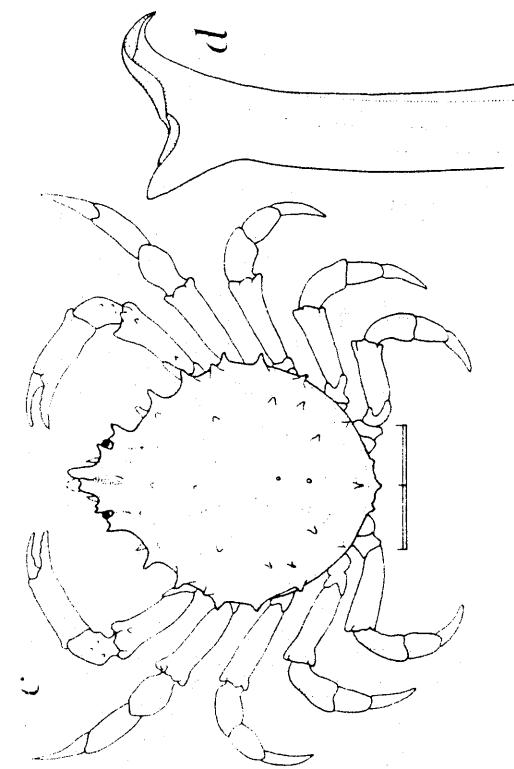
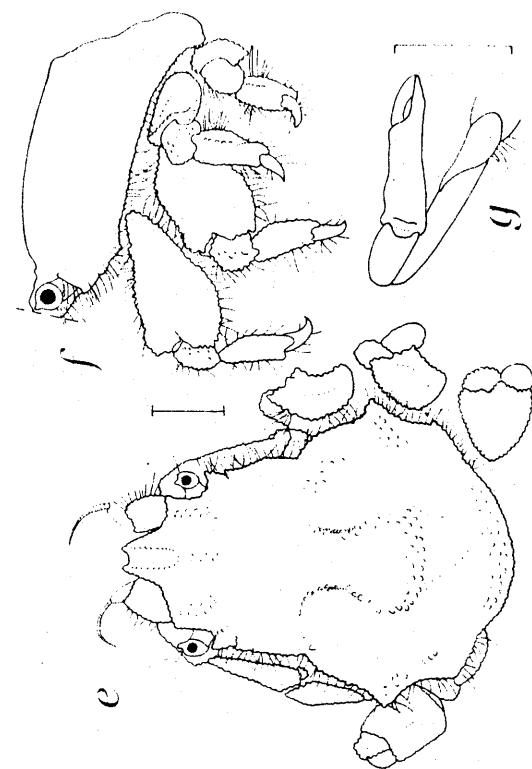
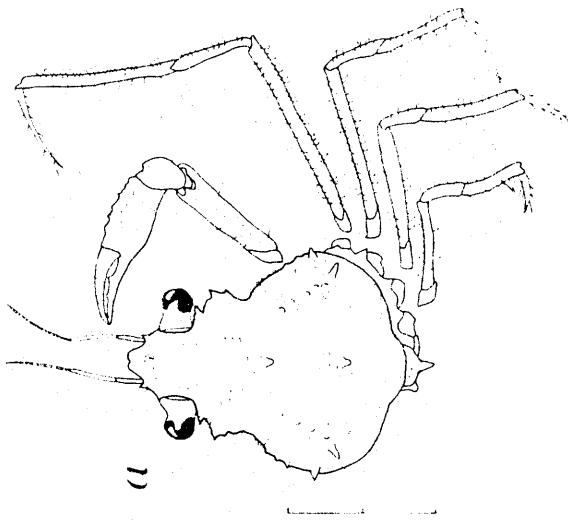
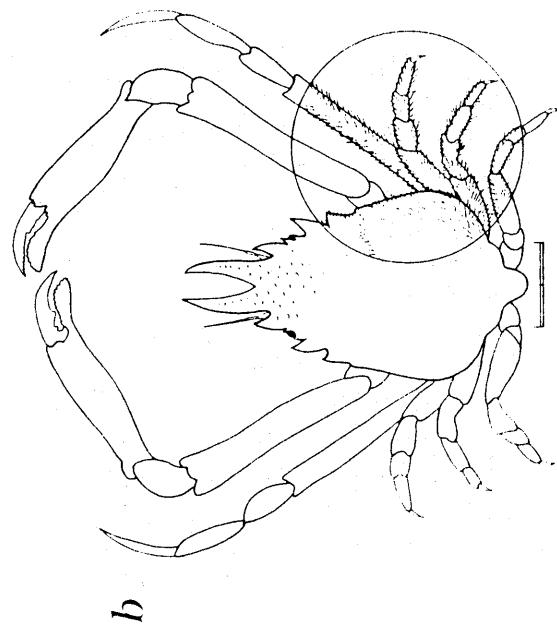
female:

e. dorsal view

f. lateral view

g. right cheliped

(after Williams, 1984)



*Inachoides forceps*

- a. dorsal view (male)  
(after Williams, 1984)

*Leptopisa setirostris*

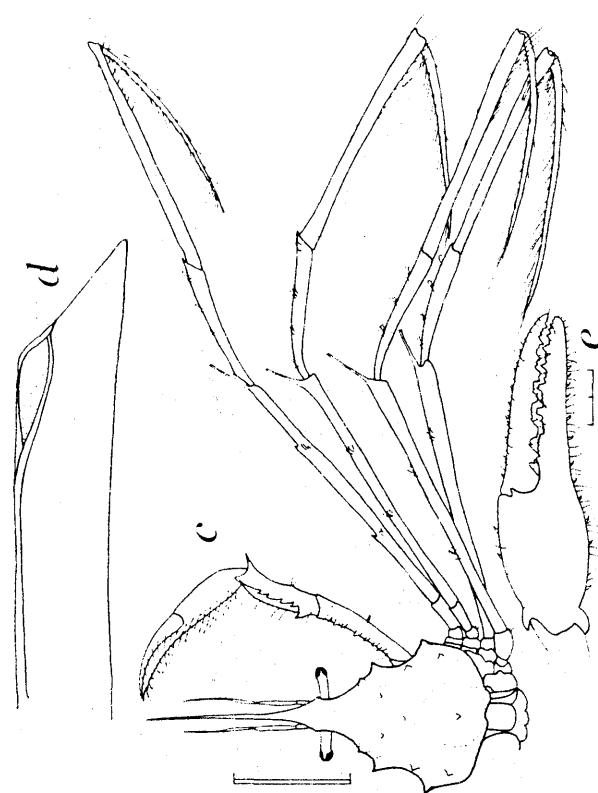
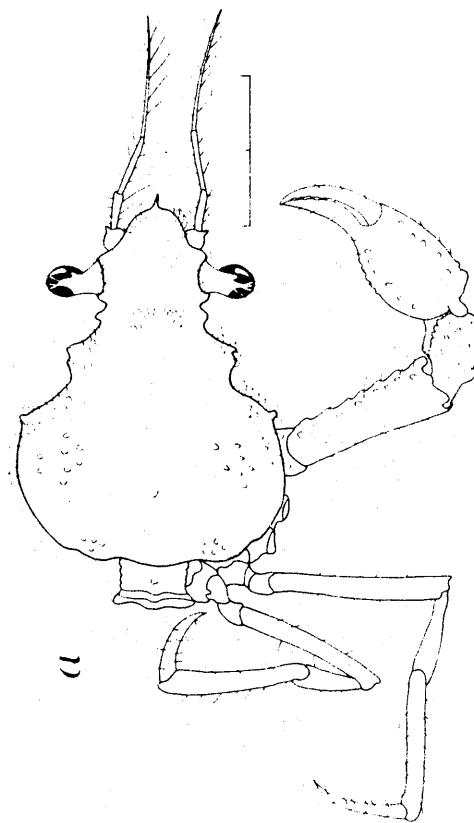
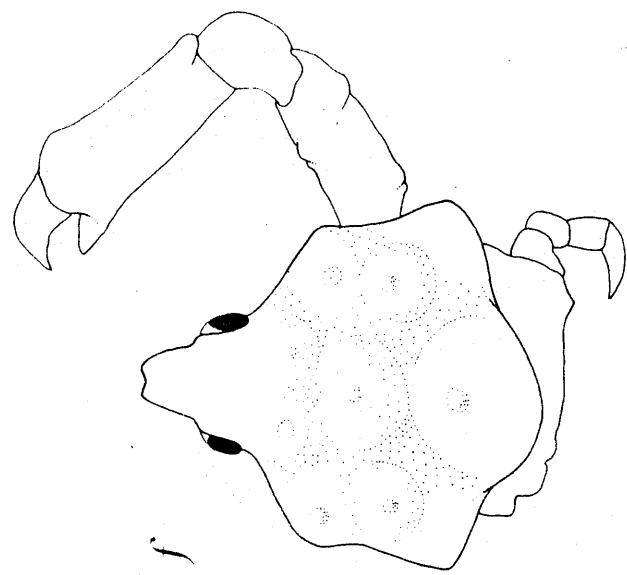
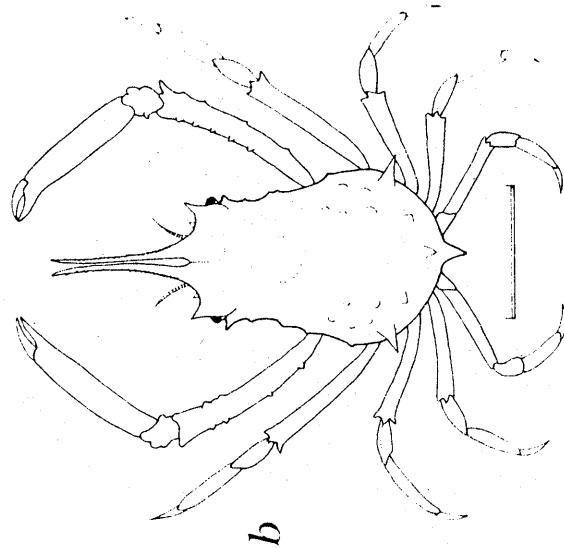
- b. dorsal view (male)  
(after Rathbun, 1925)

*Metoporhaphis calcarata*

- c. dorsal view  
d. tip of right first pleopod (gonopod),  
sternal view (male)  
e. right chela, external view (male)  
(after Williams, 1984)

*Mocosoa crebripunctata*

- f. dorsal view (male)  
(after Rathbun, 1925)



*Nibilia antilocapra*

male:

- a. dorsal view
- b. tip of right first pleopod (gonopod),  
abdominal view

(after Williams, 1984)

*Oplopisa spinipes*

c. dorsal view (female)

(after Rathbun, 1925)

*Pelia mutica*

d. dorsal view

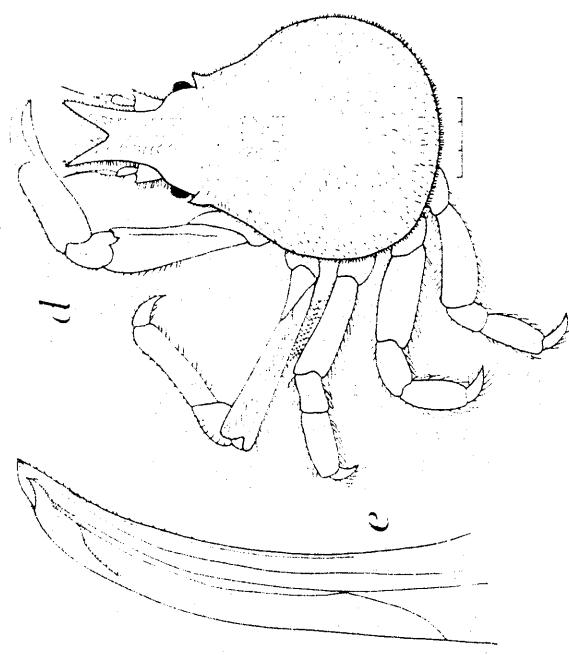
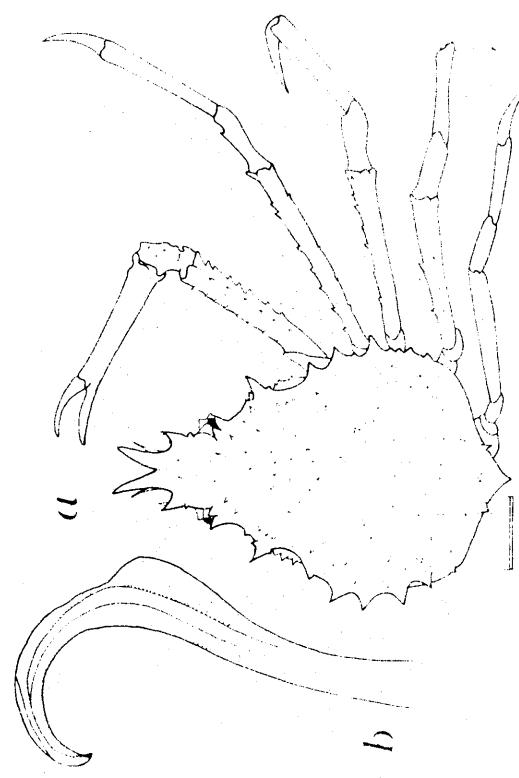
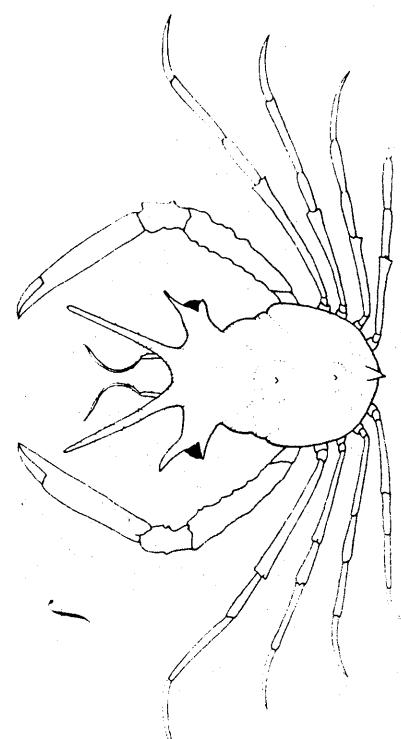
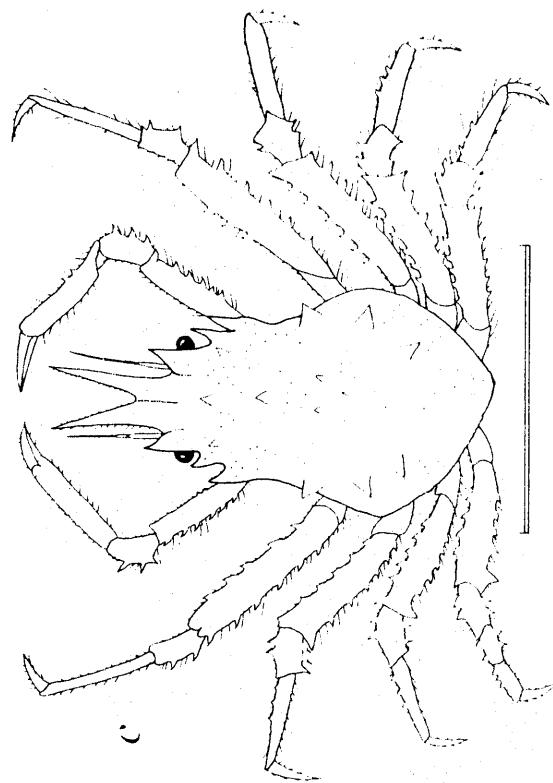
- e. tip of right first pleopod (gonopod),  
sternal view (male)

(after Williams, 1984)

*Picroceroides tubularis*

f. dorsal view (male)

(after Rathbun, 1925)



*Sphenocarcinus corrosus*

male:

- a. dorsal view
- b. tip of right first pleopod (gonopod),  
sternal view  
(after Williams, 1984)

*Stenorhynchus seticornis*

male:

- c. dorsal view
- d. tip of right first pleopod (gonopod),  
sternal view  
(after Williams, 1984)

*Stilbomastix margaritifera*

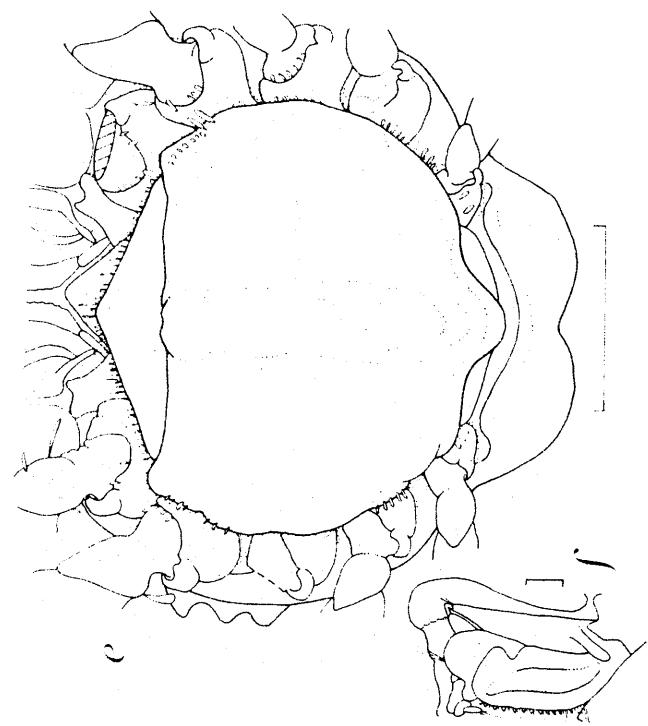
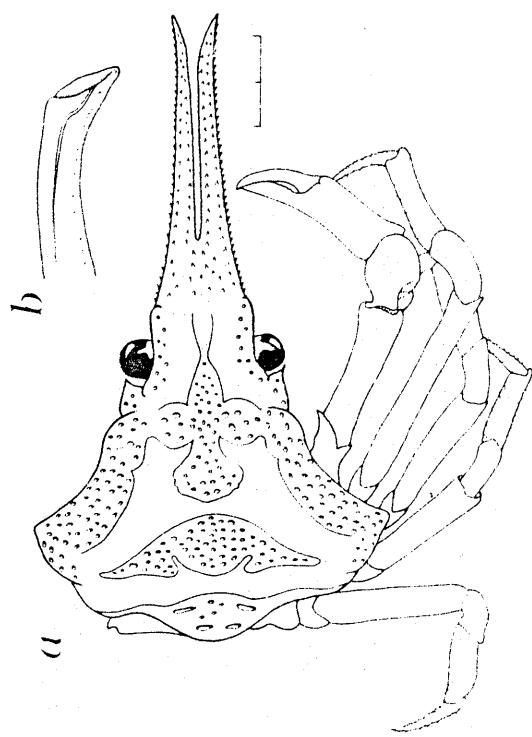
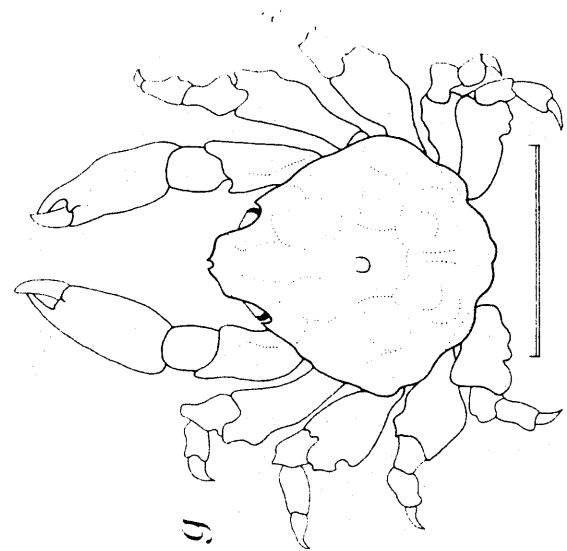
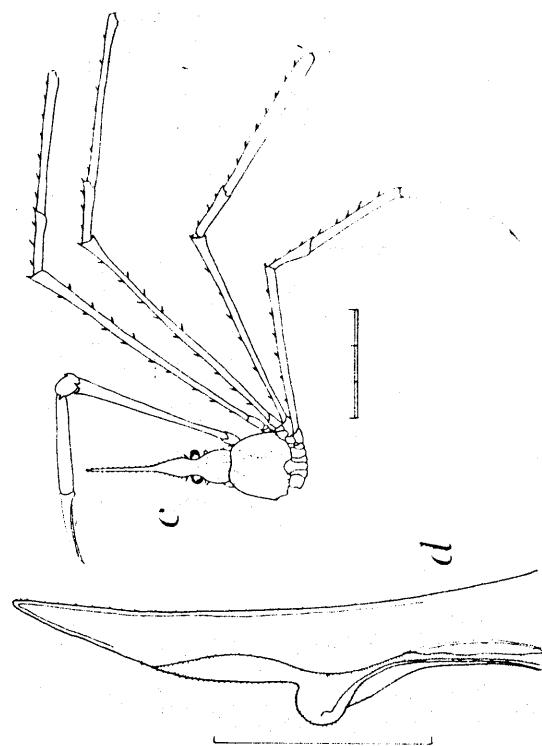
e. abdomen (mature female)

- f. left outer (third) maxilliped  
(after Williams et al., 1977)

*Thoë puella*

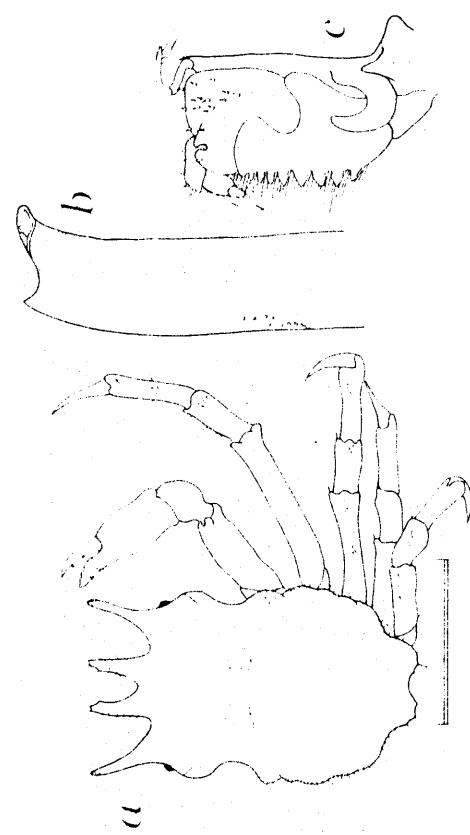
g. dorsal view

- (after Rathbun, 1933)



*Tyche emarginata*

- a. dorsal view (male)
- d. tip of right first pleopod (gonopod),  
lateral view (male)
- c. left outer (third) maxilliped  
(after Williams, 1984)



## Family Parthenopidae MacLeay, 1838

Key to genera and species

[Adapted from Gore and Scotto, 1979]

1. Carapace not laterally expanded over walking legs..... 2
- Carapace expanded to form vault concealing walking legs..... 6
2. (1) Carapace tuberculate or eroded..... 3
- Carapace smooth, except for few strong spines..... 4
3. (2) Carapace equilaterally subtriangular; basal antennal segment long, almost or completely reaching orbital hiatus ..... *Tutankhamen cristatipes*
- Carapace ovate-pentagonal or broadly triangular; basal antennal segment short, not reaching orbital hiatus ..... *Parthenope*
4. (2) Efferent branchial channels opening at middle of endostome as in Oxystomata..... *Mesorhoea sexspinosa*
- Efferent branchial channels opening at sides of endostome as in Oxrhyncha ..... 5
5. (4) Carapace depressed, with strong lateral spine..... *Leiolambrus nitidus*
- Carapace high, without strong lateral spine..... *Solenolambrus*
6. (1) Carapace greatly expanded both laterally and posteriorly; pterygostomian region smooth, not ridged ..... *Cryptopodia concava*
- Carapace expanded laterally, not posteriorly; 1.1-1.5 times as wide as long; pterygostomian and subhepatic regions traversed by granulate or crenulate ridge ..... *Heterocrypta granulata*

### Genus *Parthenope* Weber, 1795

#### Key to species

[Adapted from Gore and Scotto, 1979]

1. Carapace ovate-pentagonal, surface little carinate in adult; chelipeds at least twice as long as carapace ..... *P. agona*
- Carapace broadly triangular, surface carinate or tuberculate, sides more or less rounded; chelipeds at least twice as long as carapace ..... 2
2. (1) Carapace and chelipeds very flat; spine at end of main dorsal branchial ridge small.. .... 3
- Carapace very convex; spine at end of main dorsal branchial ridge large; chelipeds not flat ..... 4
3. (2) Triangular spines on outer margins of chelipeds rounded posteriorly; carapace with posterolateral spine directed laterally or nearly so; carapace moderately tuberculate; angle formed by posterolateral spine, gastric tubercle and outer orbital margin always distinctly less than 90° ..... *P. serrata*
- Triangular spines on outer margins of chelipeds acute, margins straight; carapace with posterolateral spine directed obliquely posteriad; carapace heavily tuberculate; angle formed by posterolateral spine, gastric tubercle and outer orbital margin always 90° or nearly so ..... *P. granulata*
4. (2) Dactylus of walking leg 4 about 1.3 times longer than propodus; carapace much broader than long; palm with 8-10 teeth on inner, 10-12 teeth on outer margin ..... *P. pourtalesii*
- Dactylus of walking leg 4 about 1.4 times longer than propodus; carapace little, if any, broader than long; palm with 6-8 teeth on inner, 3-5 teeth on outer margin ..... *P. fraterculus*

### Genus *Solenolambrus* Stimpson, 1871

#### Key to species

[Adapted from Gore and Scotto, 1979]

1. No spines or teeth on posterior or posterolateral margin; dorsal protuberance round ..... *S. tenellus*
- Some teeth or spines on posterior or posterolateral margin; dorsal protuberance angular ..... 2
2. (1) Not more than four teeth on posterior and posterolateral margins..... *S. typicus*
- Six teeth or spines on posterior and posterolateral margins; two median spines; spine near middle of branchial ridge ..... *S. decemspinosus*

*Parthenope agona*

male:

- a. dorsal view
- b. right first pleopod (gonopod), mesial view
- c. right second pleopod (gonopod), mesial view  
(after Williams, 1984)

*Parthenope serrata*

male:

- d. carapace, dorsal view
- e. distal portion of first pleopod (gonopod), mesial view
- f. second pleopod (gonopod), mesiolateral view
- g. right cheliped, dorsal view  
(after Gore and Scotto, 1979)

*Parthenope granulata*

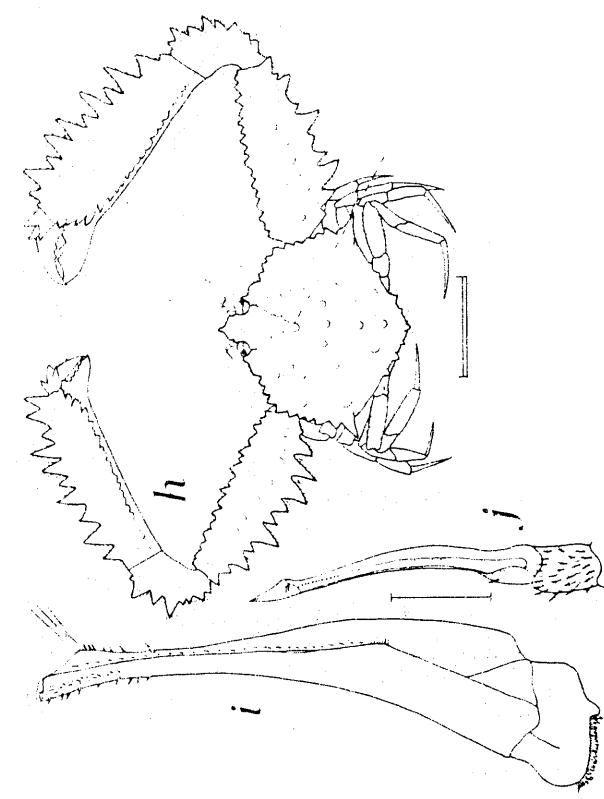
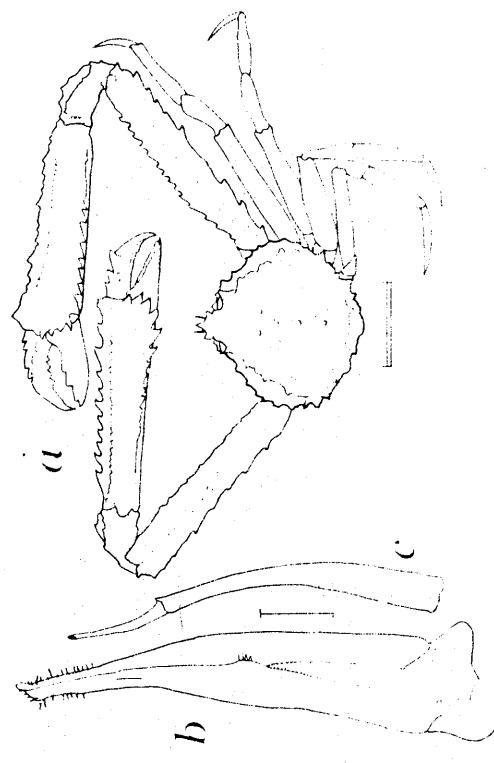
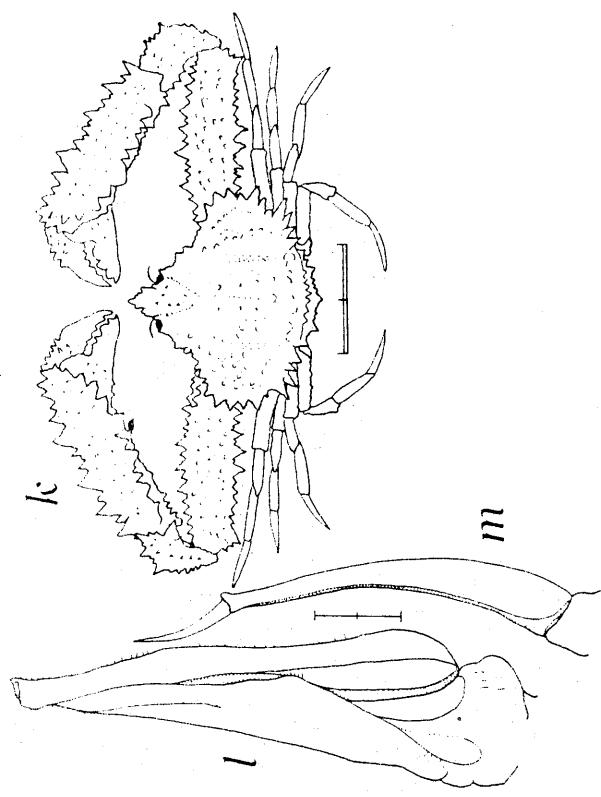
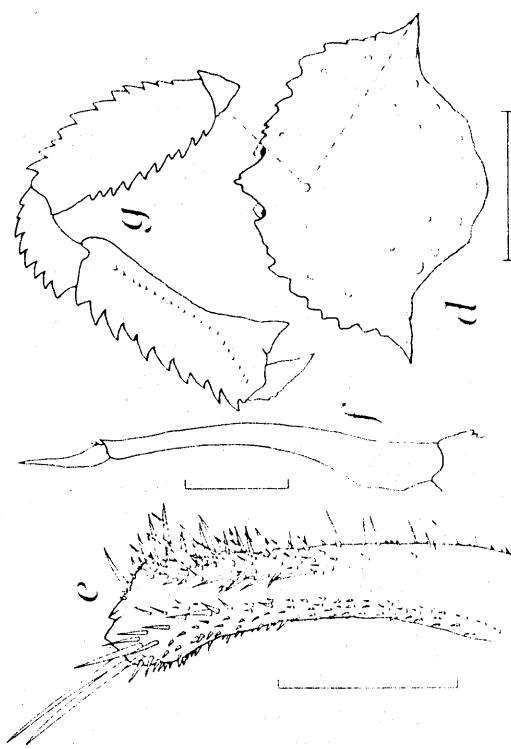
male:

- h. dorsal view
- i. right first pleopod (gonopod), mesial view
- j. right second pleopod (gonopod), mesial view  
(after Williams, 1984)

*Parthenope pourtalesii*

k. dorsal view (female)

- l. right first pleopod (gonopod), mesial view (male)
- m. right second pleopod (gonopod), mesial view (male)  
(after Williams, 1984)



*Parthenope fraterculus*

male:

- a. dorsal view
- b. right first pleopod (gonopod), mesial view
- c. right second pleopod (gonopod), mesial view  
(after Williams, 1984)

*Solenolambrus tenellus*

male:

- d. dorsal view (female)
- e. first pleopod (gonopod), mesiosternal view (male)
- f. second pleopod (gonopod), mesiosternal view (male)  
(after Williams, 1984)

*Solenolambrus typicus*

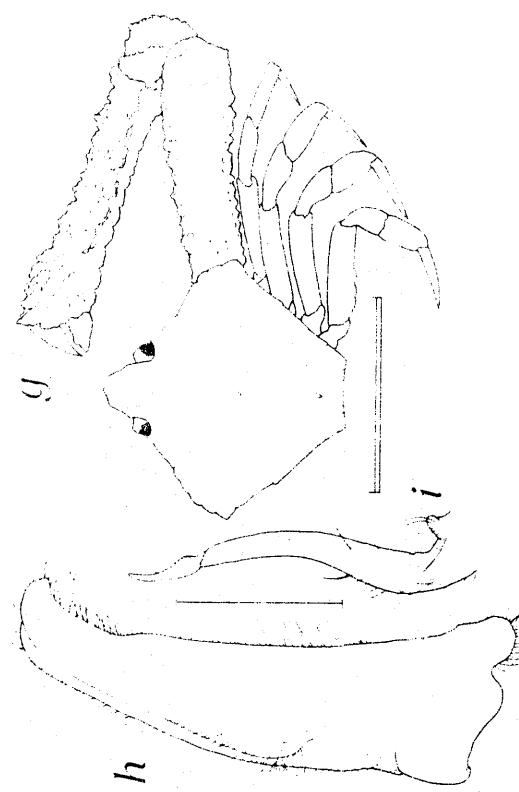
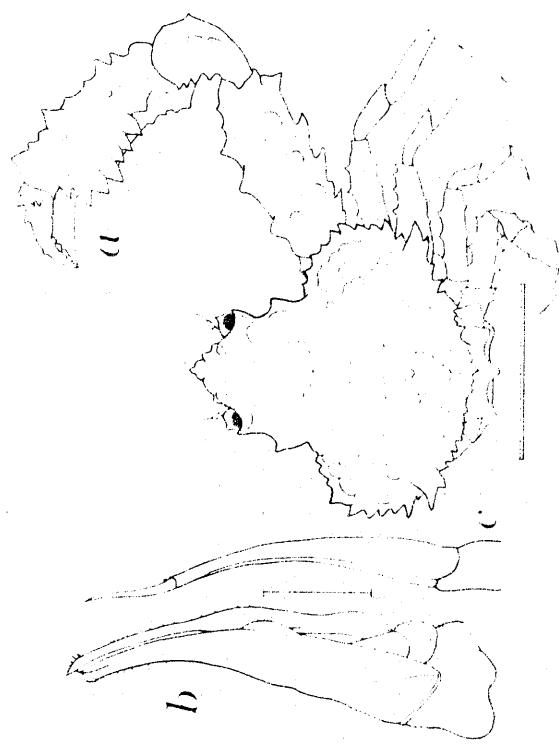
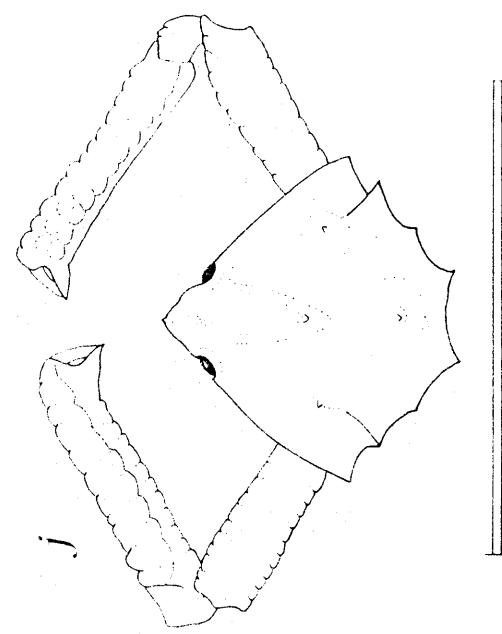
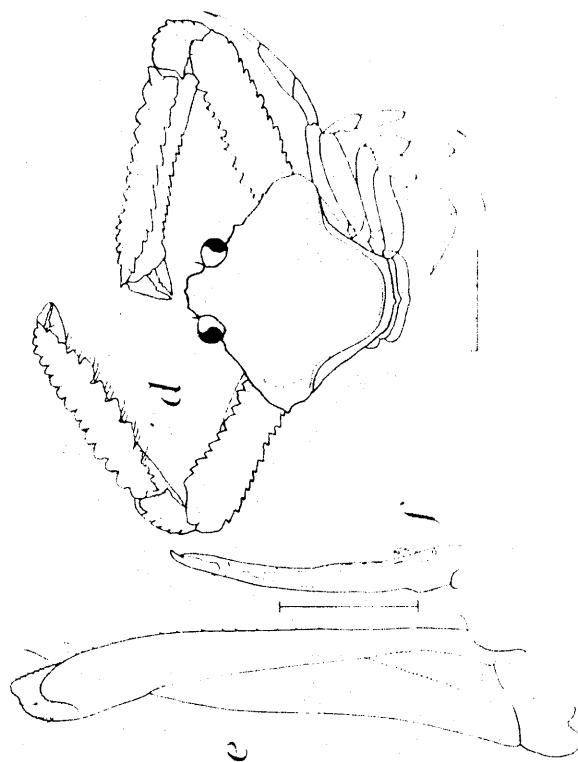
male:

- g. dorsal view
- h. first pleopod (gonopod), sternal view
- i. second pleopod (gonopod), sternal view  
(after Williams, 1984)

*Solenolambrus decemspinosis*

male:

- j. dorsal view (male)  
(after Rathbun, 1925)



*Cryptopodia concava*

male:

- a. dorsal view
- b. second pleopod (gonopod), sternal view
- c. first pleopod (gonopod), sternal view
- (after Williams, 1984)
- d. dorsal view
- e. first pleopod (gonopod), mesosternal view
- f. second pleopod (gonopod), mesosternal view

*Heterocrypta granulata*

male:

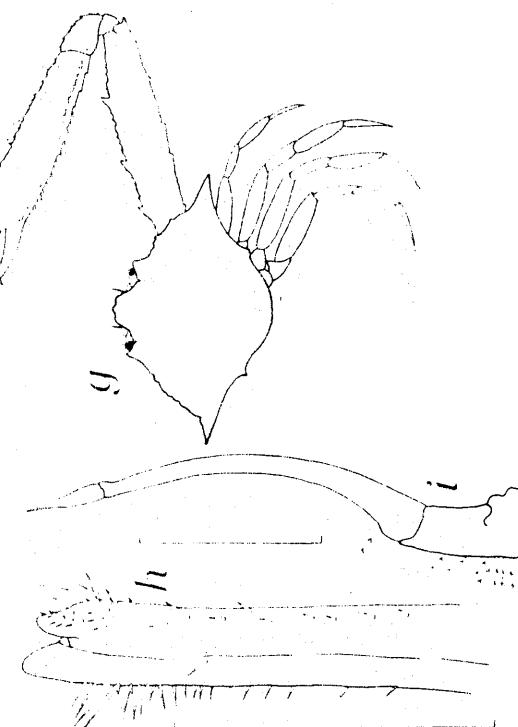
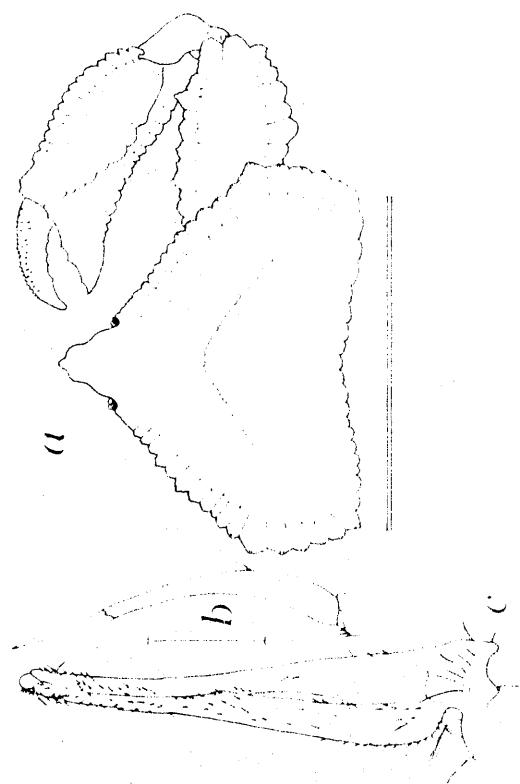
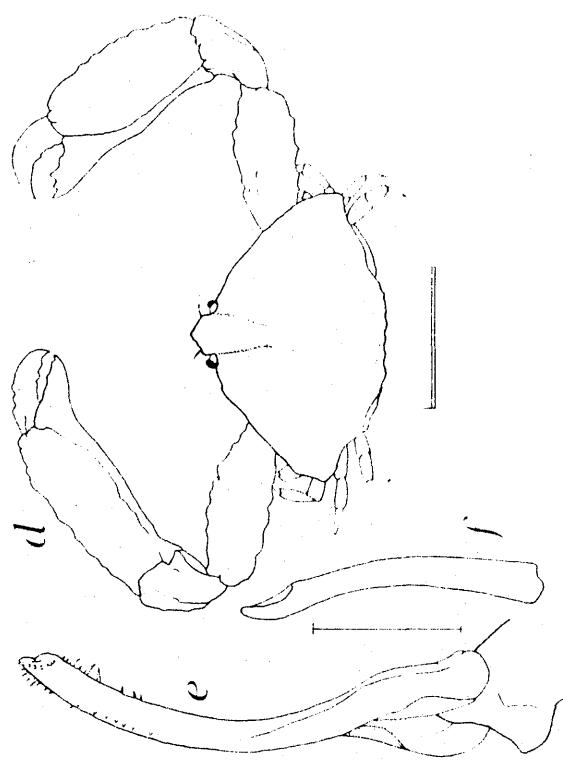
- a. dorsal view
- b. second pleopod (gonopod), sternal view
- c. first pleopod (gonopod), sternal view
- (after Williams, 1984)
- d. dorsal view
- e. first pleopod (gonopod), mesosternal view
- f. second pleopod (gonopod), mesosternal view

*Leiolambrus nitidus*

♂ dorsal view

- g. dorsal view
- h. distal portion of first pleopod (gonopod), mesial view (male)
- i. second pleopod (gonopod) mesioventral view (male)
- (g, after Felder, 1973; h, i, after Gore and Scotto, 1979)
- j. dorsal view (female)
- k. anterior part, ventral view
- l. second pleopod (gonopod), sternal view (male)
- m. first pleopod (gonopod), sternal view (male)
- (j, m, after Williams, 1984; k, after Gore and Scotto, 1979)

*Mesorhoea sexspinosa*

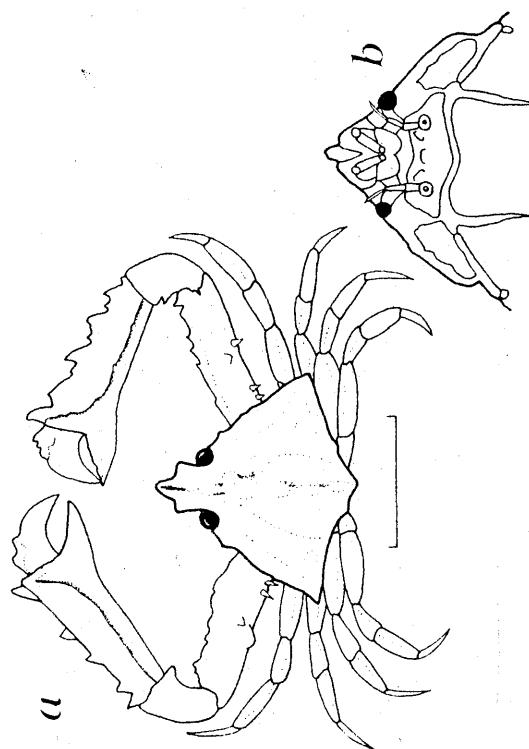


*Tutankhamen cristatipes*

male:

- a. dorsal view
- b. anterior part, ventral view

(after Rathbun, 1925)





**Family Atelecyclidae****Genus *Trichopeltarion* A. Milne Edwards, 1880**

Carapace broader than long; surface thickly velvety; median frontal spine shorter than lateral ones [from Rathbun, 1930] ..... *T. nobile*

**Family Cancridae****Genus *Cancer* Linnaeus, 1758**

Key to species  
[Adapted from Williams, 1984]

Anterolateral teeth of carapace with denticulate margins; upper margin of palm denticulate; outer orbital tooth with pointed tip, not coalesced with adjacent anterolateral tooth in small juveniles ..... *C. borealis*

Anterolateral teeth of carapace with margins granulate; chelipeds granulate, not denticulate; outer orbital tooth with rounded tip, coalesced with adjacent anterolateral tooth in small juveniles ..... *C. irrortatus*

**Family Geryonidae****Genus *Geryon* Krøyer, 1837**

Carapace broader than long; median pair of frontal teeth separated by wide sinus, teeth scarcely overreaching obtuse lateral frontal teeth; anterolateral teeth 5, second and fourth reduced, distance between first and third usually smaller than distance between third and fifth; cheliped with blunt lobe on upper margin of merus, carpus lacking outer spine, propodus lacking distal dorsal spine; meri of walking legs lacking distal dorsal spine [from Manning and Holthuis, 1984] ..... *G. fenneri*

*Trichopeltarion nobile*

a. dorsal view (male)

(after Rathbun, 1925)

*Cancer borealis*

b. dorsal view (male)

(after Williams, 1984)

*Cancer irroratus*

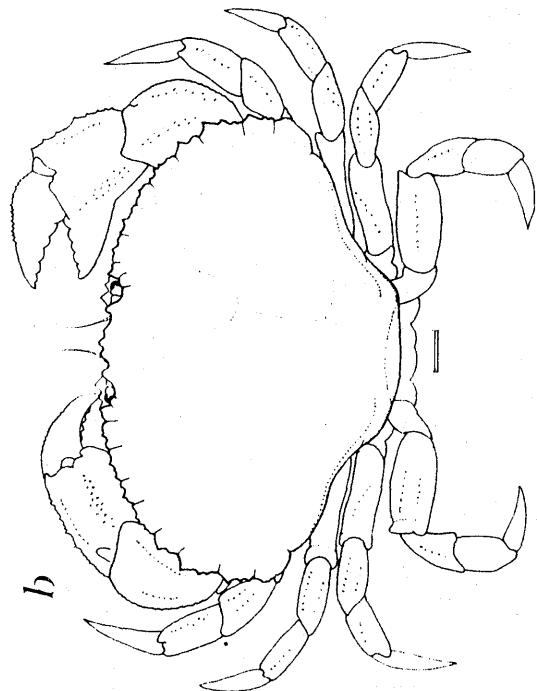
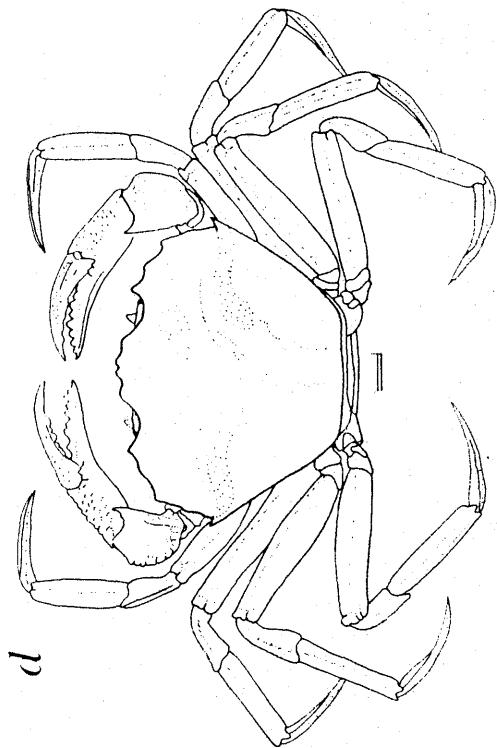
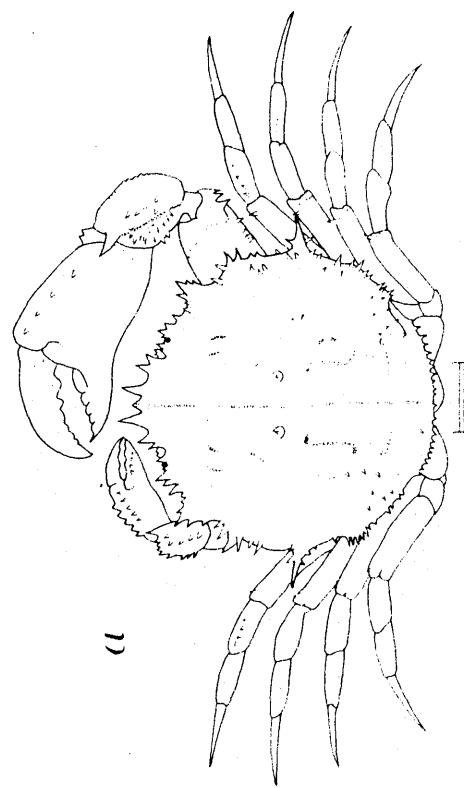
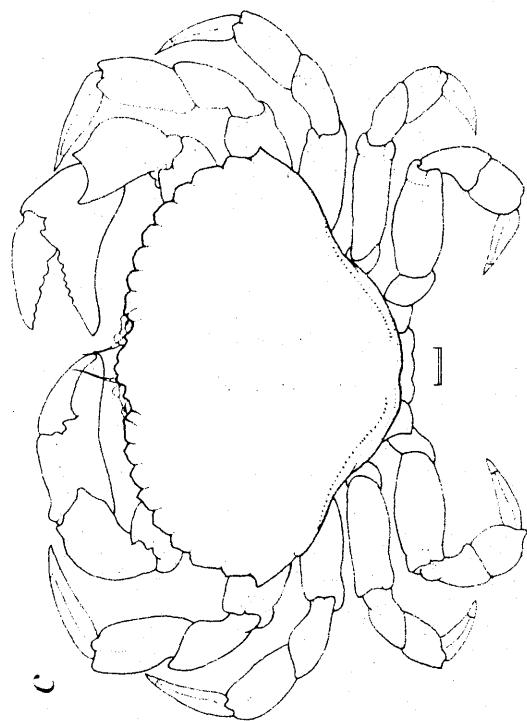
c. dorsal view (male)

(after Williams, 1984)

*Geryon fenneri*

d. dorsal view (male)

(after Manning and Holthuis, 1984)

*b**d**e**c*

## Family Portunidae

Key to genera and species

[Based on Rathbun, 1930, and Williams, 1984]

1. Carapace with 3 to 5 teeth on anterolateral margin..... 2
- Carapace with 9 anterolateral teeth..... 4
2. (1) Anterolateral teeth 3..... *Benthochason schmitti*
- Anterolateral teeth 5..... 3
3. (2) Anterolateral teeth similar, dentiform; dactyli of swimming paddles broadly oval; male abdomen oblong ..... *Ovalipes*  
    Long spine at lateral angle of carapace instead of tooth; dactyli of swimming paddles broadly lanceolate, pointed; male abdomen triangular ..... *Bathynectes longispina*
4. (1) Movable part of antenna excluded from orbit by prolongation of basal segment; anterolateral teeth alternatively large and small ..... *Cronius*  
    Movable part of antenna not excluded from orbit..... 5
5. (4) Carpus of cheliped without mesiodistal spine; abdomen of male T shaped..... *Callinectes*  
    Carpus of cheliped with mesiodistal spine; abdomen of male triangular..... 6
6. (5) Front with 2 bifurcated teeth between inner orbitals; fissures on orbital margin broadly open; color light brown, thickly covered over dorsal surface with small white spots, reticulate pattern persisting in alcohol ..... *Arenaeus cribarius*  
    Front with 4 separate teeth between inner orbitals (latter sometimes bifurcate); fissures on orbital margin closed except for shallow notch; color varied but never as above ..... *Portunus*

### Genus *Callinectes* Stimpson, 1860

Key to species based on carapace  
 (excluding juveniles)  
 [Adapted from Williams, 1984]

1. Front with 2 prominent, broad-based, triangular teeth between inner orbitals; each with or without rudimentary submesial tooth on mesial slope ..... *C. sapidus*
- Front with 4 teeth between inner orbitals or 2 prominent teeth separated by space often bearing pair of rudimentary submesial teeth ..... 2
2. (1) Submesial pair of frontal teeth well developed and more than half as long as lateral pair (measuring from base of lateral notch between teeth) ..... *C. bocourti*  
 Frontal teeth decidedly unequal in size, submesial pair no more than half as long as lateral pair (measuring from base of lateral notch between teeth) ..... 3
3. (2) Carapace very smoothly granulate, lines of granules visible but barely perceptible to touch (except epibranchial line variably prominent) ..... *C. similis*  
 Carapace coarsely granulate, scattered granules and lines of granules quite evident to sight and touch ..... 4
4. (3) Anterolateral teeth (exclusive of outer orbital and lateral spine) lacking shoulders and swept forward ..... 5  
 Anterolateral teeth (exclusive of outer orbital and lateral spine) lacking shoulders, not swept forward ..... 6
5. (4) Anterolateral teeth well separated, all except first 3 and lateral spine with anterior margins concave; chelipeds with ridges finely granulated ..... *C. larvatus*  
 Anterolateral teeth adjacent, stout, anterior margins not noticeably concave, fifth tooth often largest; chelipeds with ridges coarsely granulated ..... *C. exasperatus*
6. (4) Submesial pair of frontal teeth absent or vestigial ..... *C. ornatus*  
 Submesial pair of frontal teeth never vestigial, but no more than half length of lateral pair ..... *C. danae*

### Genus *Cronius* Stimpson, 1860

Key to species  
 [Adapted from Rathbun, 1930]

- Four spines on palm; spine at posterodistal angle of merus of each swimming leg...  
 ..... *C. ruber*
- Two spines on palm; row of spinules but no spine on posterodistal margin of merus of each swimming leg ..... *C. tumidulus*

### Genus *Ovalipes* Rathbun, 1898

#### Key to species

Carapace with relatively coarse granulation behind frontal margin and inside anterolateral borders, median elongate tract of slightly but variably enlarged granules extending from mesogastric to anterior cardiac region .. *O. stephensi*

Carapace with granulation generally fine but more pronounced anteriorly, lacking narrow tract of slightly enlarged granules in midline ..... *O. floridanus*

### Genus *Portunus* Weber, 1795

#### Key to species

[Based on Rathbun, 1930, and Williams, 1984]

1. Carapace wide, anterolateral margins forming arc of circle with center near posterior margin ..... 2
- Carapace narrow, anterolateral margins forming arc of circle with center near middle of cardiac region ..... 6
2. (1) Stridulating ridge present on lower surface of carapace; spine at posterior angle of carapace ..... *P. vocans*  
Stridulating apparatus absent; posterior angles of carapace unarmed ..... 3
3. (2) Posterodistal margin of merus of each swimming leg armed with row of spinules but no spine (frontal teeth blunt; width of merus of swimming legs equal to length of anterior margin) ..... *P. gibbesii*  
Posterodistal margin of merus of each swimming leg unarmed ..... 4
4. (3) Carapace convex, mostly smooth and glossy; palm of chela swollen, only 1 spine on upper margin ..... *P. sayi*  
Carapace uneven, not smooth and glossy; 2 spines on upper margin of palm; submesial teeth of front very small ..... 5
5. (4) Spine at posterodistal margin of merus of cheliped; submesial teeth of front much less advanced than outer teeth ..... *P. anceps*  
No spine at posterodistal margin of merus of cheliped; submesial teeth of front nearly or quite as advanced as outer teeth ..... *P. ventralis*

6. (1) Posterodistal margin of merus of swimming leg unarmed; 2 spines on upper margin of palm ..... 7  
Posterodistal margin of merus of swimming leg armed with one or two spines or with spinules or with both ..... 8
7. (6) Lateral spine of carapace similar to and very little larger than preceding spine or tooth; upper margin of dactylus on chela conspicuously fringed with long hairs ..... *P. depressifrons*  
Lateral spine of carapace much larger than preceding spine or tooth and directed more outward; upper margin of dactylus on chela with hair inconspicuous ..... *P. floridanus*
8. (6) Erect spine on basis of each swimming leg; large round persistent red spot on posterolateral slope of carapace ..... *P. sebae*  
No erect spines on bases of swimming legs; no large persistent red spot on posterolateral slope of carapace ..... 9
9. (8) Posterodistal margin of merus of each swimming leg armed with one spine besides inconspicuous spinules ..... *P. spinimanus*  
Posterodistal margin of merus of each swimming leg armed with spinules but no spines ..... 10
10. (9) Chelipeds with mesiodorsal spine of carpus less than half length of palm ..... *P. ordwayi*  
Chelipeds with mesiodorsal spine of carpus greater than half length of palm ..... 11
11. (10) Two distinct submedian red spots in middle of carapace, one on each branchial lobe ..... *P. binoculus*  
No submedian red spots in middle of carapace ..... *P. spinicarpus*

*Callinectes sapidus*

- a. dorsal view
  - b. first pleopods (gonopods) (male)
- (a, after Williams, 1978; b, after Williams, 1984)

*Callinectes bocourti*

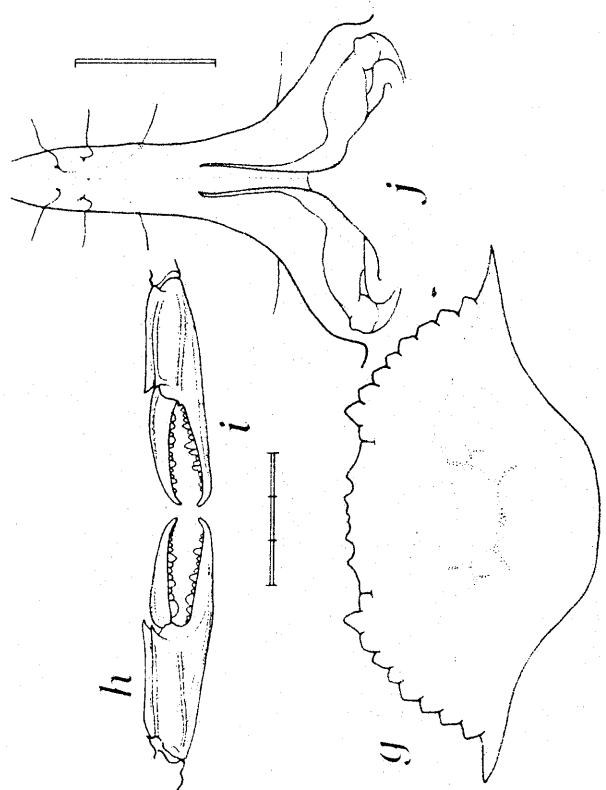
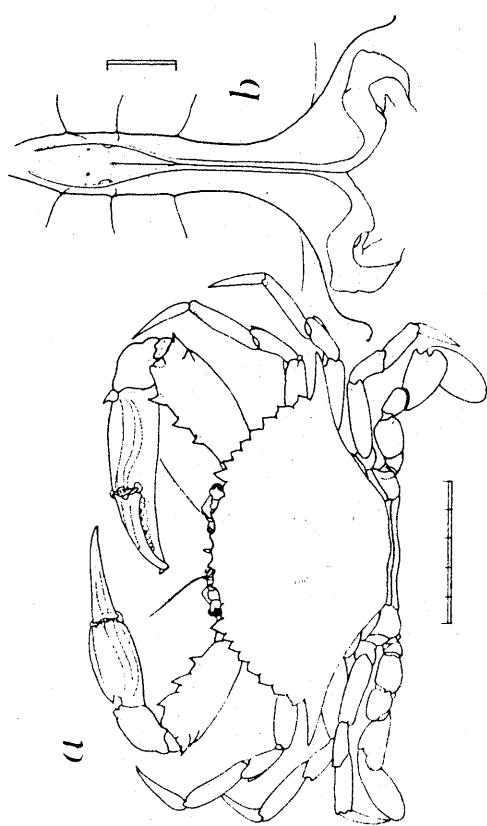
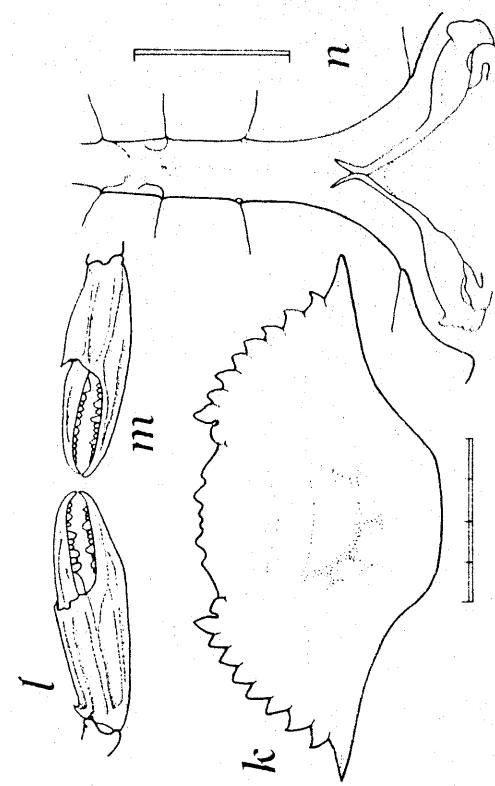
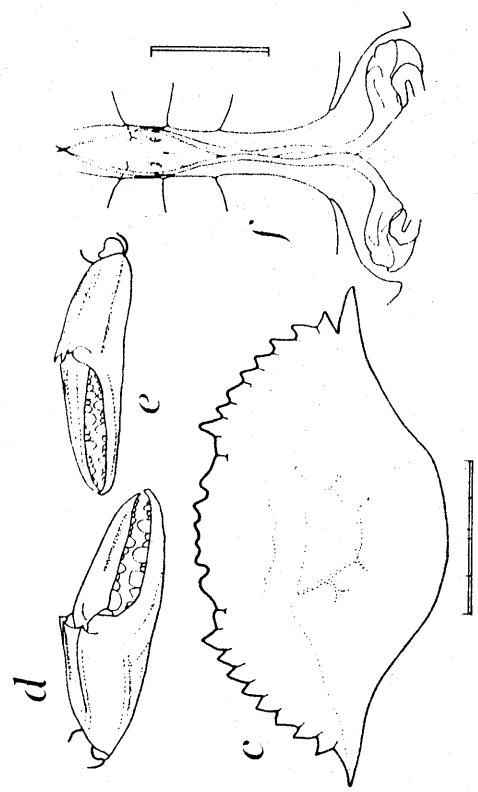
- c. carapace, dorsal view
  - d. right chela, external view
  - e. left chela, external view
  - f. first pleopods (gonopods) (male)
- (c, d, e, after Williams, 1978; f, after Williams, 1984)

*Callinectes similis*

- g. carapace, dorsal view
  - h. right chela, external view
  - i. left chela, external view
  - j. first pleopods (gonopods) (male)
- (g, h, i, after Williams, 1978; j, Williams, 1984)

*Callinectes larvatus*

- k. carapace, dorsal view
  - l. right chela, external view
  - m. left chela, external view
  - n. first pleopods (gonopods) (male)
- (k, l, m, after Williams, 1978, as *C. marginatus*; n, after Williams, 1984)



*Callinectes exasperatus*

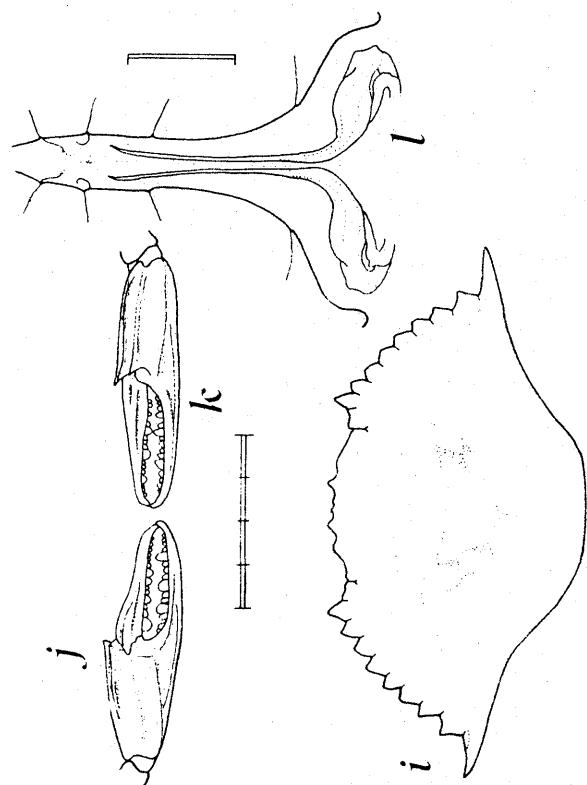
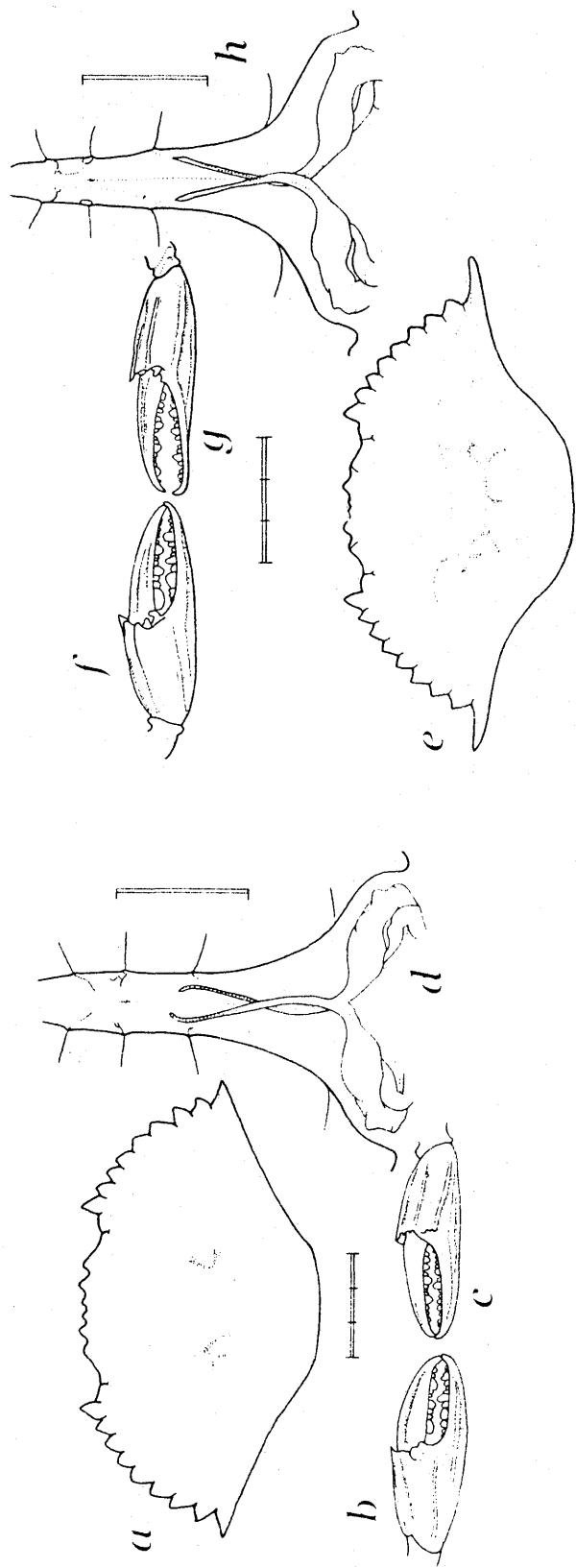
- a. carapace, dorsal view
- b. right chela, external view
- c. left chela, external view
- d. first pleopods (gonopods) (male)  
(a, b, c, after Williams, 1978; d, after  
Williams, 1984)
- e. carapace, dorsal view
- f. right chela, external view
- g. left chela, external view
- h. first pleopods (gonopods) (male)  
(e, f, g, after Williams, 1978; h, after  
Williams, 1984)

*Callinectes ornatus*

- a. carapace, dorsal view
- b. right chela, external view
- c. left chela, external view
- d. first pleopods (gonopods) (male)  
(a, b, c, after Williams, 1978; d, after  
Williams, 1984)
- e. carapace, dorsal view
- f. right chela, external view
- g. left chela, external view
- h. first pleopods (gonopods) (male)  
(e, f, g, after Williams, 1978; h, after  
Williams, 1984)

*Callinectes danae*

- i. carapace, dorsal view
- j. right chela, external view
- k. left chela, external view
- l. first pleopods (gonopods) (male)  
(i, j, k, after Williams, 1978; l, after  
Williams, 1984)



*Cronius ruber*

a. dorsal view (male)

(after Williams, 1984)

*Cronius tumidulus*

b. dorsal view (male)

(after Rathbun, 1933)

*Ovalipes stephensoni*

c. dorsal view (holotype male)

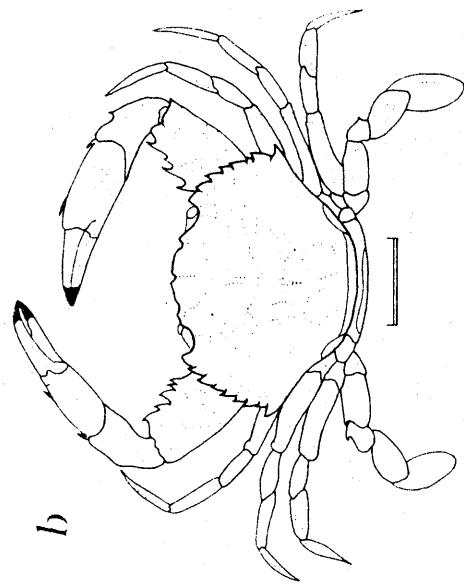
(after Williams, 1976)

*Ovalipes floridanus*

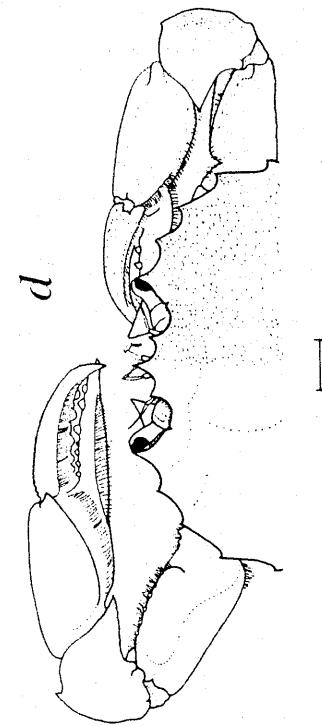
d. anterior part of carapace and chelipeds,

dorsal view (male)

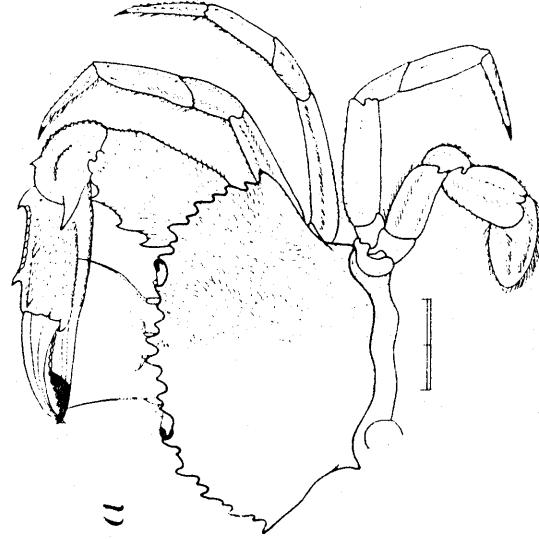
(after Williams, 1976)



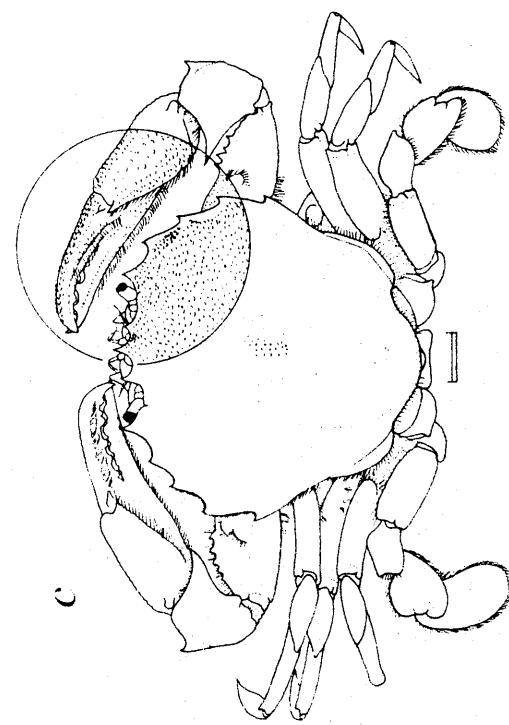
b



d



e



c

***Portunus vocans***

male:

- a. dorsal view
- b. left half of carapace, ventral view  
(after Rathbun, 1930)

***Portunus gibbesii***

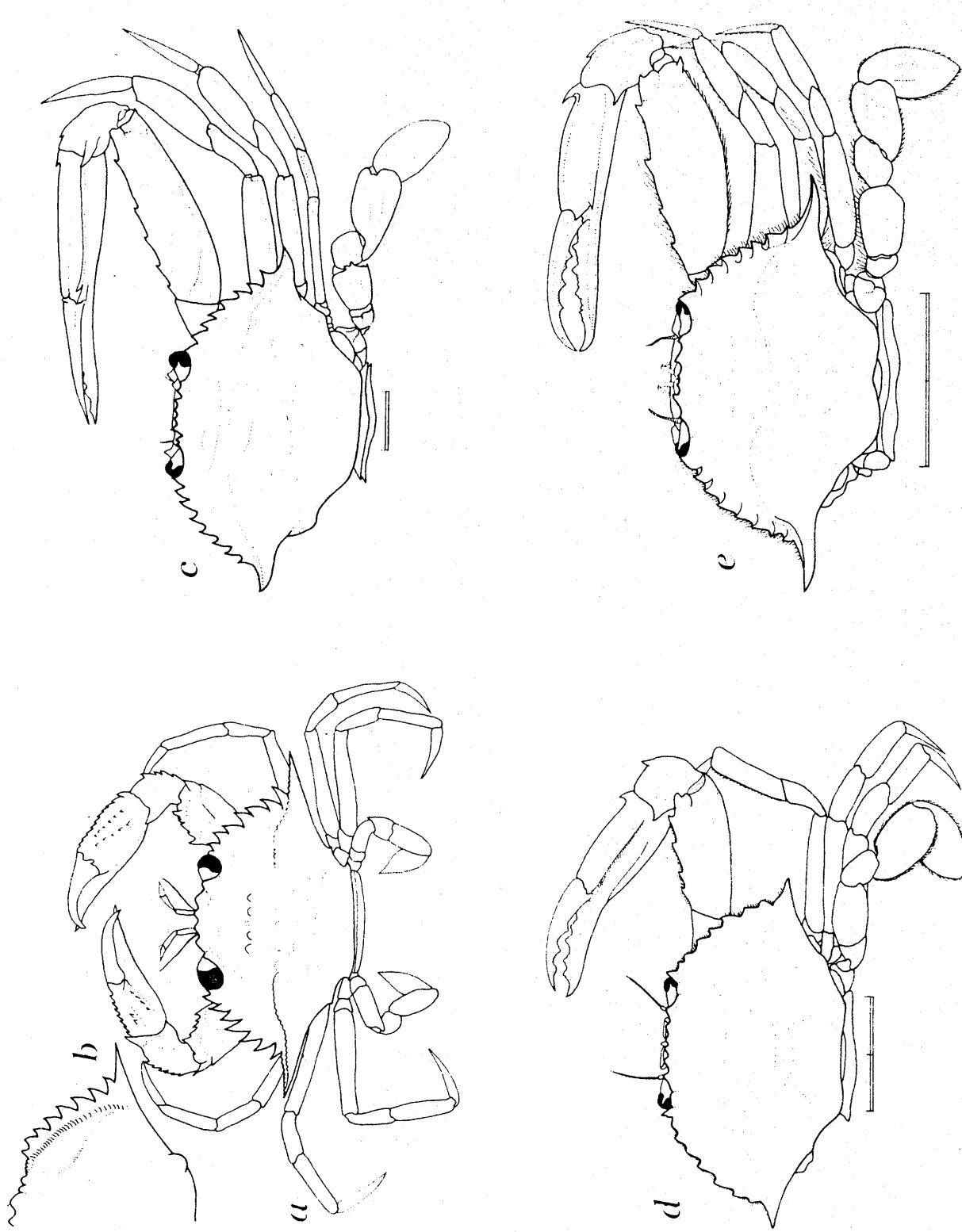
- c. dorsal view (male)  
(after Williams, 1984)

***Portunus sayi***

- d. dorsal view  
(after Williams, 1984)

***Portunus anceps***

- e. dorsal view (male)  
(after Williams, 1984)



***Portunus ventralis***

a. carapace, dorsal view (ovigerous female)

(after Rathbun, 1930)

***Portunus depressifrons***

b. dorsal view (male)

(after Williams, 1984)

***Portunus floridanus***

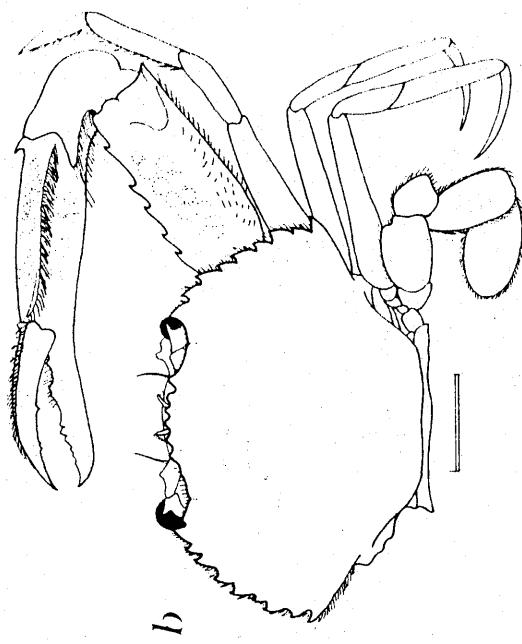
c. dorsal view (male)

(after Williams, 1984)

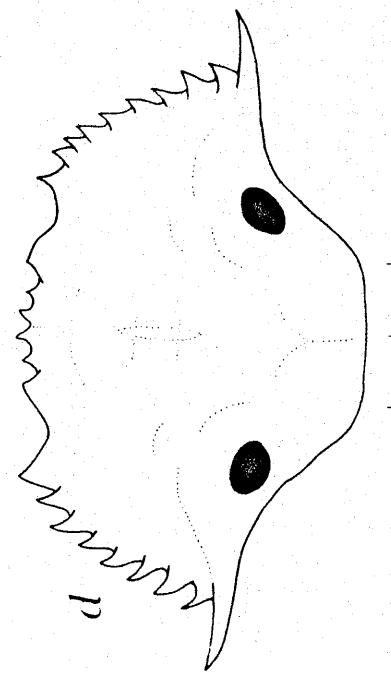
***Portunus sebae***

d. carapace, dorsal view (male)

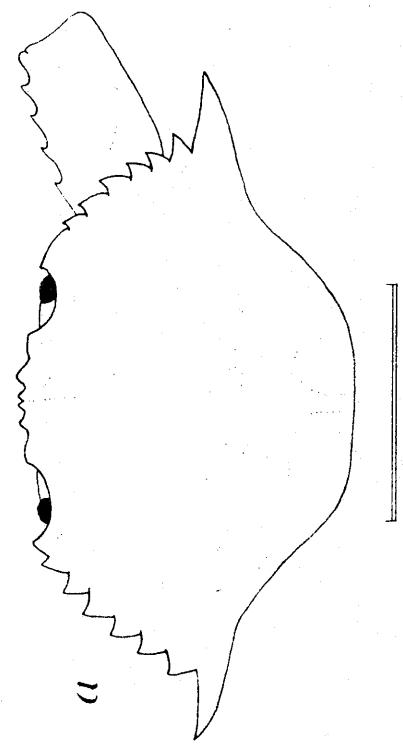
(after Rathbun, 1930)



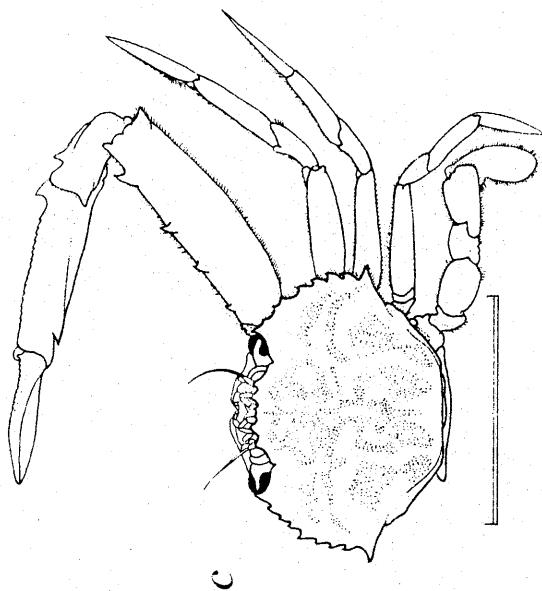
b



d



c



c

*Portunus spinimanus*

a. dorsal view (male)

(after Williams, 1984)

*Portunus ordwayi*

b. dorsal view (male)

(after Williams, 1984)

*Portunus binoculus*

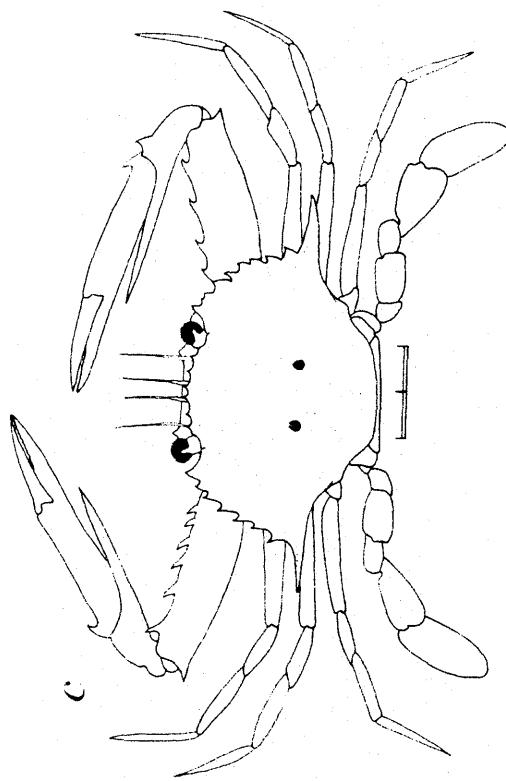
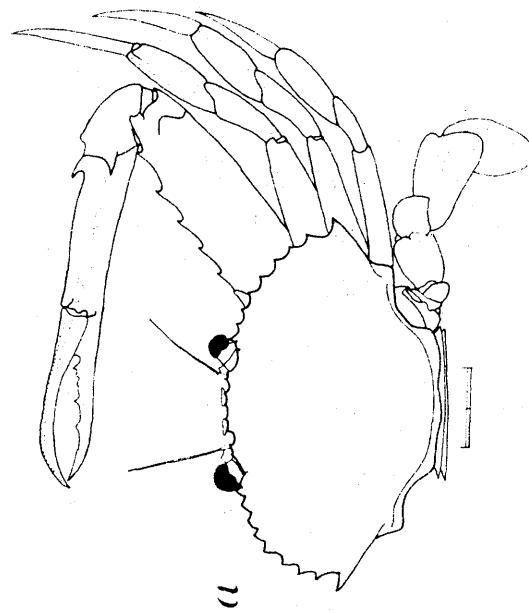
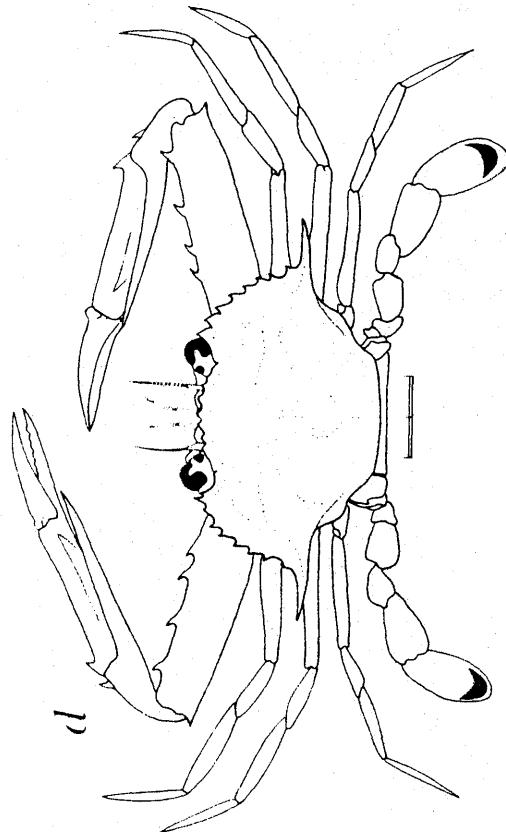
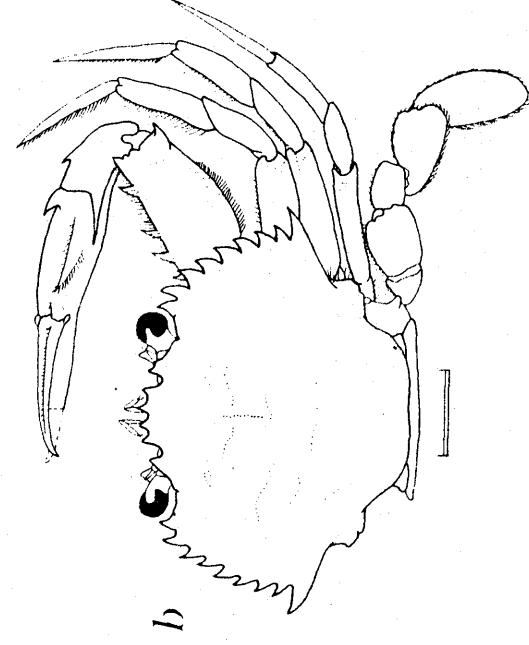
c. dorsal view (male)

(after Holthuis, 1969)

*Portunus spinicarpus*

d. dorsal view (male)

(after Holthuis, 1969)



*Arenaeus cibrarius*

a. dorsal view (male)

(after Williams, 1984)

*Bathynectes longispina*

male:

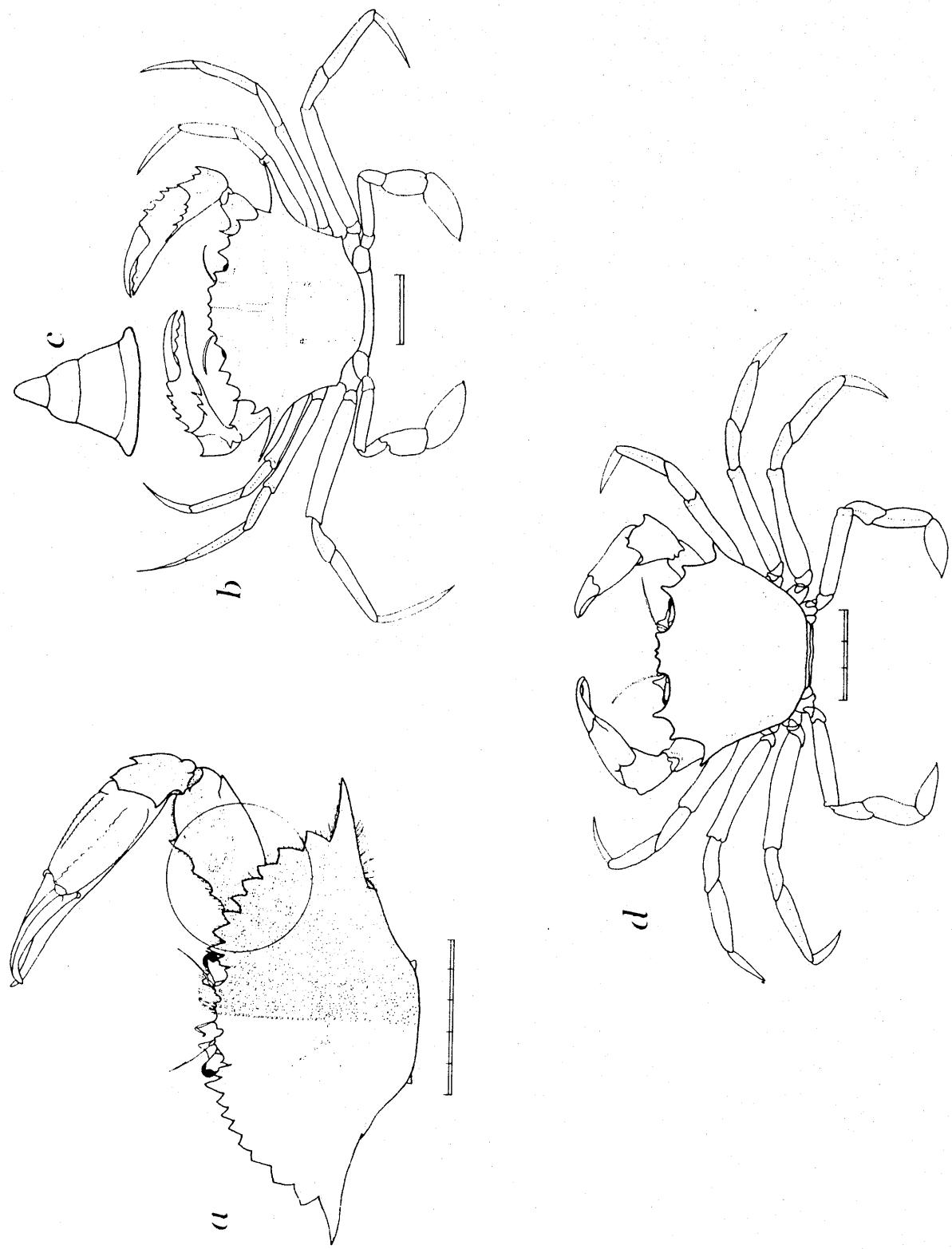
b. dorsal view

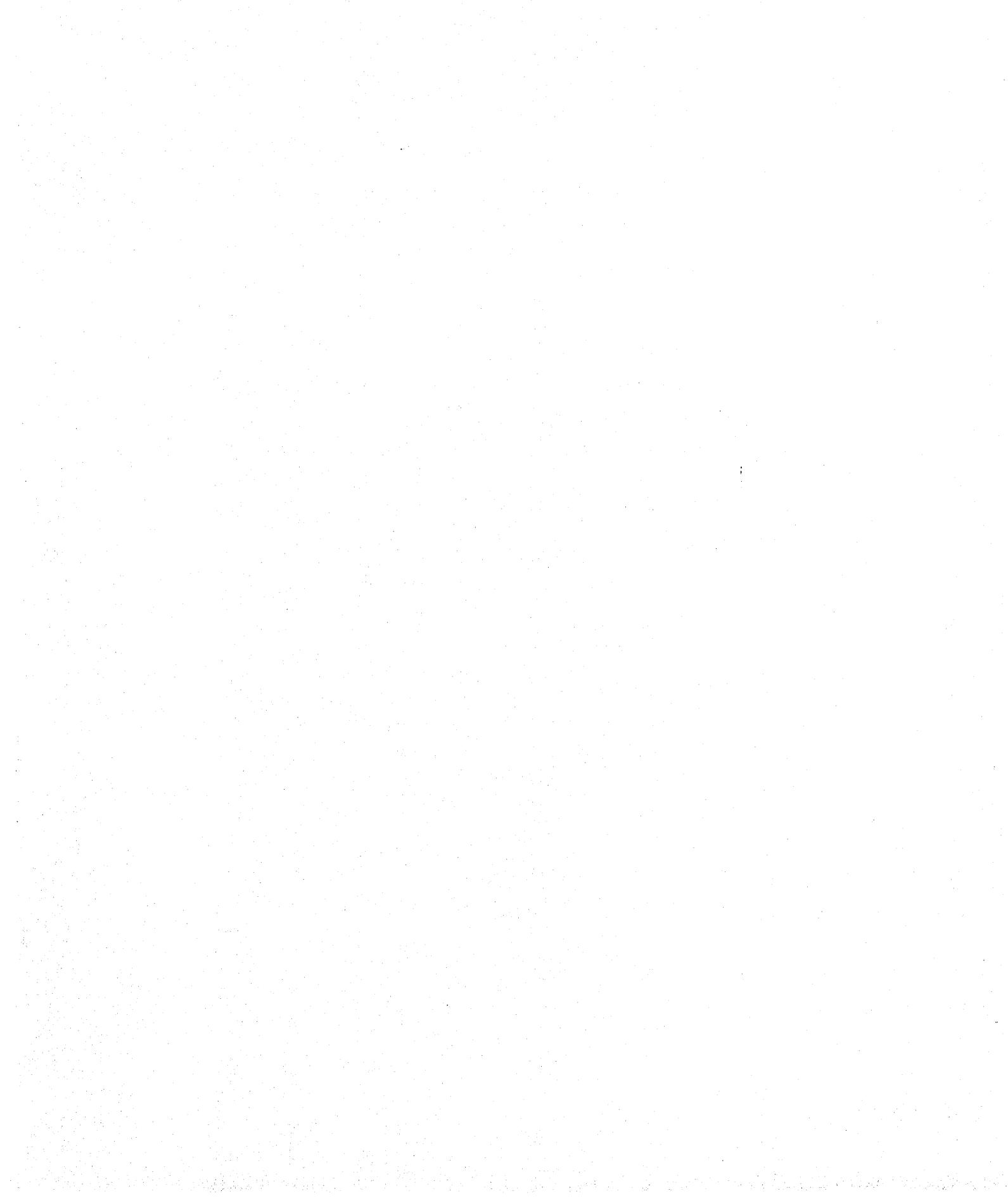
c. abdomen

(after Rathbun, 1930, as *B. superba*)*Benthochason schmitti*

d. dorsal view

(after drawing at SI-NMNH)





## Family Gonoplacidae

### Key to genera and species

[Based on Rathbun, 1918, Guinot, 1969, and Williams, 1984]

1. Base of third segment of male abdomen covering whole space between last pair of legs ..... 2  
 Base of third segment of male abdomen not covering whole space between last pair of legs ..... 9
2. (1) Carapace subquadrate, anterior border entirely occupied by square-cut front and orbits, the latter being long, narrow trenches; carapace widest between postorbital angles ..... 3  
 Carapace xanthoid, widest behind postorbital angles; orbits of normal size and form ..... 4
3. (2) Chelipeds with patch or tufts of hair on distal part of carpus and proximal part of palm ..... *Frevillea*  
 Chelipeds without patch or tufts of hair on distal part of carpus and proximal part of palm ..... *Goneplax sigsbei*
4. (2) Inner angle of carpus of cheliped prominent with two acute teeth (carapace very narrow, more than 3/4 as long as broad; male abdomen with segments free) ..... *Neopilumnoplax americana*  
 Inner angle of carpus of cheliped with one acute tooth ..... 5
5. (4) Front very narrow, much less than 1/3 of carapace width ..... 6  
 Front rather broad, more than 1/3 of carapace width ..... 7
6. (5) Male first gonopod extremely long, slender and filiform, incurved and almost without ornamentation ..... *Chacellus filiformis*  
 Male first gonopod robust, distal portion dilated, triangular in shape ..... *Euphosynoplax clausa*
7. (5) Carapace much broader than long; anterolateral teeth with granular margins ..... *Nanoplax xanthiformis*  
 Carapace narrow; anterolateral teeth with smooth margins ..... 8
8. (7) Carapace narrow, barely widened near front, with poorly defined regions; four anterolateral teeth, including outer orbital ..... *Thalassoplax angusta*  
 Five anterolateral teeth, second well developed ..... *Pilumnoplax elata*

9. (1) Carapace subquadrate, anterior margin almost completely occupied by front and elongate orbits ..... 10  
     Carapace xanthoid, anterior margin consisting of front, orbits, and anterior part of arched, toothed, anterolateral border ..... 12
10. (9) Two anterolateral teeth present, including outer orbital ..... *Sotoplax robertsi*  
     Three anterolateral teeth present ..... 11
11. (10) Antennae excluded from orbit ..... *Euryplax nitida*  
     Antennae entering orbit ..... *Trapezioplax tridentata*
12. (9) Posterolateral borders imperceptibly convergent (almost parallel); eyestalks tapering to reduced cornea and conspicuously hairy ..... *Speocarcinus lobatus*  
     Posterolateral borders obviously convergent; eyestalks rather thick and not conspicuously hairy ..... 13
13. (12) Fronto-orbital border about half total width of carapace .....  
     ..... *Pseudorhombila quadridentata*  
     Fronto-orbital border from 3/5 to 3/4 total width of carapace ..... 14
14. (13) Carapace broad, width 1.5 times length (anterolateral teeth with smooth margins, first 2 coalesced, third largest, obtuse, with strongly curved lateral margin) .....  
     ..... *Panoplax depressa*  
     Carapace narrow, width 1.3 times length ..... 15
15. (14) Merus of outer (third) maxillipeds with antero-external angle prominent, acutangular (front prominent and almost straight, with small median notch; usually 4 anterolateral teeth, second tooth largest; carpus of chelipeds smooth) .....  
     ..... *Glyptoplax smithii*  
     Merus of outer maxillipeds with antero-external angle neither prominent nor acutangular (carapace narrow, hexagonal; five anterolateral teeth, including orbital tooth) ..... *Eucratopsis crassimanus*

**Genus *Frevillea* A. Milne Edwards, 1880**

## Key to species

Orbital spine long, projecting laterally; next spine very small; sides of carapace strongly convergent posteriorly ..... *F. barbata*

Orbital spine projecting more forward than that of *F. barbata*; sides of carapace much less convergent posteriorly than those of *F. barbata*; long and dense tuft of hair on distal half of carpus and proximal part of palm in cheliped ..... *F. hirsuta*

*Frevillea barbata*

a. carapace, dorsal view (female)

(after Guinot, 1969)

*Frevillea hirsuta*

b. dorsal view

(after Rathbun, 1918)

*Chacellus filiformis*

c. dorsal view (holotype male)

d. distal portion of first pleopod (gonopod) (male)

e. first pleopod (gonopod) (male)

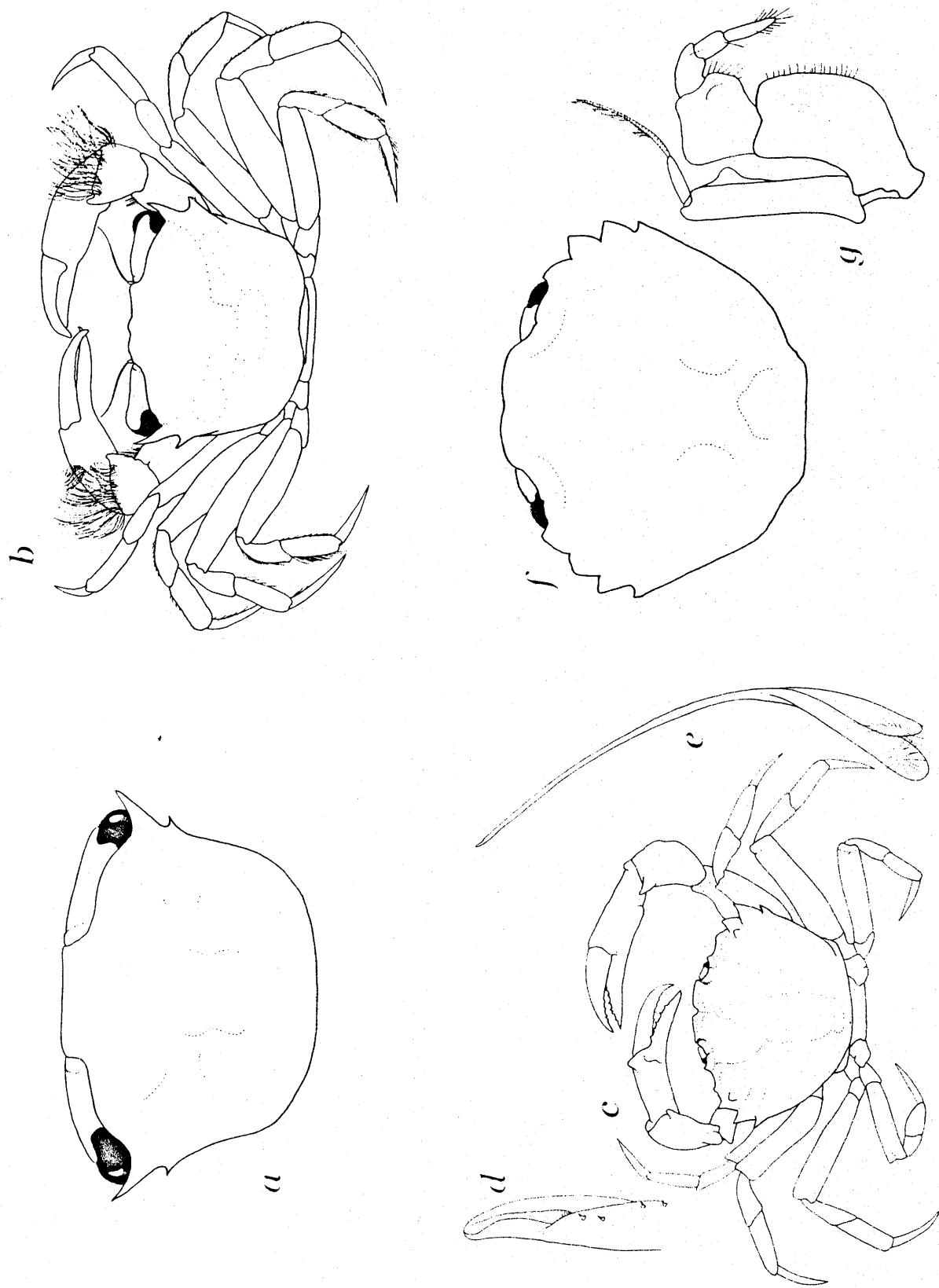
(after Guinot, 1969)

*Eucratopsis crassimanus*

f. carapace, dorsal view (male)

g. right outer (third) maxilliped (female)

(after Rathbun, 1918)



*Euphrosynoplax clausa*

- a. dorsal view (paratype male)
- b. distal portion of first pleopod (gonopod) (male)  
(after Guinot, 1969)
- c. first pleopod (gonopod) (male)
- d. dorsal view (male)

*Euryplax nitida*

- a. dorsal view (male)
- b. distal portion of first pleopod (gonopod) (male)
- c. first pleopod (gonopod) (male)

(after Williams, 1984)

(after Williams, 1984)

(after Williams, 1984)

*Glyptoplax smilii*

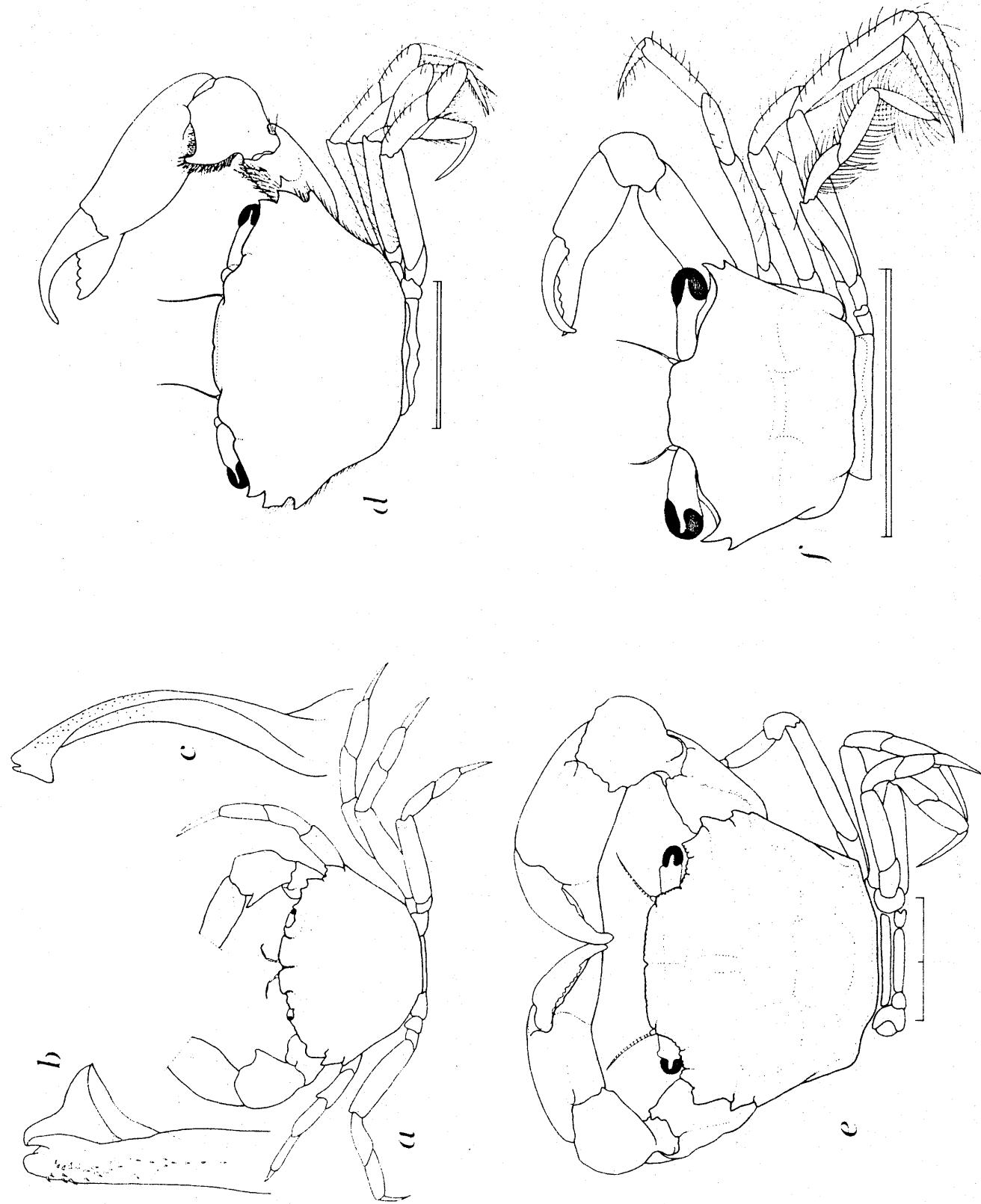
- e. dorsal view (male)
- f. dorsal view (male)

(after Williams, 1984)

*Goneplax sigsbei*

- e. dorsal view (male)
- f. dorsal view (male)

(after Williams, 1984)



*Nanoplax xanthiformis*

a. dorsal view

(after Williams, 1984)

*Neoplumopla x americana*

b. dorsal view (male)

(after Rathbun, 1918)

*Panoplax depressa*

c. dorsal view (male)

(after Williams, 1984)

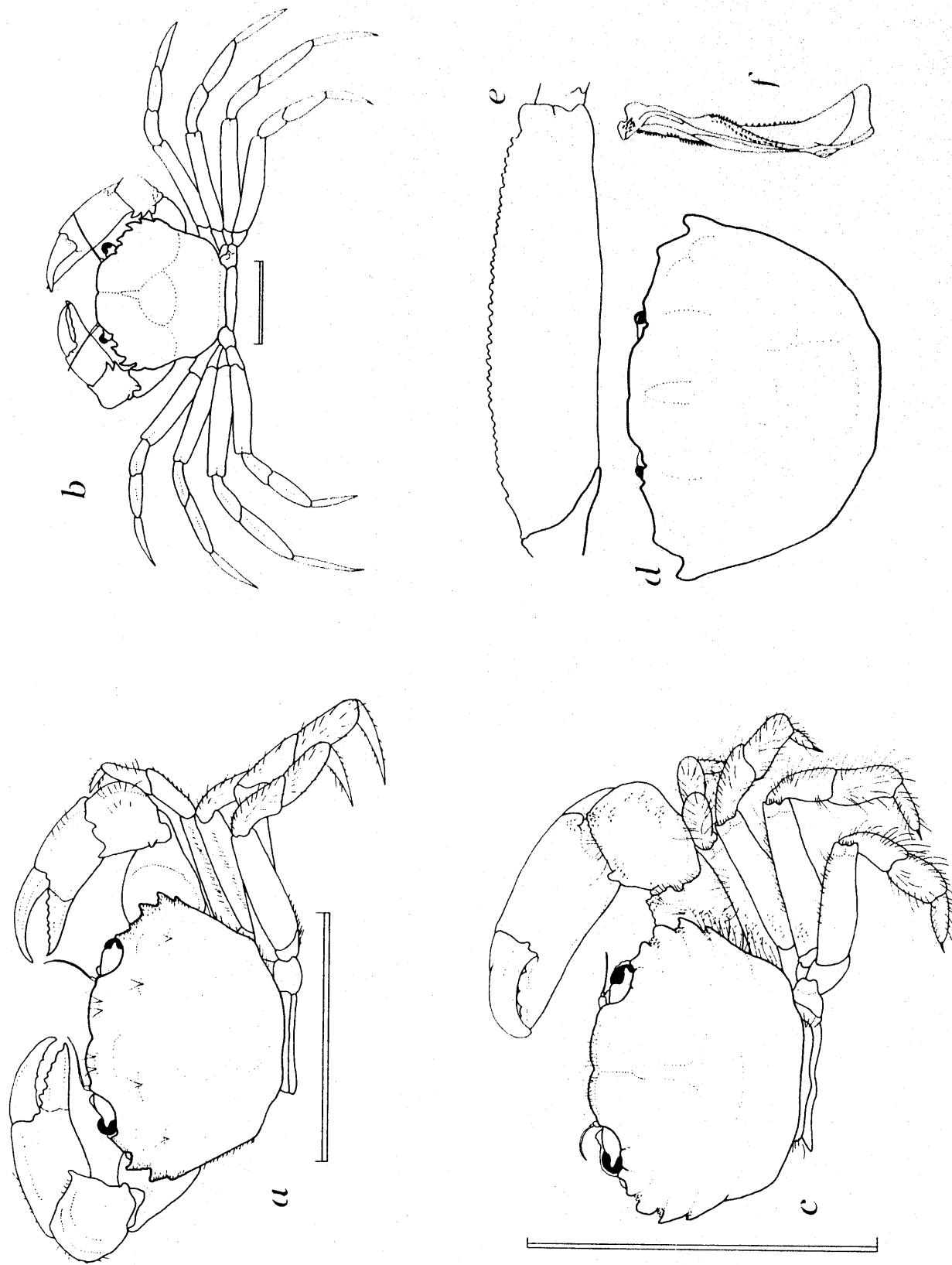
*Pseudorhombila quadridentata*

d. carapace, dorsal view

e. merus of walking leg

f. first pleopod (gonopod)

(after Hernandez, 1982)



*Sotoplax robertsi*

a. carapace, dorsal view

b. part of sternum and abdomen near coxa of left fifth pereopod, ventral view  
(after Guinot, 1984)*Specocarcinus lobatus*

c. carapace, dorsal view (holotype male)

(after Guinot, 1969)

*Thalassoplax angusta*

d. dorsal view (paratype male)

(after Guinot, 1969)

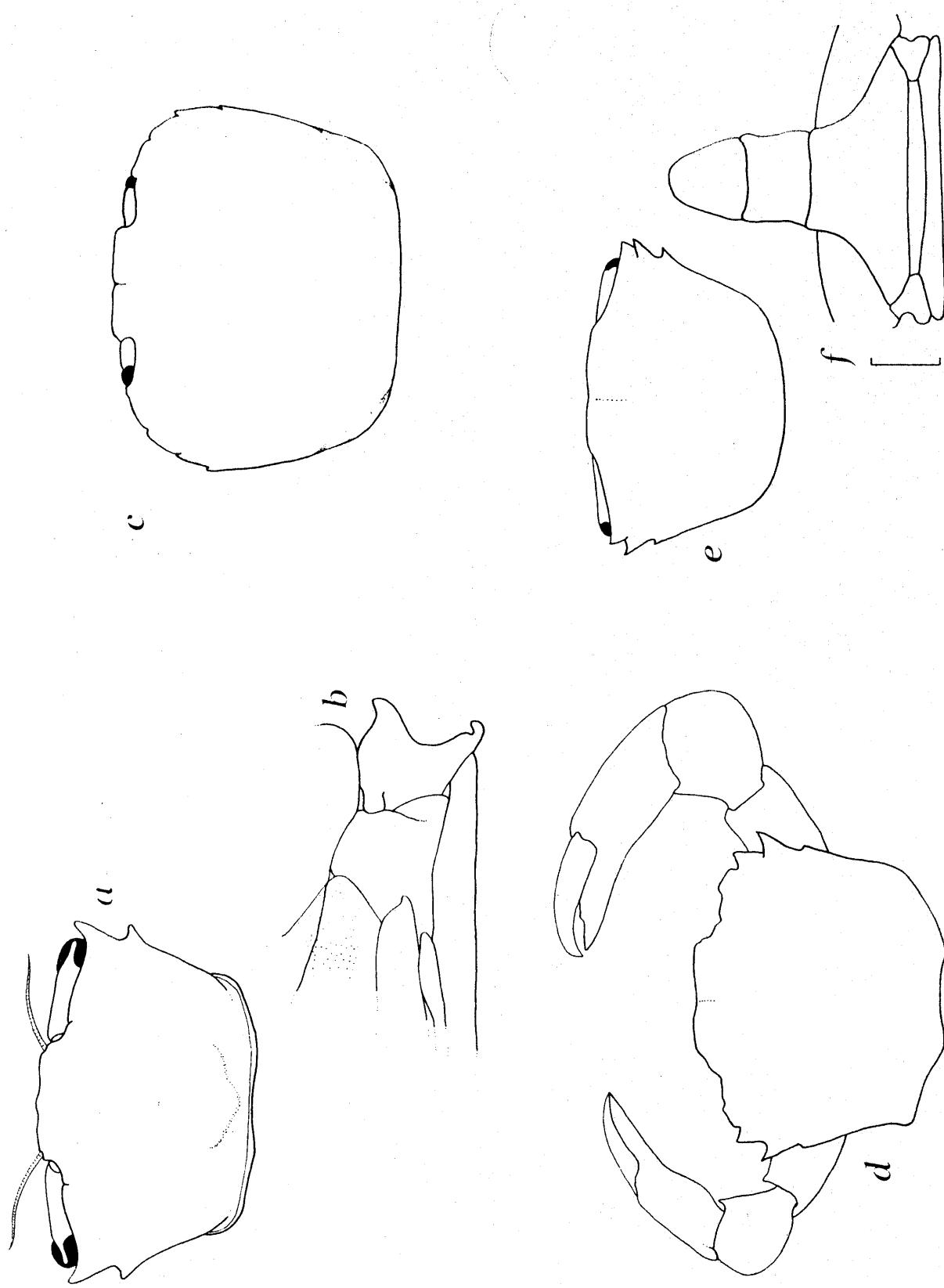
*Trapezioplax tridentata*

male:

e. carapace, dorsal view

f. abdomen

(after Rathbun, 1918, as *Prionoplax atlantica*)





## Family Xanthidae

### Key to genera and species

[Based on Rathbun, 1930, and Williams, 1984]

1. Ridges defining efferent branchial channels, if present, low and confined to posterior part of endostome, never reaching to anterior boundary of buccal cavity .....
- 2
- Ridges defining efferent branchial channels extending to anterior boundary of buccal cavity and often very strong .....
- 25
2. (1) Fronto orbital border less than half greatest width of carapace.....
- 3
- Fronto orbital border half or more than half greatest width of carapace.....
- 10
3. (2) Anterolateral border of carapace thin, cristiform; upper border at least of arms and of merus, carpus, and propodus of each leg sharp, cristiform .....
- Platypodiella spectabilis*
- Anterolateral border of carapace and upper borders of legs not cristiform.....
- 4
4. (3) Anterolateral border entire up to strong lateral epibranchial tooth; carapace perfectly smooth without trace of regions; chelipeds unequal, fingers pointed; front three-lobed .....
- Carpilius corallinus*
- Anterolateral border cut into teeth or lobes.....
- 5
5. (4) Surface of carapace nearly smooth (superior inner tooth of orbit distinct though small; anterolateral rim lobate or dentate and continued behind widest part of carapace, its chord longer than posterolateral distance) .....
- Xantho denticulata*
- Carapace usually conspicuously lobulate, granulate, or eroded.....
- 6
6. (5) Carapace and legs deeply eroded.....
- Glyptoxanthus erosus*
- Carapace lobulate or granulate, chelipeds and walking legs also granulate, often hairy .....
- 7
7. (6) Areoles low, separated by narrow furrows; marginal divisions of carapace lobiform, not angular, dentiform or spiniform (carapace uniformly granulate; black color of immovable finger of adult male widely extended on palm; fingers grooved, sharply granulate) .....
- Platyactaea setigera*
- Areoles low or high and convex, separated by narrow or wide furrows; marginal divisions of carapace various, angular, dentiform or spiniform .....
- 8
8. (7) Carapace covered dorsally with spines or sharp tubercles or carapace covered with granules and areoles low, separated by narrow furrows .....
- Actaea*
- Carapace covered with granules and areoles high, convex, widely separated.....
- 9

9. (8) Areoles separated by short pubescence; anterior mesogastric nodule small.....  
*Paractaea rufopunctata nodosa*  
 Areoles raspberry-like, set in thick coat of long hair; palms shaggy; fingers broad,  
 smooth, sharp-edged, acutely tipped ..... *Banareia palmeri*
10. (2) Anterolateral margin continued forward and downward to anterior angle of buccal  
 cavity instead of to orbit (superior inner orbital tooth absent) .....  
*Carpoporos papulosus*  
 Anterolateral margin continued to orbit ..... 11
11. (10) Dorsal surface of carapace covered with large and small lobules often arranged in  
 triads, tending to proliferate with increasing age ..... *Allactaea lithostrota*  
 Dorsal surface of carapace not covered with large and small lobules ..... 12
12. (11) Carapace rough and hairy except on margin of front and orbits; lunate crest above  
 carpus of each walking leg; anterolateral margin spinous .....  
*Heteractaea ceratopus*  
 Carapace smooth (non-granulate) and bare or nearly so ..... 13
13. (12) Carapace transversely oval ..... 14  
 Carapace more or less hexagonal or subquadrate ..... 18
14. (13) Anterolateral teeth strong ..... 15  
 Anterolateral teeth not strong ..... 17
15. (14) Last (or most posterior) of anterolateral teeth directed outward (areolations of  
 carapace not crossed by granulated ridge; anterolateral edge thick) .....  
*Leptodius parvulus*  
 Last (or most posterior) of anterolateral teeth directed obliquely forward ..... 16
16. (15) Granulation of carapace and chelipeds inconspicuous; lateral teeth of carapace  
 rather broad and flat (dark color of both immovable fingers of male continued on  
 palm) ..... *Cataleptodius floridanus*  
 Granulation coarse; lateral teeth of carapace subconical, hooked .....  
*Pseudomedaeus*
17. (14) Carapace depressed; anterolateral margin thin, teeth little projecting, second tooth  
 fused with first ..... *Eurypanopeus*  
 Carapace convex, smooth; anterolateral margin faintly lobed or toothed; palms  
 elongate, major palm at least twice as wide as minor; fingers short .. *Paraliomera*

18. (13) Frontal and anterolateral regions rough with numerous tubercles, spinules, or sharp granules; walking legs spinulous above ..... 19  
Frontal and anterolateral regions relatively smooth, never spinulous or sharply granulous ..... 20
19. (18) Anterolateral regions coarsely tuberculate (basal antennal segment broad, prolonged into orbital hiatus; front prominent, four-toothed; fingers spooned) ..... *Eitus maculatus*  
Anterolateral regions, chelipeds and walking legs spinulous or sharply granulous; size small; anterolateral margin shorter than posterolateral, with either second or fifth tooth or both reduced or wanting; basal antennal segment not reaching or barely reaching prolongation from front ..... *Micropanope*
20. (18) Only four anterolateral teeth including orbital angle; carapace very convex from front to back; front truncate; chelae elongate ..... *Tetraxanthus*  
Five anterolateral teeth ..... 21
21. (20) Anterolateral teeth small, thick, widely separated; few smooth transverse ridges on anterolateral and epigastric regions; legs thickly hairy ..... *Chlorodiella longimana*  
Anterolateral teeth broad, flat, first and second more or less fused ..... 22
22. (21) Third segment of male abdomen not reaching coxae of legs of last pair; carapace subquadrate, broad behind, front truncate ..... *Rhithropanopeus harrisii*  
Third segment of male abdomen reaching coxae of legs of last pair; carapace narrower behind ..... 23
23. (22) Carapace crossed by broken, transverse, raised, granulated lines on anterior half; front nearly transverse, not advanced; first and second anterolateral teeth partially fused ..... *Panopeus*  
Carapace narrow, not crossed by transverse raised lines ..... 24
24. (23) Front arcuate, forming regular curve with anterolateral margins; second anterolateral tooth lobiform, separated from the first by shallow sinus; male abdomen constricted between fifth and sixth segments; terminal segment subtriangular ..... *Neopanope*  
Hexagonal; front narrow, prominent beyond curve of anterolateral margins; posterolateral margins strongly converging; anterolateral teeth prominent; supraorbital lobe well marked ..... *Hexapanopeus*
25. (1) Fronto-orbital border half or less than half greatest width of carapace ..... 26  
Fronto-orbital border much more than half greatest width of carapace ..... 28

26. (25) Basal antennal segment touching front (anterior margin of merus of outer (third) maxilliped not notched at orifice of efferent branchial channel; orbits oblong) ..... *Eurytium limosum*  
..... Basal antennal segment not nearly reaching front..... 27
27. (26) Carapace broad, suboval; surface of carapace and chelipeds smooth..... *Menippe*  
..... Carapace not much broader than long, subcircular; chelipeds very rough..... *Pilumnoides nudifrons*
28. (25) Fronto-orbital border about two-thirds greatest width of carapace; anterolateral borders shorter than posterolateral; front with narrow outer tooth, spine, or lobe, separated by notch from superior inner angle of orbit ..... 29  
..... Fronto-orbital border much more than two-thirds greatest width of carapace.... 30
29. (28) More or less hairy and generally armed with spines or sharp granules. *Pilumnus*  
..... More massive than preceding, carapace deeply lobulate anteriorly, anterolateral margin with three large teeth behind orbit ..... *Lobopilumnus agassizii*
30. (28) Antennae not excluded from orbit; chelipeds long, merus reaching far beyond carapace; carapace resembling that of portunid ..... *Melybia thalamita*  
..... Antennae excluded from orbit..... 31
31. (30) Meri of outer (third) maxillipeds as long or nearly as long as broad..... *Eriphia gonagra*  
..... Meri of outer maxillipeds twice as broad as long; carapace and chelipeds armed with black spines ..... *Domecia acanthophora acanthophora*

**Genus *Actaea* De Haan, 1833**Key to species  
[Based on Rathbun, 1933]

Carapace covered dorsally with conical spines or sharp tubercles; marginal lobes spinous; fingers short, channeled, rough except at tips; color purplish, pincers brown; length 2.2 cm ..... *A. acantha*

Carapace covered with granules; areoles low, separated by narrow furrows.....  
..... *A. bifrons*

**Genus *Eurypanopeus* A. Milne Edwards, 1880**Key to species  
[Adapted from Rathbun, 1930]

1. Fingers of both chelae with acute tips, not spooned..... 2
- Fingers of minor chela spoon-shaped at tip..... 3
2. (l) Front double-edged, upper edge with line of granules..... *E. abbreviatus*  
    Front not double-edged (first and second lateral teeth of carapace very unequal, separated by shallow sinus) ..... *E. turgidus*
3. (l) Minor palm two-thirds as high as major; transverse lines on dorsum not strikingly prominent ..... *E. depressus*  
    Minor palm half as high as major; few very prominent raised granulated lines on dorsum ..... *E. dissimilis*

### Genus *Hexapanopeus* Rathbun, 1898

Key to species  
[Based on Rathbun, 1930]

1. Fingers of major cheliped black, brown, or horn color..... 2  
 Fingers of major cheliped white or nearly so..... 5
2. (1) Fifth lateral tooth almost obsolete..... *H. caribbaeus*  
 Fifth lateral tooth well developed..... 3
3. (2) Carpi of walking legs distinctly bilobed on superior margins..... *H. lobipes*  
 Carpi of walking legs not bilobed on superior margins..... 4
4. (3) Carpus of cheliped covered with tubercles, about 15 in number..... *H. paulensis*  
 Carpus of cheliped not covered with tubercles, although it may be lumpy ..... *H. angustifrons*
5. (1) Fingers not deeply grooved; short granulated ridges on carapace... *H. hemphillii*  
 Fingers deeply grooved; first two lateral teeth similar to, but smaller than, remaining teeth ..... *H. quinquedentatus*

### Genus *Menippe* De Haan, 1833

Key to species  
[Adapted from Rathbun, 1930]

- Surface of carapace not nodose, almost smooth; anterolateral teeth or lobes shallow or little projecting; stridulating apparatus present ..... *M. mercenaria*
- Surface of carapace anteriorly nodose; anterolateral teeth strong, projecting well out from carapace; no stridulating apparatus ..... *M. nodifrons*

### Genus *Micropanope* Stimpson, 1871

#### Key to species

[Adapted from Rathbun, 1930]

1. Last lateral tooth of carapace obsolescent..... 2  
Last lateral tooth of carapace small but easily discernible..... 4
2. (1) Carapace deeply areolated all over; legs unarmed; chelae high and heavy..... *M. pusila*  
Carapace areolated and rough anteriorly; legs spinulous..... 3
3. (2) Second lateral tooth small but distinct; anterior carapace and carpus of cheliped finely granulate ..... *M. lobifrons*  
Second lateral tooth fused with first and scarcely distinguishable; anterior carapace and carpus of cheliped deeply eroded ..... *M. sculptipes*
4. (1) Palms mostly smooth (lateral projections spiniform)..... *M. spinipes*  
Palms entirely or mostly rough..... 5
5. (4) Second lateral tooth absent or fused with first or orbital tooth; palms rough with large bead granules ..... *M. nuttingi*  
Second lateral tooth or spine present..... 6
6. (5) Outer surface of major palm rough all over; chelipeds and legs long-haired..... *M. urinator*  
Outer surface of major palm partly rough; chelipeds and legs inconspicuously hairy. .... *M. barbadensis*

### Genus *Neopanope* A. Milne Edwards, 1880

#### Key to species

1. Movable finger of major chela with large basal tooth..... *N. packardii*  
Movable finger of major chela without large basal tooth..... 2
2. (1) Dactylus of fifth pereopod longer than propodus..... *N. texana*  
Dactylus of fifth pereopod equal to or shorter than propodus..... *N. sayi*