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Mysidacea

by H. Nouvel



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INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton

MYSIDACEA

Pamphlet 18

General information and
bibliography

(by H. Nouvel)

1950

NB: geographical limits: 20°W - 80°E

80°N - Cape Finisterre

Fig 1. *Praunus flexuosis*. ♀; dorsal view--Fig 2. *Praunus flexuosis*. ♂; lateral view.

Ab: abdomen (A₁ and A₆ are 1st and 6th somites).

cp: carapace (ch: posterior notch of carapace pr: rostrum).

Ct: cephalothorax ec: antennal scale oe: eye (co: cornea

po: eye stalk)

ex: thoracic exopods ml, m2: 1st & 2nd maxillipeds (= 1st & 2nd thoracic appendages)

pa: antennular peduncle (pm: processus masculinus) pe: penis pi: brood pouch consisting of oostegites

pl: pleopods (swimmerets) (pl₁, pl₅ - 1st and 5th) P: mandibular palp

pt: thoracic endopods T: telson

U: uropod (re: exopod ri: endopod st: statocyst)

Fig 3. *Praunus flexuosis*, mandibles and labrum.

l: labrum md: mandible P: mandibular palp

Fig 4. *Paramysis ornata*, antenna base.

ec: antennal scale (ld: distal lobe--ad: distal segment)

Fig 5. *Praunus flexuosis*, thoracic appendage (pereiopod).

pt: thoracic endopod (ta: tarsus - gr: dactylus). ex: exopod for swimming

Fig 6 & 7. tip of telson in *Praunus flexuosis* (6) and *Neomysis integer* (7).

en: bifurcated tip ep. d: distal spines ep.l: lateral spines

sp: spinules

Fig 8. Base of pair of thoracic appendages in *Gnathophausia*.

br: branchiae pt: base of endopod ex: base of swimmer exopod

Distinguishing the sexes:

♀ Oostegites present at base of last two pairs of thoracic appendages. No processus masculinus at end of antennular peduncle.

♂ Pair of penises present at base of last pair of thoracic appendages. In Mysidae, processus masculinus is at antennular peduncle (except in the young).

NB: It is not possible to distinguish sex in very young individuals.

Distinguishing families:

The boldface numbers lead to items further on in the key, the numbers in brackets to other pamphlets.

1. Arborescent branchiae (fig 8) at base of thoracic appendages (suborder Lophogastrida)
No statocyst on uropodal endopod.....2
No branchiae (fig 5) at base of thoracic appendages (suborder Mysida)
Statocysts generally present (st on fig 1).....3
2. The last 7 pairs of thoracic appendages have much the same structure ...
Lophogastridae (19)
Thoracic appendages from back to front: one normal pair, 3 long, slender pairs, and 3 much shorter, thicker pairs (fig 22)..*Eucopiidae* (19)
3. 6 or 7 pairs of thoracic exopods for swimming. No statocysts. The very long mandibular palp extends beyond the antennal scale.....
.....*Petalophthalmidae* (19)
8 pairs of thoracic exopods for swimming. Statocysts present with very few exceptions. The mandibular palp is not usually as long as the antennal scale.....*Mysidae* (19-27)

Key for identifying genera in Mysidae:

1. The outer edge of the uropodal exopod bears quite a number of spines... 2
This edge bears only setae, no spines..... 5
2. Linguiform telson.....*Siriella* (20)
Telson with bifurcated tip..... 3
3. The outer edge of the uropodal exopod is made up of a smooth proximal part separated by one or more spines from a setose distal, part (fig 38)
.....*Boreomysis* (19)
The outer edge bears spines along its length..... 4
4. The telson bears more than 20 lateral spines on each side. The thoracic endopod tarsi are composed of at most 4 segments....*Anchialina* (20)
The telson bears less than 12 lateral spines on each side. The tarsi have at least 7 segments.....*Gastrosaccus* (20)
5. The antennal scale is reduced to just a spine or is absent.....6
Normally developed antennal scale.....7
6. Long eye stalks, eyes much longer than they are wide (cephalothorax extends forward beyond the thoracic endopods*)..... *Arachnomysis* (23)
Eye stalks very short, eyes wider than they are long.....*Chunomysis* (23)
7. The endopods of the 1st pair of thoracic appendages are much stronger than those of the following 5 pairs and the second last segment is undivided and spiny (fig 357).....*Heteromysis* (27)
The endopods of the 1st pair of thoracic appendages do not differ notably from the others.....8
8. The back of the labrum is a lamellar plate divided into 2 rounded, unequal lobes (fig 361, 362). In the first pair of maxillipeds, the 2nd last segment is enlarged and the anterior edge bears spines (fig 365)
.....*Mysidella* (27)
The labrum and 1st pair of maxillipeds do not present these characteristics
.....9
9. The outer edge of the antennal scale has a smooth or serrated proximal part and, generally, a setose distal part.....10
The outer edge of the scale is covered with setae right to the base...28
10. There is no spine separating the smooth part from the setose part of the edge of the scale.....*Hemimysis* (25)

These two parts are separated by a spine.....11

11. The telson is bifurcated at the tip.....12

 The telson is rounded, pointed or truncated at the tip.....13

12. The distal lobe of the antennal scale is much wider than it is long
 and does not extend past or just extends past the distal spine on
 the outer edge.....*Praunus* (25)

 The scale's distal lobe is at least as long as it is wide and
 extends considerably beyond the distal spine on the outer edge....
 *Paramysis* (26)

13. Each eye has a frontal and lateral cornea (fig 209 and 210)
 *Euchaetomera* (23)

 One cornea or none at all.....14

14. Normal eyes.....15

 Rudimentary eyes.....20

15. The telson has no lateral spines.....16

 The telson has spines on at least one part of each side.....18

* here the author appears to use "patte thoracique" which elsewhere
means "endopod of thoracic appendage" to mean "(the whole) thoracic
appendage".

16. Not counting the spines, the telson width is greater than its length (there are 4 spines and 2 median feathery setae on the truncated tip).....*Erythroops* (21)
The telson is longer than it is wide.....17
17. The antennular peduncles are clearly longer than the antennal scales*Katerythroops* (21)
The antennal scales are longer than the antennular peduncles
.....*Meterythroops, Parerythroops* (21)
18. The cephalothorax extends backwards beyond the last pair of thoracic appendages.....*Longithorax* (23)
The cephalothorax does not have this characteristic and is shorter than the abdomen.....19
19. The rostrum is well developed, pointed and clearly extends beyond the eye insertion.....*Metamblyops* (23)
Rostrum hardly noticeable and does not cover the eye insertion.....
.....*Hypererythroops* (23)
20. The carapace is pointed in the frontal region and clearly extends beyond the eyes.....*Paramblyops* (22)
The frontal region is rounded and does not extend beyond the eyes....21
21. The eye stalks are fused into a plate which may or may not have a small sagittal cut.....22
The eye stalks or rudiments are separated.....25
22. The eye plate is cut sagittally.....23
The eye plate is not cut.....*Michthyops theeli* (23)
23. The telson has more than 20 lateral spines.....*Amblyops* (22)
The telson has less than 15 lateral spines.....24
24. The uropodal endopod is at least as long as the exopod....*Michthyops parva* (23)
The endopod is shorter.....*Pseudomma* (22)
25. The eyes, which are more or less quadrangular and flattened or truncated in front, are close together.....*Amblyops* (22)
The eyes have a different shape and have a clear gap between them...26
26. The eyes are stalked, rounded and have a fairly normal shape...*Dactylamblyops* (22)
The eyes are pointed in the outer corner and have no well-defined stalk.....27
27. Telson totally lacking in spines (?).....*Dactylamblyops sarsi* (22)
Telson has at least a few terminal spines....*Dactylerythroops* (22)
28. Telson has bifurcated tip (fig 6).....29
Telson has rounded, pointed or truncated tip.....35
29. Eyes are more or less abnormal.....30
Eyes normal.....31
30. Eyes flattened in front without a distinct cornea,
telson is about twice as long as it is large.....*Bathymysis* (24)
Eyes pointed at end, telson only a little longer than it is wide....
.....*Pseudomysis* (24)
31. The telson's small terminal bifurcation has no spinules along the edges.....32
The edges of the bifurcation have spinules.....33
32. A pair of feathery setae are inserted in the point of the telson's bifurcation.....*Mysideis* (24)
No feathery setaw at point of bifurcation...*Mysidopsis angusta* (24)
33. Only the distal half of the telson's lateral edges is spiny.....34
The telson is spiny all along its lateral edges.....*Mysis* (25)
34. A pair of feathery setae are inserted in the point of the telson's bifurcation.....*Tenagomysis* (24)
No feathery setae at point of bifurcation...*Mysidetes* (24)

35. Very short, unusually shaped telson (fig 336). Eyes much longer than anterior width of carapace.....*Mesopodopsis* (27)
Telson has different shape. Eyes shorter than anterior width of carapace.....36
36. The inner edge of the uropodal endopod is spiny up to the distal extremity.....37
The inner edge of the uropodal endopod has no spines in the distal half.....38
37. The distal segment of the antennal scale is several times longer than it is wide.....*Leptomysis* (24)
The distal segment of the antennal scale is minuscule and about as long as it is wide.....*Stilomysis* (27)
38. The telson is rounded at the end or slightly truncated with 4 distal spines. The distal segment of the antennal scale is clearly longer than it is wide.....*Neomysis* (27)
The telson is substantially truncated and the flat end bears only 2 spines. The distal segment of the antennal scale is no longer than it is wide.....*Mysidopsis* (24)

Bibliography

Identification

General Information

Biology (excluding anatomy, physiology, embryology)

Marine vertebrate food and economy

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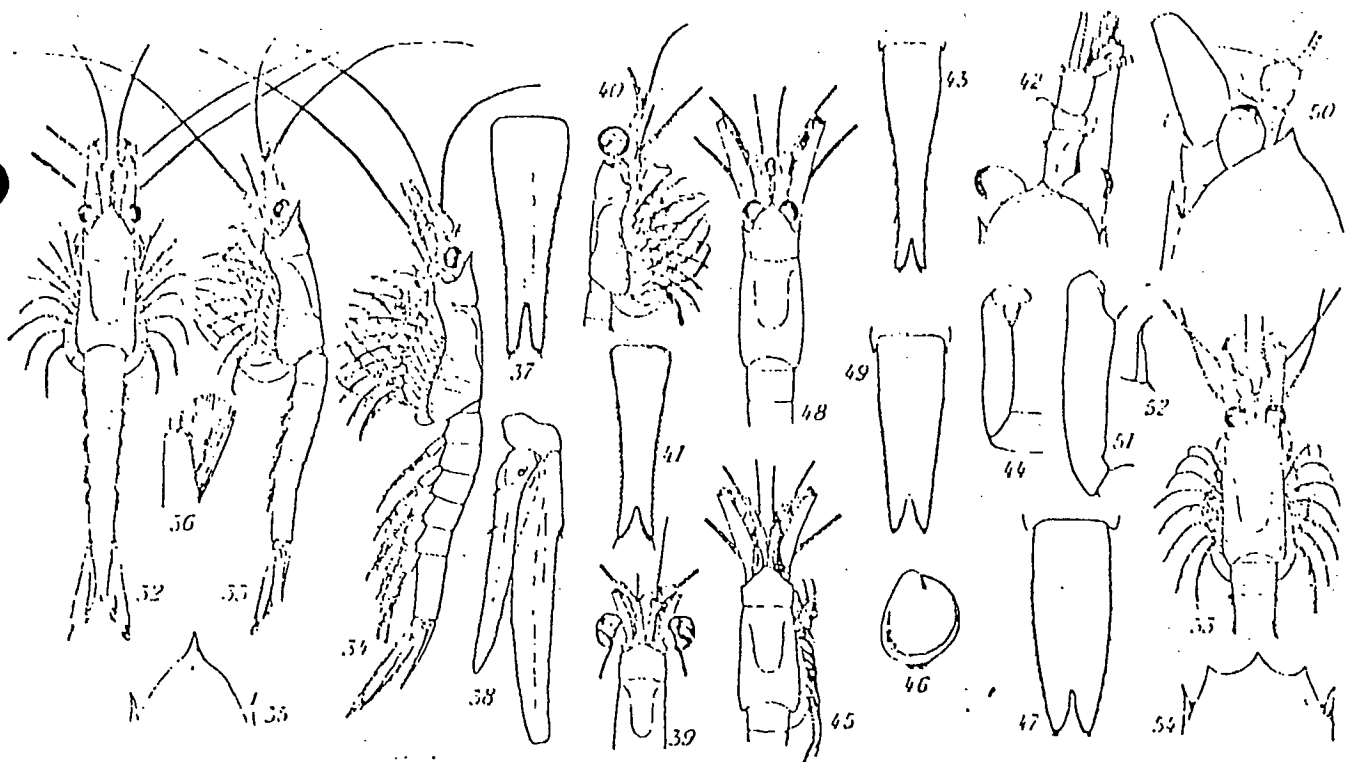
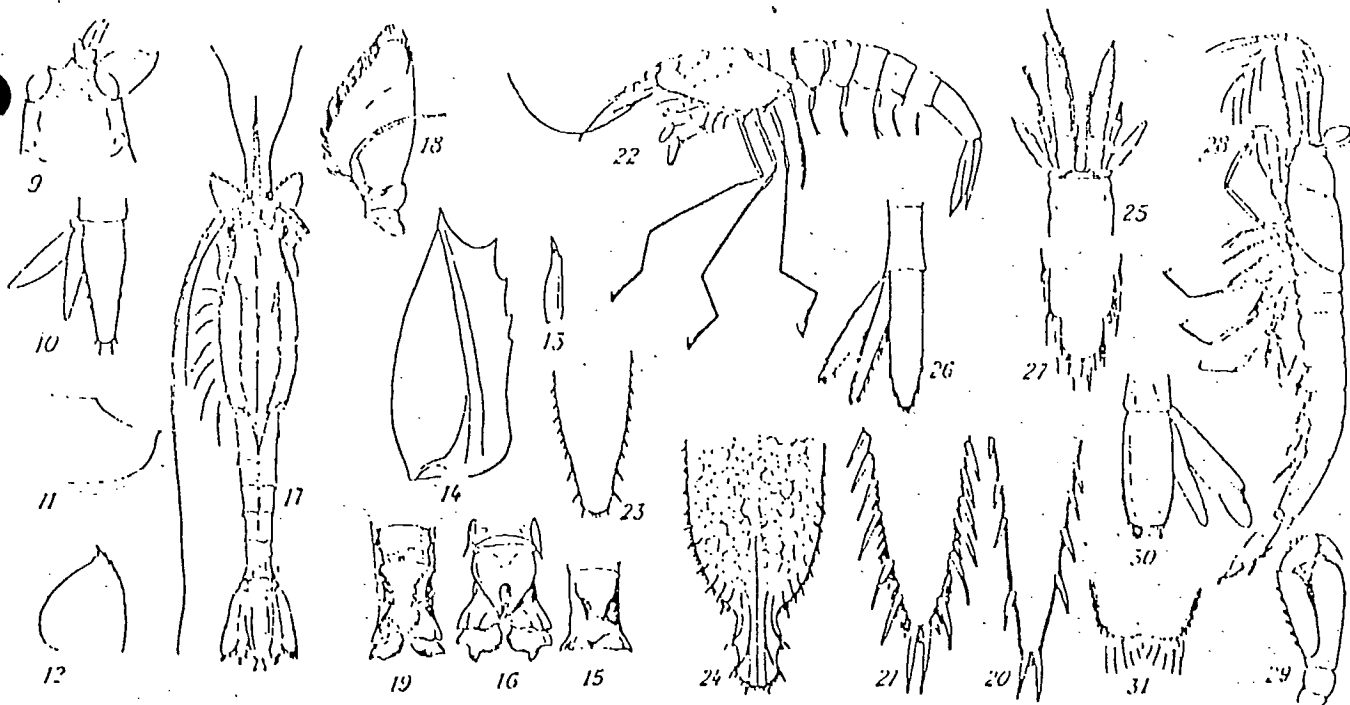
Zooplankton
Pamphlet 19

MYSIDACEA

Families: Lophogastridae, Eucopiidae,
Petalophthalmidae,
Mysidae (part 1): BOREOMYSINAE
(by H Nouvel)
1950

(See next page for diagram)

(After various authors. - Different scales).



(D'après divers auteurs. --- Echelles différentes).

Family LOPHOGASTRIDAE G.O. Sars

Genus LOPHOGASTER M. Sars:

Frontal region of carapace is tridentate. Telson is truncated and bears 2 pairs of spines at tip.

Genus GNATHOPHAUSIA Will.-Suhm

Carapace with denticulate rostrum. Telson's distal extremity ends in small crescent-shaped plate. Adults very large. Bathypelagic.

2. *Gn. gigas* Will.-Suhm 1875. - (Fig 13-16). - Infero-posterior corners of carapace pointed. Antennal scale pointed at end.
3. *Gn. zoea* Will.-Suhm 1875. - (Fig 17-19). - Carapace rounded at infero-posterior corners. Antennal scale apical lobe is rounded.

Family EUCOPIIDAE G.O. Sars

Genus EUCOPIA Dana

4. *E. hanseni* Nouvel 1942. - (Fig 20). - Telson pointed at end; 10 to 20 small spines separate distal spines from last two large lateral spines.
5. *E. grimaldii* Nouvel 1942. - (Fig 21). - Telson pointed at end; 2 to 4 small spines between the distal spines and the last two large lateral spines.
6. *E. sculpticauda* Faxon 1893. - (Fig 22-24). - Telson rounded at end, honeycomb pattern on dorsal side.

Family PETALOPHTHALMIDAE Czerniavsky

Genus HANSENOMYSIS Stebbing

7 pairs of exopods for swimming. Carapace rounded in front. Eyes in shape of triangular blade.

Genus PETALOPHTHALMUS Will.-Suhm

6 pairs of exopods for swimming. Short rostrum. Eyes are oval, stalked, and stand erect. First 2 pairs of thoracic appendages bear lateral, lamellar epipods.

Legend for figures

- Fig 9-12. *Lophogaster typicus*: 9, anterior end, dorsal view; 10, telson, left uropod; 11, latero-posterior part of carapace; 12, antennal scale.
Fig 13-16. *Gnathophausia gigas*: 13 and 14, antennal scale from a young specimen and from a large one; 15 and 16, ventral view of 6th abdominal somite in young and adult specimens.
Fig 17-19. *Gnathophausia zoea*: 17, dorsal view; 18, antennal scale; 19, ventral view of 6th abdominal somite.
Fig 20. *Eucopia hanseni*: end of telson.

- Fig 21. *Eucopeia grimaldii*: end of telson.
Fig 22-24. *Eucopeia sculpticauda*: 22, lateral view; 23 and 24, end of telson in young and adult specimens.
Fig 25-27. *Hansenomysis fyllae*: 25, anterior end, dorsal view; 26, telson and left uropod; 27, end of telson.
Fig 28-31. *Petalophthalmus armiger*: 28, lateral view; 29, 2nd thoracic appendage; 30, telson and right uropod; 31, end of telson.
Fig 32-38. *Boreomysis arctica*: 32, ♀, dorsal view; 33, ♀, lateral view; 34, ♂, lateral view; 35, anterior part of carapace, dorsal view; 36, end of antennal scale; 37, telson; 38, ventral view of left uropod.
Fig 39-41. *Boreomysis megalops*: 39, anterior end, dorsal view; 40, ♀, anterior end, lateral view; 41, telson.
Fig 42-44. *Boreomysis microps*: 42, anterior end, dorsal view; 43, telson; 44, end of 2nd thoracic endopod.
Fig 45-47. *Boreomysis scyphops*: 45, anterior end, dorsal view; 46, eye; 47, telson.
Fig 48-49. *Boreomysis nobilis*: 48, anterior end, dorsal view; 49, telson.
Fig 50-52. *Boreomysis semicaeca*: 50, anterior end, dorsal view; 51, 2nd last segment of 2nd thoracic endopod; 52, lateral spine on same segment.
Fig 53-54. *Boreomysis tridens*: 53, anterior end, dorsal view; 54, anterior end of carapace, dorsal view.

Family MYSIDAE Dana
(see also pamphlets 20-27)
Subfamily BOREOMYSINAE Holt & Tattersall

The uropodal exopod is never clearly divided into 2 segments. On its outer edge is a short, smooth, proximal part which is separated by a few spines from a longer distal part covered with setae (fig 38).

Genus BOREOMYSIS G.O. Sars
Key for identifying species:

1. Regressed, cupuliform eyes, without visual elements.....*scyphops*
Eyes with pigmented cornea.....2
2. Carapace has tridentate frontal region.....*tridens*
Frontal region rounded or with a single median point.....3
3. Enormous eyes (as large as abdominal somites). Carapace frontal region rounded.....*megalops*
Eyes much smaller than abdominal somites. Rostrum more or less pronounced.....4
4. Cornea narrower than eye stalk.....5
Cornea much wider than eye stalk.....6
5. Cornea almost as wide as stalk.....*microps*
Cornea much narrower.....*semicaeca*
6. Antennal scale has pointed tip and extends beyond the antennular peduncle by more than the latter's length.....*nobilis*
Antennal scale has truncated tip and extends beyond the antennular peduncle by less than the latter's length.....*arctica*

References

Distribution	Species
(Lophogastridae, Eucopiidae, Petalophthalmidae, Borcomysinae)	
Arctic seas.....	9, 10, 11, 14, 15
Faeroes, Iceland.....	3, (4,5) ?, 9, 10, 11, 12, 14
South of Norway.....	1, 15
North Sea (W, S, SE).....	--
Skagerrak.....	15
Baltic.....	--
Channel, Irish Sea.....	--
NW of Scotland, Shetlands.....	1, (4,5)?, 6, 7, 10, 11, 12, 15
W and SW of Ireland.....	1, 2, 3, (4,5)?, 6, 7, 8, 10, 11, 12, 15
Bay of Biscay.....	1, 2, 3, 4, 5, 6, 12, 13, 15

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton
Pamphlet 20

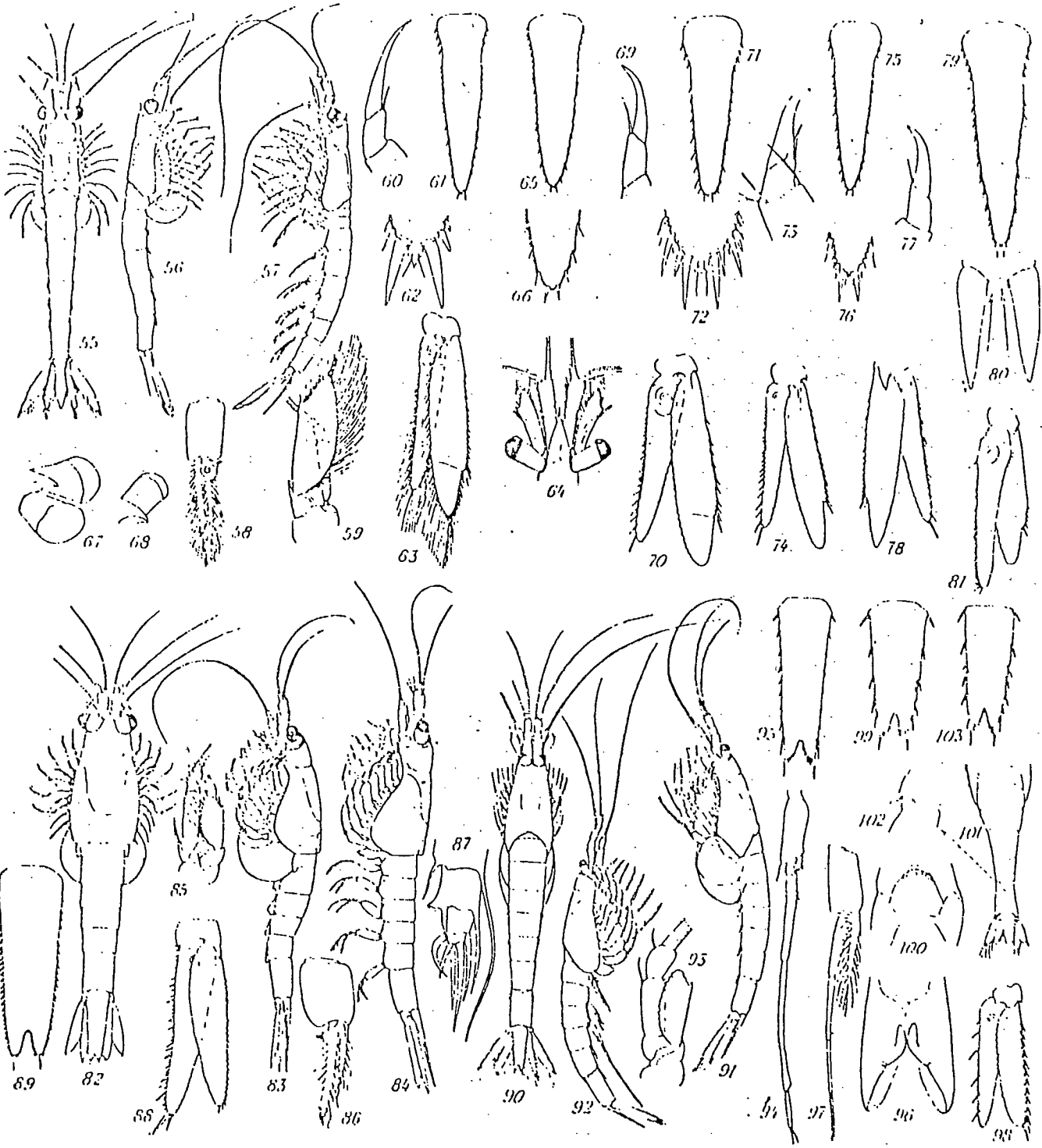
MYSIDACEA

Family Mysidae (part 2):
SIRIELLINAE, GASTROSACCINAE

(By H Nouvel)

1950

(After various authors. - Different scales).



(D'après divers auteurs. -- Echelles différentes).

Family MYSIDAE Dana (part 2)

Subfamily SIRIELLINEAE Norman

Uropodal exopod divided into 2 segments: proximal segment bears spines on outer edge, distal segment bears setae.

Genus SIRIELLA Dana

Key for identifying species:

1. Rostrum very clearly extends beyond the antennular peduncle's proximal segment. (Antennal scale more than 4 times longer than it is wide. Spines around telson in characteristic pattern.) *armata*
The rostrum is much shorter, its tip not reaching the end of the antennular peduncle's proximal segment. (Antennal scale is at most 3½ times longer than it is wide.) 2
 2. Inner edge of uropodal endopod bears spines of unequal length 3
Inner edge of uropodal endopod bears spines becoming progressively longer towards tip 4
 3. At the tip of the telson between the 2 large distal spines is a little tridentate plate of which the middle spinule is much longer than the others *norvegica*
Between the 2 large, distal spines on the telson are 3 spinules of equal length *clausi*
 4. Rostrum very short and curves strongly downwards. In ♂, antennular peduncle's distal segment bears single seta on inner edge *brooki*
Rostrum not curved. In ♀, antennular peduncle's distal segment bears 2 to 3 setae on inner edge 5
 5. Antennal scale's length 3 times greater than width. In last pair of endopods, length of segment before dactylus is as great as width ... *jaltensis crassipes*
Length of antennal scale 3 to 3½ times as great as width. Length of segment before dactylus greater than width *gordonae*
21. *S. gordonae* Zimmer 1932

N B: *S. thompsoni* does exist in the extreme south of the geographical region we are considering. Species is characterized by uropodal endopod being longer than exopod (fig 81).

Subfamily GASTROSACCINAE Norman

Uropodal exopod not divided into 2 segments and bears spines along at least the distal 2/3 of the outer edge. Third pleopod of ♂ modified.

Genus ANCHIALINA Norman

Legend for figures

- Fig 55 - 63. *Siriella norvegica*: 55, ♂, dorsal view; 56, ♀, lateral view; 57, ♂, lateral view; 58, 3rd pleopod in ♂; 59, antennal scale; 60, end of last pereopod; 61, telson; 62, tip of telson; 63, left uropod, ventral view.
- Fig 64 - 66. *Siriella armata*: 64, anterior end, dorsal view; 65, telson; 66, tip of telson.
- Fig 67 - 68. *Siriella brooki*: rostrum and eyes.
- Fig 69 - 72. *Siriella clausi*: 69, end of last pereopod; 70, underside of left uropod; 71, telson; 72, tip of telson.
- Fig 73 - 76. *Siriella jaltensis crassipes*: 73, end of last pereopod; 74, underside of left uropod; 75, telson; 76, tip of telson.
- Fig 77 - 80. *Siriella gordonae*: 77, end of last pereopod; 78, ♀, underside of right uropod; 79, telson; 80, tip of telson.
- Fig 81. *Siriella thompsoni*: upper side of right uropod.
- Fig 82 - 89. *Anchialina agilis*: 82, ♂, dorsal view; 83, ♀, lateral view; 84, ♂, lateral view; 85, base of antenna; 86, 3rd pleopod in ♂; 87, tip of exopod of 3rd pleopod in ♂; 88, underside of left uropod; 89, telson.
- Fig 90 - 95. *Gastrosaccus normani*: 90, ♂, dorsal view; 91, ♀, lateral view; 92, ♂, lateral view; 93, base of antenna; 94, 3rd pleopod in ♂; 95, telson.
- Fig 96 - 99. *Gastrosaccus sanctus*: 96, posterior end of carapace, dorsal view; 97, 3rd pleopod in male; 98, underside of left uropod; 99, telson.
- Fig 100 - 103. *Gastrosaccus spinifer*: 100, carapace's posterior notch, dorsal view; 101, posterior end of body, lateral view; 102, dorsal lamella of 5th abdominal sonite; 103, telson.

Genus GASTROSACCUS Norman

Key for identifying species:

1. The 2nd last abdominal somite has on its posterior edge a small, slightly raised, dentiform plate (fig 102). The posterior edge of the carapace bears small, triangular blades pointing backwards (fig 100) *spinifer*
5th abdominal somite has no raised plate. Posterior edge of carapace differently covered 2
2. Telson length about twice as great as width. Telson usually has 5 lateral spines. 3rd pleopods in male are biramous *sanctus*
Telson length about 3 times as great as width. Telson bears at least 7 lateral spines, with distal one being much longer than preceding ones. 3rd pleopods in ♂ have no clearly developed endopod 3
3. The posterior edge of the carapace bears 2 dorsal, tongue-like projections curled down towards the front (as in *G sanctus*, fig 96). Distal segment of 3rd pleopod in ♂ is distinctly shorter than 2nd last one *lobatus*
No tongue-like projections on posterior edge of carapace. Distal and 2nd last segments of 3rd pleopod in ♂ are about same length *normani*

References

See pamphlet 19 for other references

Distribution	Species
(Siriellinae, Gastrosaccinae)	
N & W of Norway	--
SW of Norway	17, 25
Kattegat, Skagerrak	17, 25
Øresund (as far as Bornholm)	25
Baltic	--
E of Scotland	16, 17, 19, 25
SW of the North Sea	16, 17, 18, 19, 21, 22, (23? 23a?), 24, 25
SE of the North Sea	(16), 17, (19), 25
W of Scotland	16, 17, 18, 20, (23?, 23a?), 25
W and SW of Ireland	16, 17, 18, 22, 23, 23a, 24, 25
Irish Sea	16, 17, 18, (23? 23a?), 24, 25
Channel, Bay of Biscay	16, 17, 18, 19, 22, 23, 23a, 24, 25

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton

Pamphlet 21

MYSIDACEA

Family Mysidae (part 3):

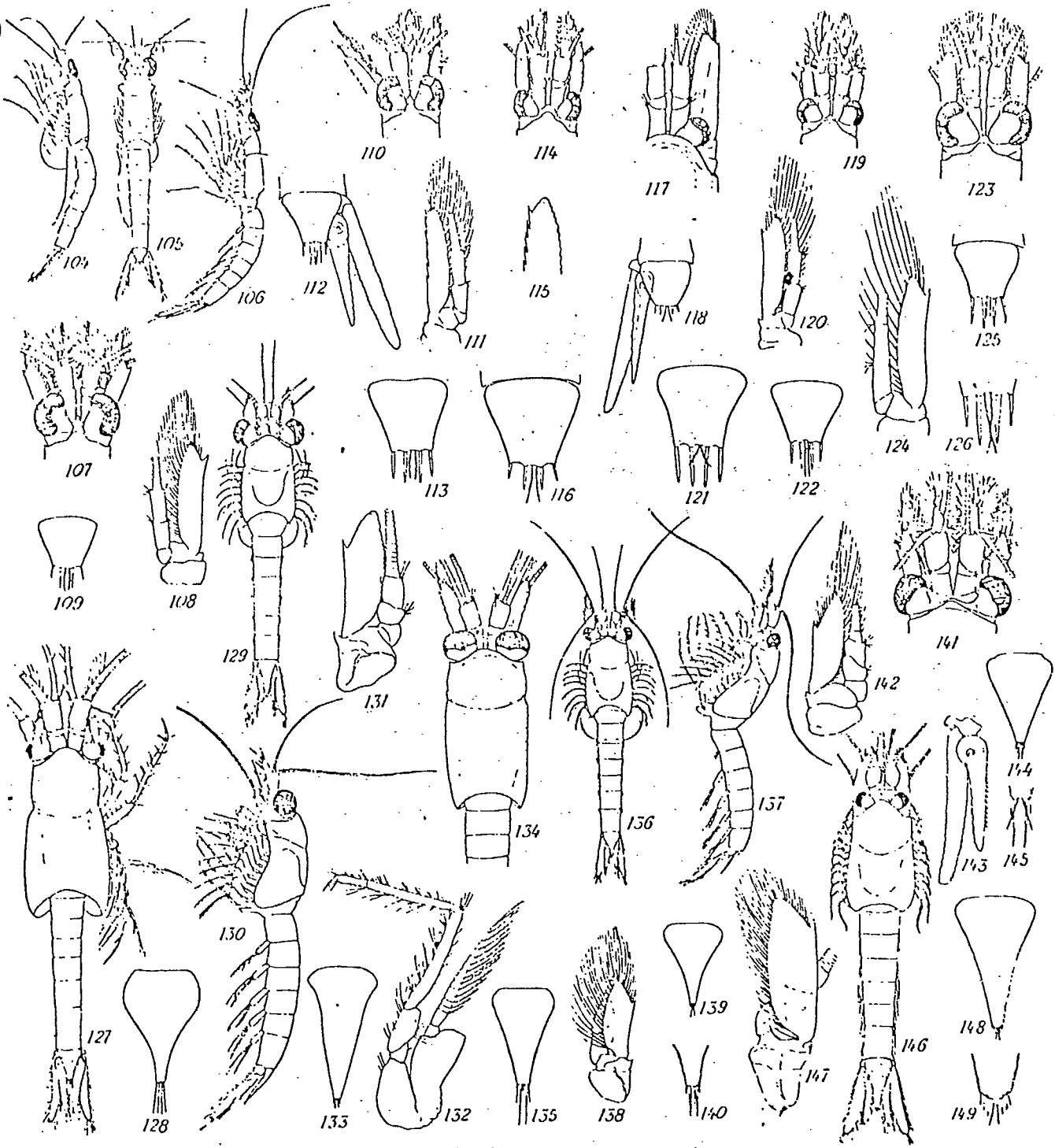
MYSINAE (part 1):

Erythropini (part 1):

(by H. Nouvel)

1950

(After various authors. - Different scales.)



(D'après divers auteurs. — Echelles différentes).

Family MYSIDAE (part 3)

Subfamily MYSINAE Hansen

Uropodal exopod covered exclusively with feathery setae. Labrum, mandibles and first 2 pairs of thoracic endopods do not have Mysidellinae characteristics (cf pamphlet 27).

Tribe Erythropini Hansen
(see also pamphlets 22 and 23)

The outer edge of the antennal scale (rarely absent or styliform) is always smooth, sometimes denticulate, and ends in a distal spine. The 6th segment of the thoracic endopods generally has 2 joints of which the proximal one (sometimes absent) is oblique (fig 132). In the ♂, the 4 back pairs of pleopods are well developed, the 4th pair of exopods are not differentiated but the endopods may bear modified setae.

Genus ERYTHROPS G O Sars

Key for identifying species:

1. Outer edge of antennal scales are serrated 2
Outer edge not serrated 3
2. Distal lobe of antennal scales very small, much shorter than distal spine on outer edge *serrata*
Scales' distal lobe extends much further than distal spine .. *abyssorum*
3. Eyes very small: about as wide as antennal scales; the cornea does not extend beyond the carapace at the side *glacialis*
Eyes are much wider than antennal scales and extend beyond the carapace 4
4. From a dorsal view, the cornea's width is about equal to the eye's length 5
The cornea's width is greater than the eye's length ... *erythropthalma*
5. The eyes inserted very close to each other. None of the thoracic endopods when stretched forward reaches the distal end of the antennal scales *elegans*
The eyes are quite far apart at the base. When extended forward, all thoracic endopods reach further than the distal end of the antennal scales *microps*

Legend for figures

- Fig 104 - 109. *Erythroptis erythroptis*: 104, ♀, lateral view; 105, ♂, dorsal view; 106, ♂, lateral view; 107, ♂, front end, dorsal view; 108, base of antenna; 109, ♀, telson.
- Fig 110 - 113. *Erythroptis serrata*: 110, ♂, front end, dorsal view; 111, base of antenna; 112, ♂, telson and right uropod; 113, ♀, telson.
- Fig 114 - 116. *Erythroptis abyssorum*: 114, ♂, front end, dorsal view; 115, tip of antennal scale; 116, ♀, telson.
- Fig 117 - 118. *Erythroptis glacialis*: 117, ♂, front end, dorsal view; 118, telson and left uropod.
- Fig 119 - 122. *Erythroptis microps*: 119, ♂, front end, dorsal view; 120, base of antenna; 121, ♀, telson; 122, ♂, telson.
- Fig 123 - 126. *Erythroptis elegans*: 123, ♂, front end, dorsal view; 124, base of antenna; 125, ♀, telson; 126, ♂, telson.
- Fig 127 - 128. *Katerythroptis oceanae*: 127, ♂, dorsal view; 128, ♀, telson.
- Fig 129 - 133. *Meterythroptis robusta*: 129, ♀, dorsal view; 130, ♂, lateral view; 131, base of antenna; 132, thoracic appendage (4th pair); 133, telson.
- Fig 129 - 133. *Meterythroptis robusta*: 129, ♀, dorsal view; 130, ♂, lateral view; 131, base of antenna; 132, thoracic appendage (4th pair); 133, telson.
- Fig 134 - 135. *Meterythroptis picta*: 134, ♂, front end, dorsal view; 135, telson.
- Fig 136 - 140. *Parerythroptis abyssicola*: 136, ♀, dorsal view; 137, ♂, lateral view; 138, base of antenna; 139, telson; 140, tip of telson.
- Fig 141 - 145. *Parerythroptis obesa*: 141, ♂, front end dorsal view; 142, base of antenna; 143, underside of right uropod; 144, telson; 145, tip of telson.
- Fig 146 - 149. *Parerythroptis spectabilis*: 146, ♂, dorsal view; 147, base of antenna; 148, telson; 149, tip of telson.

Genus METERYTHROPS S. I. Smith

In ♂, the first pair of pleopodal exopods are normal.

33. *M. robusta* Smith 1879. - (Fig 129 - 133). Outer edge of antennal scale is smooth.
34. *M. picta* Holt and Tattersall 1905. - (Fig 134 - 135). Part of antennal scale's outer edge is serrated.

Genus PARERYTHROPS G. O. Sars

In ♂, the 1st pair of pleopods are very rudimentary.

35. *P. spectabilis* G. O. Sars 1876. - (Fig 146 - 149). The eyes do not extend beyond the carapace on the sides. The tip of the telson bears 6 spines.
36. *P. abyssicola* G. O. Sars 1876. - (Fig 136 - 140). The eyes extend beyond the carapace on the sides. The tip of the telson bears 4 spines. The cornea's width is less than half than that of the anterior carapace.
37. *P. obesa* G. O. Sars 1864. - (fig 141 - 145). The eyes extend considerably beyond the carapace on the sides. The tip of the telson bears 4 spines. The cornea's width is equal to half that of the anterior carapace.

Distribution

(see pamphlet 23)

References

For other references, see pamphlets 19 and 20.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton
Pamphlet 22

MYSIDACEA

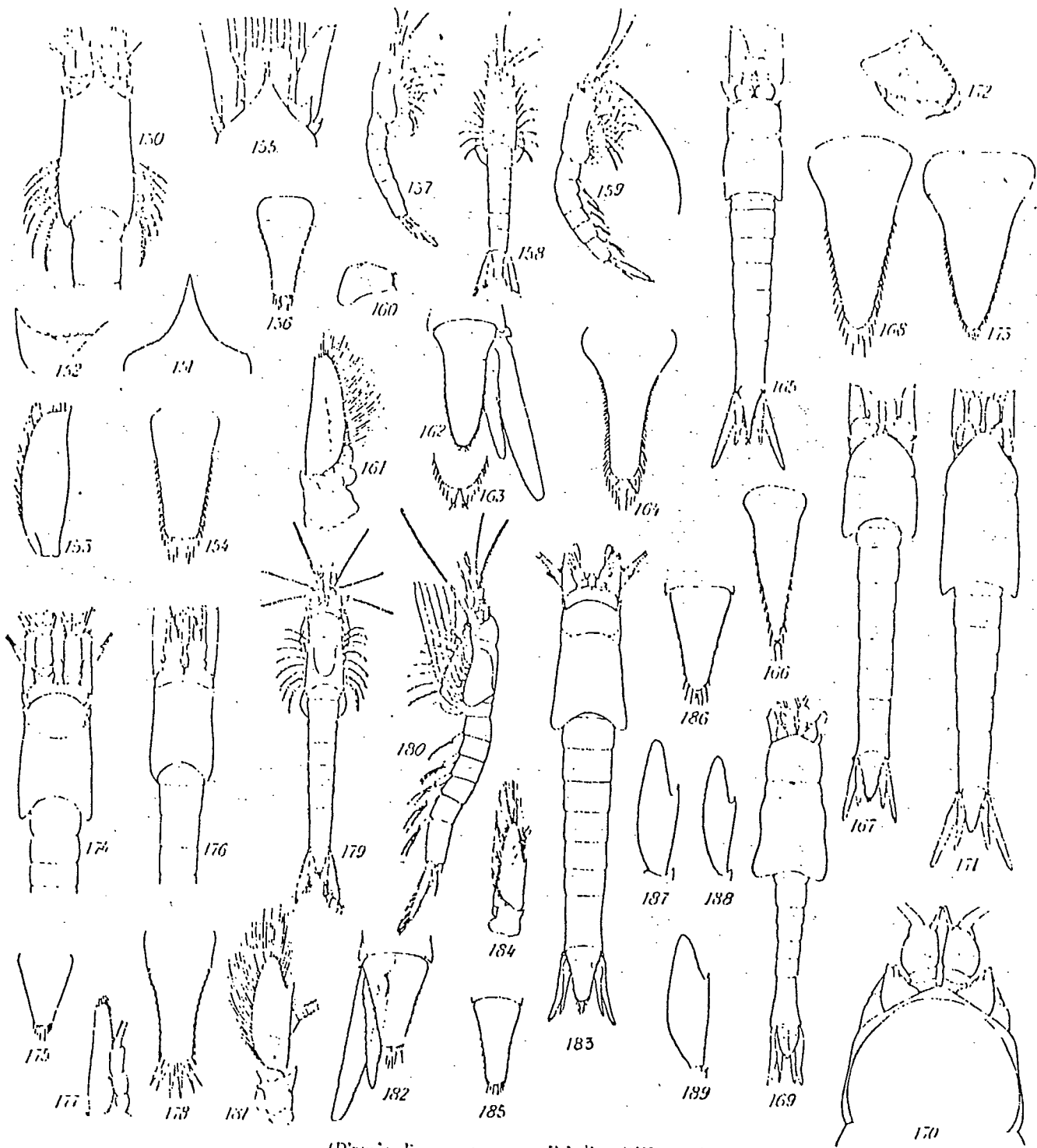
Family Mysidae (part 4);

MYSINAE (part 2): Erythropini

(part 2)

(by H Nouvel)

1950



(D'après divers auteurs. — Echelles différentes).

Fig 150 -154. *Paranblyops instrata*: 150, ♂, partie antérieure, vue dorsale; 151, partie antérieure de la carapace, vue dorsale; 152, oeil, vue dorsale; 153, écaille antérieure; 154, telson.
 Fig 155 -156. *Paranblyops bidigitata*: 155, partie antérieure, vue dorsale; 156, telson.

Fig. 157 -163. *Amblyops ablucriata*: 157, ♀, vue latérale; 158, ♀, vue dorsale; 159, ♂, vue latérale; 160, oeil, vue dorsale; 161, base de l'antenne; 162, telson et uropode droit; 163, extrémité du telson.

Fig. 164. *Amblyops kempi*, telson.

Family MYSIDAE Dana (part 4)

Subfamily MYSINAE Hansen (part 2)

Tribe Erythropini Hansen (part 2)

Genus PARAMBLYOPS Holt & Tattersall

38. *P. rostrata* Holt and Tattersall 1905. - (Fig 150 - 154). - Anterior edge of carapace is finely serrated. The ocular plates have a single point at the outer corner.
39. *P. bidigitata* Tattersall 1911. - (Fig 155 - 156). Anterior edge of carapace is not serrated. The eye has 2 anterior points, 1 inner and 1 outer.

Genus AMBLYOPS G. O. Sars

40. *A. kempfi* (Holt and Tattersall 1905). - (Fig 164). Telson is linguiform, distal spines are as long as the telson's width towards its distal 1/3.
41. *A. abbreviata* (M. Sars 1869). - (Fig 157 - 163). Telson linguiform, distal spines much shorter than in *A. kempfi*.
42. *A. tenuicauda* Tattersall 1911. - (Fig 165 - 166). Triangular telson. Eyes bear a small dorsal protuberance on inner side.

Genus DACTYLAMBLYOPS Holt & Tattersall

43. *D. goniops* Tattersall 1907. - (Fig 167 - 168). The median length of the carapace is less than the total length of the 1st 3 abdominal somites. Tip of telson bears shorter spine between 2 longer ones.
44. *D. sarsi* (Ohlin 1901). - (Fig 169 - 170). Carapace almost as long as 6 abdominal somites together. Eyes are pointed in front. Telson bears no spines?
45. *D. thomatops* Tattersall 1907. - (Fig 171 - 173). Carapace a bit longer than 5 first abdominal somites together. Frontal region of carapace shaped like ogive arch with rounded point. Two distal spines of telson are of equal length, not separated by shorter spine.

Legend for figures

- Fig 165 - 166. *Amblyops tenuicauda*: 165, dorsal view; 166, telson.
- Fig 167 - 168. *Dactylamblyops goniops*: 167, dorsal view; 168, telson.
- Fig 169 - 170. *Dactylamblyops sarsi*: 169, dorsal view; 170, front end, dorsal view.
- Fig 171 - 173. *Dactylamblyops thomatops*: 171, , dorsal view; 172, lateral view of eye; 173, telson.
- Fig 174 - 175. *Pseudomma nanum*: 174, front end, dorsal view; 175, telson.
- Fig 176 - 178. *Pseudomma calloplura*: 176, front end, dorsal view; 177, base of antenna; 178, telson.
- Fig 179 - 182. *Pseudomma truncatum*: 179, † , dorsal view; 180, , lateral view; 181, base of antenna; 182, telson and left uropod.
- Fig 183 - 185. *Pseudomma affine*: 183, - , dorsal view; 184, base of antenna; 185, telson.
- Fig 186 - 188. *Pseudomma roseum*: 186, telson; 187, † , antennal scale; 188, , antennal scale.
- Fig 189. *Pseudomma frigidum*: , antennal scale.
- Fig 190 - 192. *Dactylerythrops dactylops*: 190, † , front end, dorsal view; 191, dorsal view of eye; 192, telson - a. shallow water variety, b. deep water variety.
- Fig 193 - 194. *Dactylerythrops bidigitata*: 193, front end, dorsal view; 194, telson.
- Fig 195 - 196. *Dactylerythrops gracilura*: 195, front end, dorsal view; 196, telson.

Genus DACTYLERYTHROPS Holt & Tattersall

- 46. *D. dactylops* Holt and Tattersall 1905. - (Fig 190 - 192). The antennal scale barely extends beyond the antennular peduncle.
- 47. *D. bidigitata* Tattersall 1907. - (Fig 193 - 194). The antennal scale extends much beyond the antennular peduncle. Its distal lobe does not extend beyond the spine on the outer edge. Eyes very visible.
- 48. *D. gracilura* Tattersall 1907. - (Fig 195 - 196). Antennal scale much longer than antennular peduncle with the distal lobe extending much further than the distal spine on the outer edge. Eyes not very visible.

Genus PSEUDOMMA G. O. Sars

Key for identifying species:

- 1. The distal lobe of the antennal scale does not extend beyond or barely extends beyond the point of the distal spine on the outer edge 2
The distal lobe extends considerably beyond the spine 3
- 2. The telson has no lateral spines *nanum*
The telson bears spines laterally along the sides of its distal 2/3 *calloplura*
- 3. Telson definitely truncated. The truncated part bears 4 distal spines which are clearly longer than the lateral ones *truncatum*
Telson has rounded tip. No marked difference between lateral and distal spines 4
- 4. The rounded distal part of the telson bears several pairs of spines, their length decreases towards the sides *affine*
The rounded part of the telson bears 2 pairs of equally long spines clearly longer than the ones next to them 5
- 5. The length of the antennal scale's distal lobe is clearly greater than the scale's width *roseum*
The length of the distal lobe is about equal to the width of the scale *frigidum*

Distribution

(see pamphlet 23)

References

For other references see pamphlets 19, 20 and 21.

(After various authors. - Different scales).

Fig 150 - 154. *Paramblyops rostrata*: 150, ♂, front end, dorsal view; 151, front end of carapace, dorsal view; 152, eye, dorsal view; 153, antennal scale; 154, telson.

Fig 155, 156. *Paramblyops bidigitata*: 155, front end, dorsal view; 156, telson.

Fig 157 - 163. *Amblyops abbreviata*: 157, ♀, lateral view; 158, ♂, dorsal view; 159, ♀, lateral view; 160, eye, dorsal view; 161, base of antenna; 162, telson and right uropod; 163, tip of telson.

Fig 164. *Amblyops kempfi*: telson.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton
Pamphlet 23

MYSIDACEA
Family Mysidae (part 5):
MYSINAE (part 3): Erythropini
(part 3), Calyptommini.
(by H Nouvel)
1950

- Fig 197 - 200. *Longithorax fuscus*: 197, ♀, lateral view; 198, front end, dorsal view; 199, antennal scale; 200, telson.
- Fig 201 - 203. *Metamblyops oculata*: 201, dorsal view; 202, base of antenna; 203, telson.
- Fig 204 - 206. *Hypererythrops serriventer*: 204, dorsal view; 205, base of antenna; 206, telson.
- Fig 207 - 210. *Euchaetomera tenuis*: 207, ♂, dorsal view; 208, ♀, antennal scale; 209, eye, dorsal view; 210, eye, lateral view.
- Fig 211 - 212. *Arachnomysis leuckarti*: 211, ♂, lateral view; 212, ♀, front end, dorsal view.
- Fig 213 - 214. *Chunomysis diadema*: 213, ♀, dorsal view; 214, base of antenna.
- Fig 215 - 218. *Michthyops parva*: 215, ♀, lateral view; 216, antennal scale; 217, carapace frontal region and eye plate; 218, telson.
- Fig 219 - 221. *Michthyops theeli*: 219, carapace frontal region and eye plate; 220, base of antenna; 221, telson.

(After various authors. - Different scales).

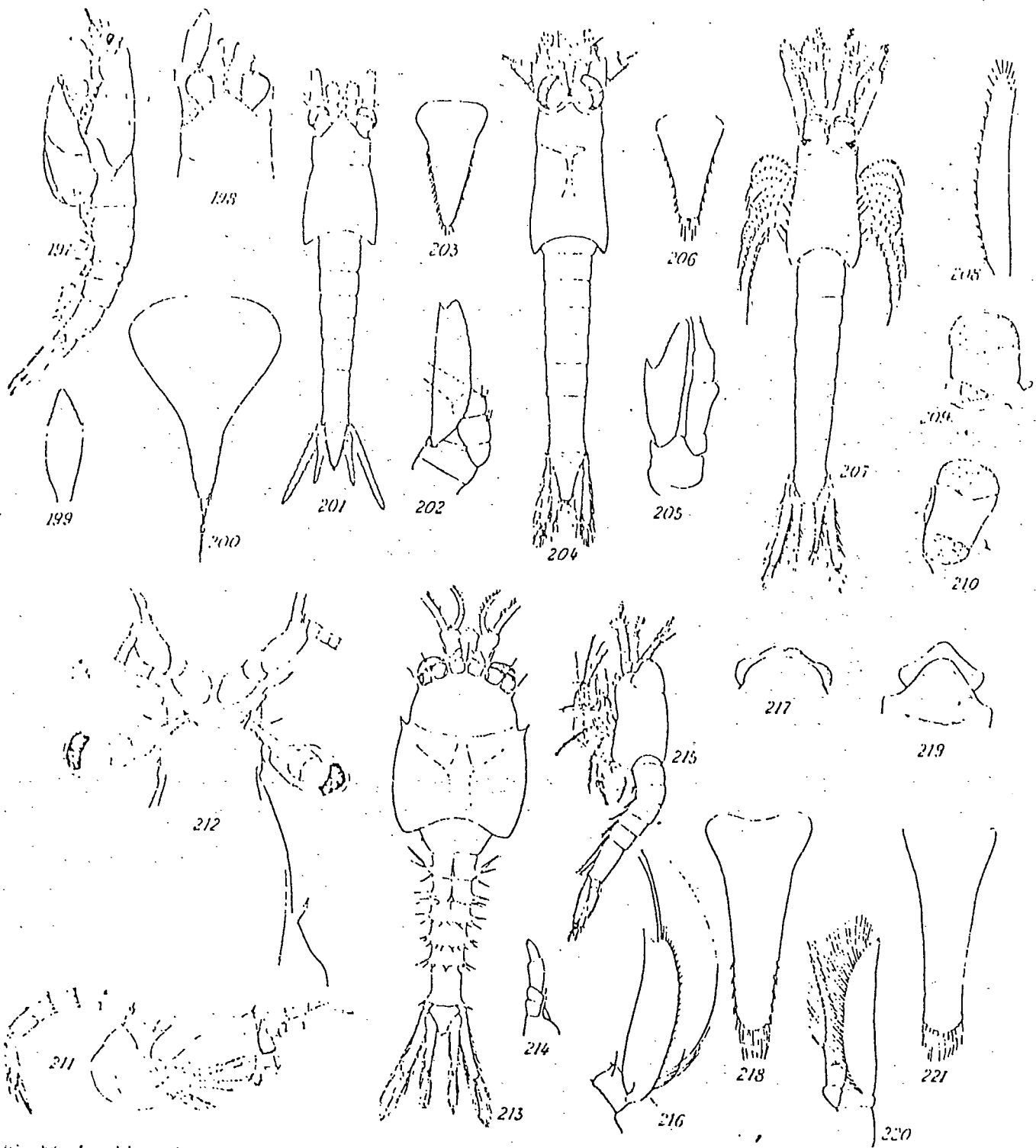


Fig. 197-200. *Leptothorax fascus*: 197, ♀, vue latérale; 198, partie cephalate, vue dorsale; 199, base de l'antenne; 200, telson.
 Fig. 201-203. *Mesocyclops oculatus*: 201, vue dorsale; 202, base de l'antenne; 203, telson.
 Fig. 204-206. *Hypocyclops scutiger*: 204, vue dorsale; 205, base de l'antenne; 206, telson.
 Fig. 207-210. *Leuchtorseta tenuis*: 207, ♂, vue dorsale; 208, ♀, partie cephalate; 209, œil, vue dorsale; 210, oril, vue latérale.

Fig. 211-212. *Anchoanymys leuckarti*: 211, ♀, vue latérale; 212, ♀, partie antérieure, vue dorsale.
 Fig. 213-214. *Chironomys diadema*: 213, ♀, vue dorsale; 214, base de l'antenne.
 Fig. 215-218. *Micrathyops parva*: 215, ♀, vue latérale; 216, ♂, antenne; 217, plaque frontale et plaque oculaire; 218, telson.
 Fig. 219-221. *Micrathyops theeli*: 219, plaque frontale et plaque oculaire; 220, base de l'antenne; 221, telson.

(D'après divers auteurs. — Echelles différentes.)

Family MYSIDAE Dana (part 5)

Subfamily MYSINAE Hansen (part 3)

Tribe Erythropini Hansen (part 3)

Genus LONGITHORAX Illig

Genus METAMBLYOPS Tattersall

Genus HYPERERYTHROPS Holt & Tattersall

Genus EUCHAETOMERA G. O. Sars

Genus ARACHNOMYSIS Chun

Genus CHUNOMYSIS Holt & Tattersall

Tribe Calyptommini Tattersall (subfamily)

Pleopods in the ♂ and ♀ are uniramous and unsegmented; the 5th pleopods in the ♂ and the 4th and 5th in the ♀ are longer than the others.

Genus MICHTHYOPS Tattersall

References

For other references, see pamphlets 19-22.

Distribution (Erythropini, Calyptommini)	Species
Iceland	26, 37, 41, 51, 53, 55
N of Norway	26, 27, 29, 31, 33, 35, 36, 37, 41, 51, 53.
W of Norway	26, 27, 29, 31, 35, 36, 37, 41, 52, 53.
S of Norway and Skagerrak	26, 27, 30, 31, 37, 41, 52, 53.
Kattegat, Øresund	30, 31.
Baltic	—
North of Scotland, Shetlands, Faeroes ..	26, (27?), 31, 34, 37, 38, 40, 41, 42, 43, 45, 46, 49, 50, 52, 53, 56, 60.
E of Scotland	26, (27?), 30, 31, 37.
SW and SE of North Sea	30
Channel	30
W of Scotland	26, 31, 34, 38, 40, 41, 51, 52.

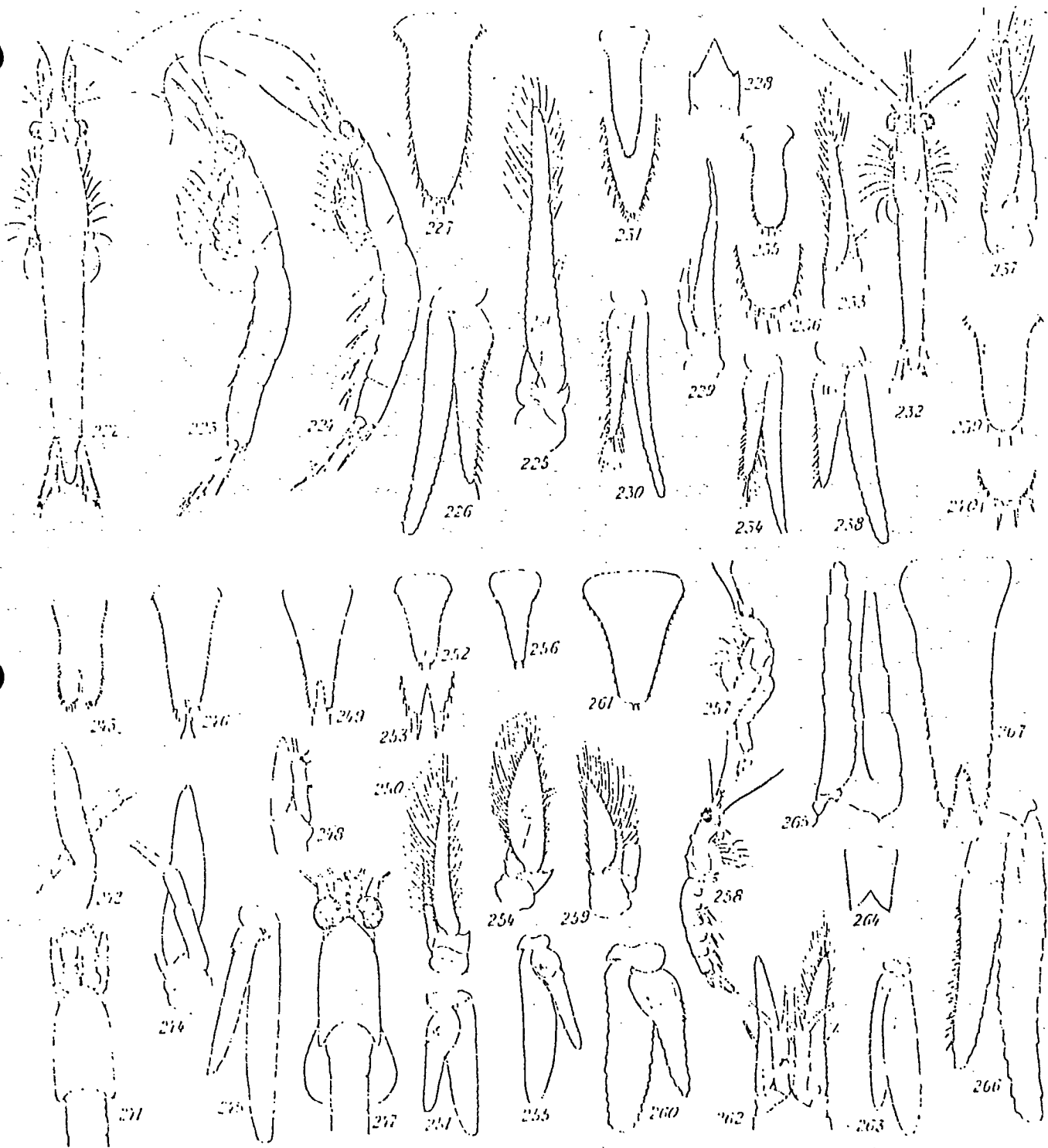
W and SW of Ireland	26, 29, 30, 31, 32, 34, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 52, 55, 56, 57, 58, 59, 60, 61.
Irish Sea	26, 30, 31.
Bay of Biscay	30, 34, 38, 41, 42, 55, 58.
Arctic seas	27, 28, 29, 31, 33, 35, 44, 51, 54, 62.
Kara & Barents Seas	27, 31, 33, 37, 51, (54), 62.
Between Norway and Iceland	28, 31, 33, 35, 54.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton
Pamphlet 24

MYSIDACEA
Family Mysidae (part 6):
MYSINAE (part 4): Leptomysini
(by H Nouvel)
1950

(After various authors. - Different scales).



(D'après divers auteurs. -- Echelles différentes).

Family MYSIDAE Dana (part 6)

Subfamily MYSINAE Hansen (part 4)

Tribe Leptomysini Hansen

The 6th segment of the thoracic endopods have 2 or 3 joints of which none are oblique. In the ♂, the 4 posterior pairs of pleopods are well developed and used for swimming (except in *Mysidetes*); the 4th pair of exopods are longer and bear modified setae at the end; the endopods are normal. Antennal scale is lanceolate, spineless, its outer edge entirely covered in setae.

Genus LEPTOMYSIS G. O. Sars

Key for identifying species:

- 1. The tip of the rostrum reaches or nearly reaches the end of the basal segment of the antennular peduncle. Lateral spines are of unequal length on distal half of telson 2
The tip of the rostrum reaches no further than the middle of the basal segment of the antennular peduncle. Telson's lateral spines subequal *linguura* and *sardica*
- 2. Rostrum has small notch on either side of the base. Teguments bear small, erect plates. Unequal spines along inner edge of uropodal endopods *gracilis*
No small notch on either side of rostrum base. Smooth teguments. The uropodal endopod bears along its inner edge spines becoming progressively longer towards the end..... *mediterranea*

63. *L. gracilis* G. O. Sars 1864.

64. *L. mediterranea* G. O. Sars 1877.

65 and 65a. *L. linguura* G. O. Sars 1869 and *L. sardica* G. O. Sars 1877.

NB Except in characteristic habitats, it is practically impossible to identify the various local races and varieties with one or the other of these species. No doubt there are actually several distinct species. (*L. linguura* described came from south Norwegian coasts, *L. sardica* from Gulf of Cagliari, Sardinia.)

Genus BATHYMYSIS Tattersall

Genus MYSIDEIS G. O. Sars

Genus MYSIDETES Holt & Tattersall

Legend for figures

- Fig 222 - 227. *Leptomysis mediterranea*: 222, ♀, dorsal view; 223, ♂, lateral view; 224, ♂, lateral view; 225, ♀, antennal scale; 226, underside of right uropod; 227, telson.
- Fig 228 - 231. *Leptomysis gracilis*: 228, frontal region of carapace, dorsal view; 229, base of antenna; 230, underside of left uropod; 231, telson.
- Fig 232 - 236. *Leptomysis linguura*: 232, ♀, dorsal view; 233, base of antenna; 234, underside of left uropod; 235, telson; 236, tip of telson.
- Fig 237 - 240. *Leptomysis sardica*: 237, base of antenna; 238, underside of left uropod; 239, telson; 240, tip of telson.
- Fig 241 - 243. *Bathymysis helgae*: 241, ♂, front end, dorsal view; 242, base of antenna; 243, telson.
- Fig 244 - 246. *Mysideis insignis*: 244, base of antenna; 245, underside of left uropod; 246, telson.
- Fig 247 - 249. *Mysidetes farrani*: 247, ♀, front end, dorsal view; 248, base of antenna; 249, telson.
- Fig 250 - 253. *Mysidopsis angusta*: 250, base of antenna; 251, underside of left uropod; 252, telson; 253, tip of telson.
- Fig 254 - 256. *Mysidopsis didelphys*: 254, base of antenna; 255, underside of right uropod; 256, telson.
- Fig 257 - 261. *Mysidopsis gibbosa*: 257, ♀, lateral view; 258, ♂, lateral view; 259, base of antenna; 260, underside of right uropod; 261, telson.
- Fig 262 - 264. *Pseudomysis abyssi*: 262, ♂, front end, dorsal view; 263, underside of left uropod; 264, telson.
- Fig 265 - 267. *Tenagomysis atlantica*: 265, base of antenna; 266, underside of left uropod; 267, telson.

Genus MYSIDOPSIS G. O. Sars

Key for identifying species:

1. Tip of telson has triangular notch. Antennal scale length is more than 7 times greater than width..... *angusta*
 Unnotched telson. Antennal scale length 3 to 4 times as great as width 2
2. The uropodal endopod bears only a single spine on its inner edge, near the statocyst. Very prominent, triangular rostrum *didelphys*
 Several spines near statocyst (but sometimes only one! - check telson shape). Very blunt rostrum. Carapace has two dorsal bumps *gibbosa*

Genus PSEUDOMYSIS G. O. Sars

Genus TENAGOMYSIS Thomson

References

see pamphlets 19, 20 and 22.

Distribution
(Leptomysini)

Species

Iceland	67, 70.
N of Norway	--
W of Norway	67, 70, 71.
S of Norway	63, 65, 67, 69, 70, 71.
Skagerrak	63, 67, 69, 70, 71.
Kattegat	63, 69, 70, 71.
Øresund	(63), (70), (71).
Baltic	--
N of Scotland, Shetlands, Faeroes	63, 66, 70.
E of Scotland	63, (65?), 69, 70, 71.
SW of North Sea	63, 64, (65?), 69, 70, 71.
SE of North Sea	63, 64, 69.
Channel	63, 64, (65?), (65b?), 69, 70, 71.
W of Scotland	63, (65?), 69, 70, 71.
W, SW of Ireland	63, 64, (65?), 66, 67, 68, 69, 70, 71.
Irish Sea	63, 64, (65?), 70, 71.
Bay of Biscay	63, 64, 67, 68, 70, 71, 73.
Arctic seas	72.
Kara and Barents Seas	--
Between Norway and Iceland	72.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton

Pamphlet 25

MYSIDACEA

Family Mysidae (part 7):

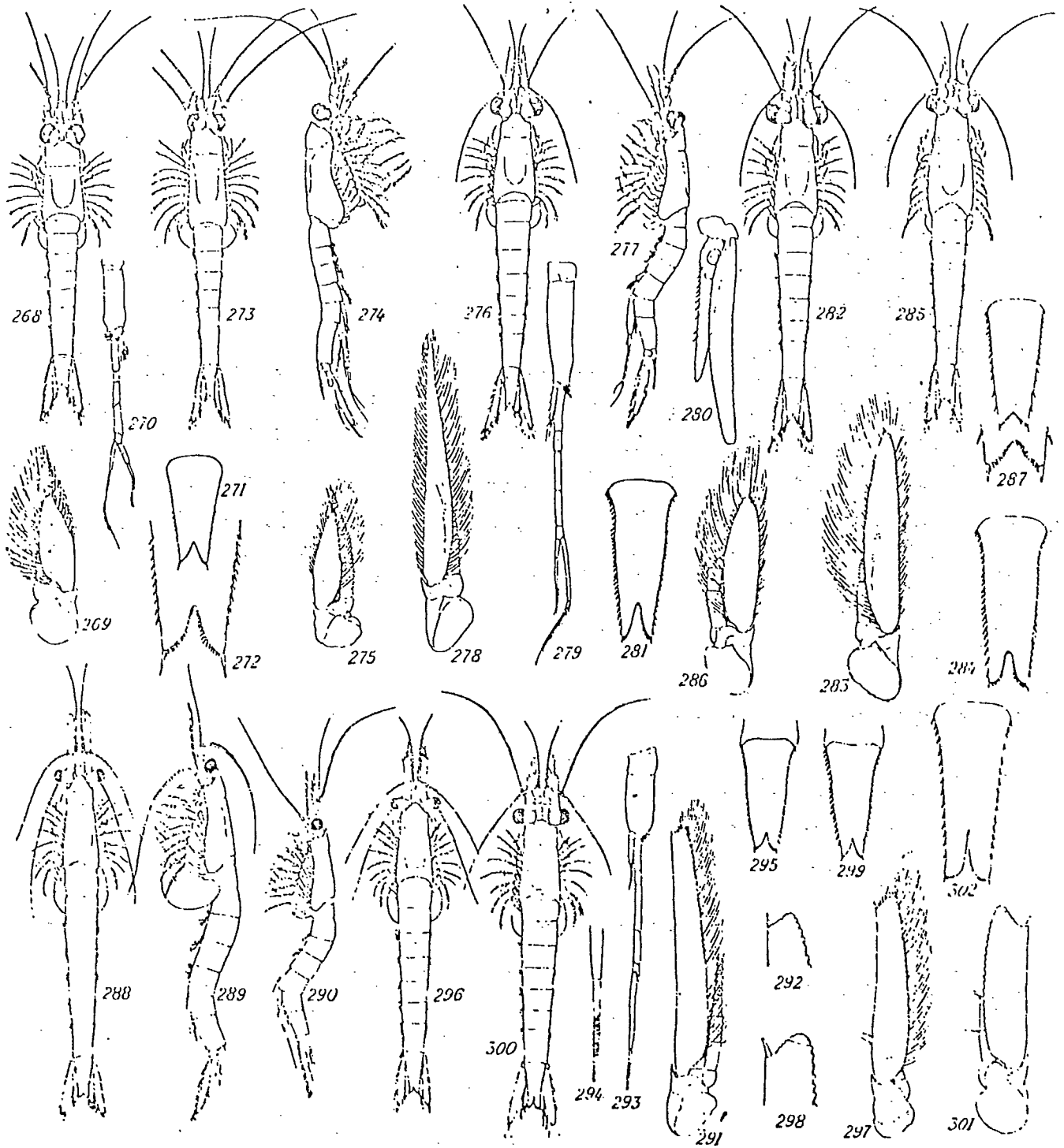
MYSINAE (part 5):

Mysini (part 1).

(by H. Nouvel)

1950

(After various authors. - Different scales).



(D'après divers auteurs. — Echelles différentes)

Family MYSIDAE Dana (part 7)
Subfamily MYSINAE Hansen (part 5)
Tribe Mysini Hansen
(also see pamphlets 26 and 27)

6th segment of thoracic appendages have 2, 3 or more than 3 joints of which none are oblique. In the ♂, at least the 2nd pair of pleopods are rudimentary, the 4th pair of pleopodal endopods are extended and modified. Antennal scale varies greatly in shape.

Genus HEMIMYSIS G. O. Sars

- 74. *H. lamornae* (Couch 1856) *f. typica*. - (Fig 268 - 272). - Antennal scale does not extend beyond antennular peduncle.
- 75. *H. abyssicola* G. O. Sars 1869. - (Fig 273 - 275). - The antennal scale is clearly longer than the antennular peduncle.

Genus MYSIS Latreille

Key for identifying species:

- 1. End of antennal scale forms very sharp point; its outer edge is straight *mixta*
Antennal scale is lanceolate and slightly rounded at end; its outer edge is curved 2
- 2. Length of antennal scale is 5 to 6 times its width. Telson has more than 20 lateral spines on each side *occulata*
Length of antennal scale is only 4 times its width. Telson has less than 20 lateral spines *oculata relicta*

Genus PRAUNUS Leach
(Macromysis)

Key for identifying species:

- 1. Length of antennal scale is at most 4 times its width. The telson's terminal notch is more than $\frac{1}{4}$ of the total telson length. Eye stalk length about equal to width (from dorsal view) *inermis*
Antennal scale length at least 5 times its width. Notch is less than $\frac{1}{5}$ of total telson length. Eye stalk length much greater than width 2
- 2. Length of antennal scale 7 to 8 times its width; scale extends further than antennular peduncle by more than the latter's length. Distal lobe does not extend beyond distal spine, which is in the line of the outer edge of scale *flexuosis*
Length of antennal scale 5 to 6 times its width. Scale extends beyond antennular peduncle by only just the length of latter. Distal lobe extends slightly beyond distal spine, which projects at an angle to the outer edge of the scale *neglectus*

Legend for figures

- Fig 268 - 272. *Hemimysis lamornae*: 268, ♀, dorsal view; 269, base of antenna; 270, 4th pleopod in ♂; 271, telson; 272, tip of telson.
- Fig 273 - 275. *Hemimysis abyssicola*: 273, ♀, dorsal view; 274, ♂, lateral view; 275, base of antenna.
- Fig 276 - 281. *Mysis mixta*: 276, ♀, dorsal view; 277, ♂, lateral view; 278, base of antenna; 279, 4th pleopod in ♂; 280, underside of right uropod; 281, telson.
- Fig 282 - 284. *Mysis oculata*: 282, ♀, dorsal view; 283, base of antenna; 284, telson.
- Fig 285 - 287. *Mysis oculata relicta*: 285, ♀, dorsal view; 286, base of antenna; 287, telson.
- Fig 288 - 295. *Praunus flexuosus*: 288, ♀, dorsal view; 289, ♀, lateral view; 290, ♂, lateral view; 291, base of antenna; 292, end of antennal scale; 293, 4th pleopod in ♂; 294, end of latter; 295, telson.
- Fig 296 - 299. *Praunus neglectus*: 296, ♀, dorsal view; 297, base of antenna; 298, end of antennal scale; 299, telson.
- Fig 300 - 302. *Praunus inermis*: 300, ♀, dorsal view; 301, base of antenna; 302, telson.

Fam. MYSIDAE Dana (suite 6)
 Sous-fam. MYSINAE Hansen (suite 4)
 Tribu Mysini Hansen
 (voir aussi fiches 26 et 27)

6^e article des appendices thoraciques avec 2, 3 ou plus de 3 articulations dont aucune n'est oblique. Chez les ♂, au moins les pléopodes de la 2^e paire sont rudimentaires, les exopodites de la 4^e paire sont allongés et modifiés. Ecaille antennaire de forme très variable.

Genre HEMIMYSIS G. O. Sars

74. *H. lamornae* (Couch 1856) f. *typica*. -- (Fig. 268--272). -- L'écaille antennaire ne dépasse pas le pédoncule de l'antennule. -- Norman, 1860, (*Mysis lamornae*), pl. 8, fig. 4-5. G. O. Sars, 1879, (*Mysis lamornae*), pl. XXX. Zimmer, 1909, fig. 289-292. 1933, fig. 12, 13. Baecesco, 1938, fig. 18.
75. *H. abyssicola* G. O. Sars 1869. -- (Fig. 273--275). -- L'écaille antennaire dépasse très nettement le pédoncule antennulaire. -- G. O. Sars, 1879, pl. XXI--XXIII. Zimmer, 1909, fig. 293-298. 1933, fig. 10-11. Baecesco, 1941a, fig. I, II.

Genre MYSIS Latreille

Clé de détermination des espèces considérées:

- I. L'extrémité de l'écaille antennaire forme une pointe très aiguë; son bord externe est rectiligne *mixta*
 L'écaille antennaire laméolée est un peu arrondie à l'extrémité; son bord externe est courbé II
- II. L'écaille antennaire est 5 à 6 fois plus longue que large. Le telson a plus de 20 épines latérales de chaque côté *oculata*
 L'écaille antennaire est seulement 4 fois plus longue que large. Le telson a moins de 20 épines latérales *oculata relicta*
76. *M. mixta* Lilljehorg 1852. -- (Fig. 276-281). -- G. O. Sars, 1879, pl. XXXIII. Zimmer, 1909, (*Miththeimysis mixta*) fig. 355-360. 1933, fig. 25, 65.
77. *M. oculata* (Fabricius 1780). -- (Fig. 282-284). -- G. O. Sars, 1879, pl. XXXI. Zimmer, 1909, fig. 348-354.
78. *M. oculata* var. *relicta* (Lovén 1861). -- (Fig. 285-287). -- G. O. Sars, 1867, pl. I-III. 1879, pl. XXXII. Czerniavsky, 1882, pl. XV, fig. 17-20; pl. XVI; pl. XVII, fig. 1. Zimmer, 1933, fig. 23, 24, 66, 70, 75.

Genre PRAUNUS Leach
 (= *Macromysis*)

Clé de détermination des espèces:

- I. Ecaille antennaire, au plus, 4 fois plus longue que large. La longueur de l'encoche terminale du telson vaut plus du 1/4 de la longueur totale du telson. Pédoncule oculaire environ aussi long que large (en vue dorsale) *inermis*
 Ecaille antennaire au moins 5 fois plus longue que large. L'encoche vaut moins du 1/5 de la longueur totale du telson. Le pédoncule oculaire bien plus long que large II
- II. Ecaille antennaire 7 à 8 fois plus longue que large, dépassant le pédoncule antennulaire de plus de la longueur de ce dernier; le lobe distal ne dépasse pas la pointe de l'épine distale dont la direction prolonge le bord externe de l'écaille *flexuosus*
 Ecaille antennaire 5 à 6 fois plus longue que large, dépassant le pédoncule antennulaire d'à peine la longueur de ce dernier; le lobe distal dépasse légèrement l'épine distale qui est un peu oblique par rapport à la direction du bord externe *neglectus*
79. *P. flexuosus* (Müller 1788). -- (Fig. 288-295). -- G. O. Sars, 1879, (*Mysis flexuosa*) pl. XXIV-XXV. Bleqvad, 1922, (*M. flexuosus*) fig. 6. Zimmer, 1933, fig. 68-69.
80. *P. neglectus* (G. O. Sars 1869). -- (Fig. 296-299). G. O. Sars, 1879, (*Mysis neglecta*) pl. XXVI. Bleqvad, 1922, (*M. neglecta*) fig. 6. Zimmer, 1933, fig. 15-16.
81. *P. inermis* (Rathke 1843). -- (Fig. 300-302). -- G. O. Sars, 1879, (*Mysis inermis*) pl. XXVII. Zimmer, 1909, fig. 306-310. 1933, fig. 14.

Légende des Figures

- Fig. 268--272. *Hemimysis lamornae*: 268, ♀, vue dorsale; 269, base de l'antenne; 270, pléopode 4 du ♂; 271, telson; 272, extrémité du telson.
- Fig. 273--275. *Hemimysis abyssicola*: 273, ♀, vue dorsale; 274, ♂, vue latérale; 275, base de l'antenne.
- Fig. 276--281. *Mysis mixta*: 276, ♀, vue dorsale; 277, ♂, vue latérale; 278, base de l'antenne; 279, pléopode 4 du ♂; 280, nœpode droit, face inférieure; 281, telson.
- Fig. 282--284. *Mysis oculata*: 282, ♀, vue dorsale; 283, base de l'antenne; 284, telson.
- Fig. 285--287. *Mysis oculata relicta*: 285, ♀, vue dorsale; 286, base de l'antenne; 287, telson.
- Fig. 288--295. *Praunus flexuosus*: 288, ♀, vue dorsale; 289, ♀, vue latérale; 290, ♂, vue latérale; 291, base de l'antenne; 292, extrémité de l'écaille antennaire; 293, pléopode 4 du ♂; 294, extrémité de ce dernier; 295, telson.
- Fig. 296--299. *Praunus neglectus*: 296, ♀, vue dorsale; 297, base de l'antenne; 298, extrémité de l'écaille antennaire; 299, telson.
- Fig. 300--302. *Praunus inermis*: 300, ♀, vue dorsale; 301, base de l'antenne; 302, telson.

Distribution
(see pamphlet 27)

References

For other references, see pamphlet 19.

Distribution

(voir fiche 27)

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Autres références: voir fiche 19.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton

Pamphlet 26

MYSIDACEA

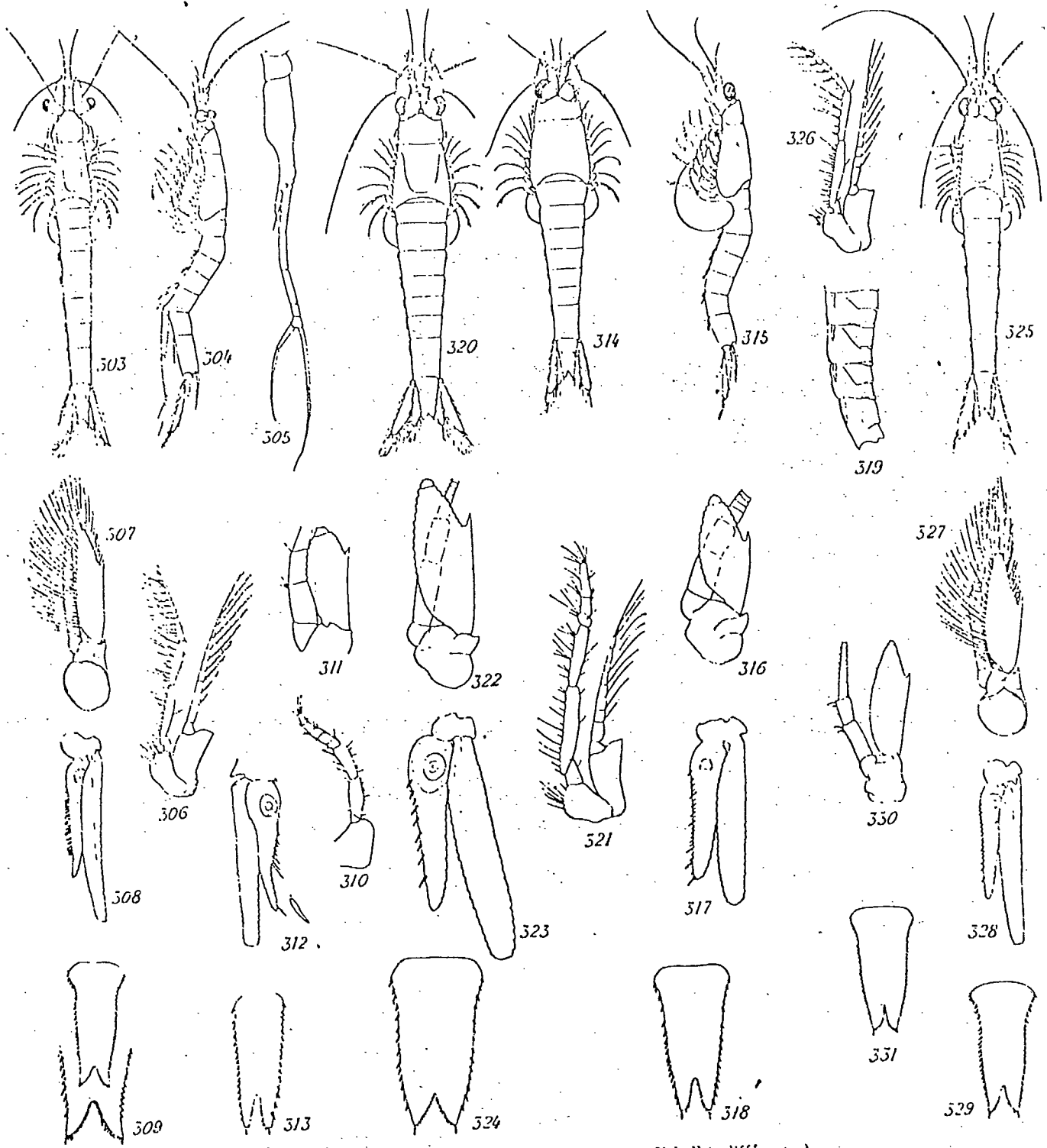
Family Mysidae (part 8):

MYSINAE (part 6): Mysini (part 2)

(by H. Nouvel)

1950

(After various authors; fig 319 is original. - Different scale).



(D'après divers auteurs; fig. 319 originale. --- Echelles différentes)

Family MYSIDAE Dana (part 8)
Subfamily MYSINAE Hansen (part 6)
Tribe Mysini Hansen (part 2)
Genus PARAMYSIS (Czerniavsky) Zimmer
Key for identifying species:

1. End of uropodal endopod bent towards telson (fig 308, 312) (subgenus *Synmysis*) 2
End of uropodal endopod not bent 3
2. Cylindrical eyes extend far beyond the carapace. Length of antennal scale's distal lobe greater than its width *spiritus*
Pear-shaped eyes barely extend beyond the carapace. Length of scale's distal lobe about equal to its width *parkeri*
3. Tarsus of thoracic endopods have 4 or 5 segments of which the proximal one is short and cup-shaped (fig 321) (subgenus *Paramysis*) 4
Thoracic endopods have tarsi with 5 to 7 segments, all cylindrical (fig 326) (subgenus *Schistomysis*) 6
4. Inner edge of uropodal endopod bears about 20 spines of unequal length. The distal lobe is almost as long as the rest of the antennal scale 5
There are at most 10 subequal spines along the inner edge of the uropodal endopod. The distal lobe is much shorter than the rest of the scale *helleri*
5. The teguments of the abdominal somites are folded so that from a dorsal view there appear to be twice as many as actually exist. The last thoracic somites are not covered by the carapace and form transverse pads *portzicensis* n.sp.
6. Abdominal and thoracic somites have neither folds nor pads *arenosa*
The distal lobe of the antennal scale is only a little shorter than the rest of the scale *ornata*
The distal lobe is barely $\frac{1}{2}$ as long as the rest of the scale *kervillei*

Subgenus SYNMYISIS Czerniavsky

Subgenus PARAMYSIS Czerniavsky

85. *P (P) portzicensis* n. sp. - (fig 319). - Brittany: from Douarnenez Bay (Finistère) to Lannion Bay (Côtes-du-Nord).

Subgenus SCHISTOMYSIS Norman

Distribution
(see pamphlet 27)

References

For other references, see pamphlets 19 and 20.

Legend for figures

- Fig 303 - 309. *Paramysis spiritus*: 303, ♀, dorsal view; 304, ♂, lateral view; 305, 4th pleopod in ♂; 306 pereopod of 2nd pair; 307, base of antenna; 308, underside of left uropod; 309, telson.
- Fig 310 - 313. *Paramysis parkeri*: 310, periopodal endopod; 311, base of antenna; 312, underside of right uropod; 313, telson.
- Fig 314 - 318. *Paramysis arenosa*: 314, ♂, dorsal view; 315, ♀, lateral view; 316, base of antenna; 317, underside of left uropod; 318, telson.
- Fig 319. *Paramysis portzicensis*: lateral view of last abdominal somites.
- Fig 320 - 324. *Paramysis helleri*: 320, ♀, dorsal view; 321, pereopod of 1st pair; 322, base of antenna; 323, underside of left uropod; 324, telson.
- Fig 325 - 329. *Paramysis ornata*: 325, ♀, dorsal view; 326, pereopod of 1st pair; 327, base of antenna; 328, underside of left uropod; 329, telson.
- Fig 330 - 331. *Paramysis kervillei*: 330, base of antenna; 331, telson.

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

Zooplankton

Pamphlet 27

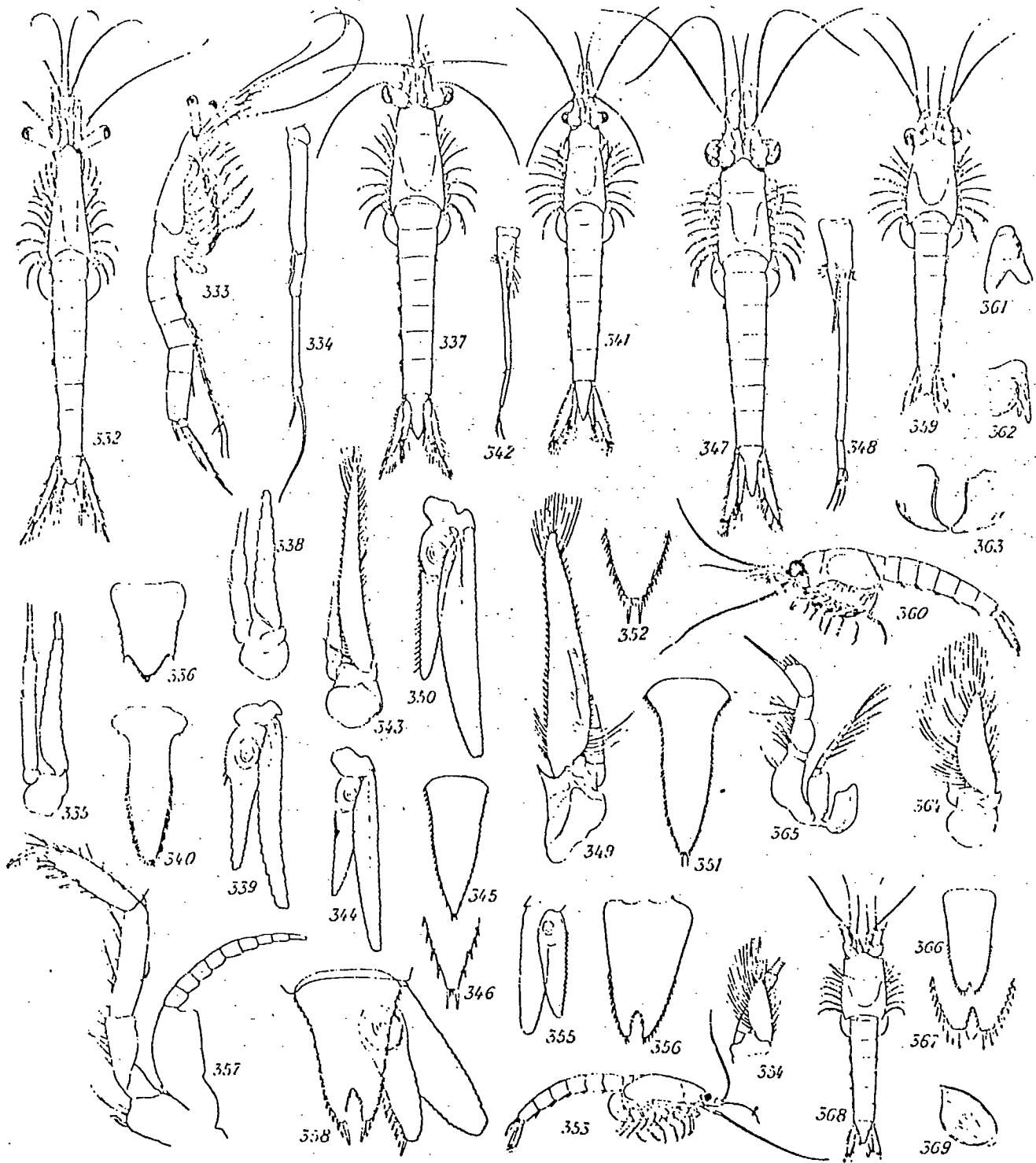
MYSIDACEA

Family Mysidae (part 9): MYSINAE (part 7):
Mysini (part 3), Heteromysini
MYSIDELLINAE

(by H Nouvel)

1950

(After various authors. - Different scales).



(D'après divers auteurs. — Echelles différentes).

Family MYSIDAE Dana (part 9)
 Subfamily MYSINAE Hansen (part 7)
 Tribe Mysini Hansen (part 3)
 Genus MESOPODOPSIS Czerniavsky
 (Macropsis= Podopsis =Parapodopsis)

Genus NEOMYSIS Czerniavsky

- 90. *N. (Acanthomysis) longicornis* (Milne-Edw 1837). - (Fig 337 - 340). - The antennal scale extends beyond the antennular peduncle and has a slightly rounded end.
- 91. *N. integer* (Leach 1815) = *N. vulgaris* (J.V. Thompson 1928). - Fig 341 - 346). - The antennal scale extends considerably further than the antennular peduncle and its tip is very sharp.

Genus STILOMYSIS Norman

Tribe Heteromysini Hansen

1st pair of thoracic endopods much stronger than the others; 6th segment undivided, thick, and armed with spines (fig 357); 6th segment of other thoracic endopods has many joints. Pleopods rudimentary in both sexes. Telson notched at tip.

Genus HETEROMYSIS S. I. Smith

- 93. *H. formosa* S. I. Smith 1874. - (Fig 353 - 356). - Telson bears spines on both edges only in its distal half.
- 93a. *H. microps* (G. O. Sars 1877). - The uropodal endopod bears only one spine on its inner edge near the statocyst (numerous spines in other 2 species).
- 94. *H. armoricana* Nouvel 1940. - (Fig 357 - 358). - Whole of telson bears spines on both edges.

Subfamily MYSIDELLINAE Norman

Uropodal endopod bears setae all around its periphery. The labrum is formed ventrally of a plate divided into 2 unequal lobes (fig 361 - 362). Mandibles have cutting inner edges without teeth or laciniae (fig. 363). The 1st maxilliped's 6th segment is widened and its free anterior edge is spiny (fig 365). Pleopods are rudimentary in both sexes.

Genus MYSIDELLA G. O. Sars

- 95. *M. typica* G. O. Sars 1871. - (Fig 359 - 367). - Eyes have normal cornea.
- 96. *M. typhlops* G. O. Sars 1871. - (Fig 368 - 369). - Eyes are rudimentary, with no cornea, and pointed in front.

Legend for figures

- Fig 332 - 336. *Mesopodopsis slaberi*: 332, ♀, dorsal view; 333, ♂, lateral view; 334, 4th pleopod in ♂; 335, base of antenna; 336, telson.
- Fig 337 - 340. *Neomysis longicornis*: 337, ♀, dorsal view; 338, base of antenna; 339, underside of left uropod; 340, telson.
- Fig 341 - 346. *Neomysis integer*: 341, ♀, dorsal view; 342, 4th pleopod in ♀; 343, base of antenna; 344, underside of left uropod; 345, telson; 346, tip of telson.
- Fig 347 - 352. *Stilomysis grandis*: 347, ♀, dorsal view; 348, 4th pleopod in ♀; 349, base of antenna; 350, underside of left uropod; 351, telson; 352, tip of telson.
- Fig 353 - 356. *Heteromysis formosa*: 353, ♀, lateral view; 354, base of antenna; 355, underside of right uropod; 356, telson.
- Fig 357 - 358. *Heteromysis armoricana*: 357, pereopod of 1st pair; 358, telson and right uropod.
- Fig 359 - 367. *Mysidella typica*: 359, ♀, dorsal view; 360, ♀, lateral view; 361 & 362, labrum, front view and profile; 363, cutting edges of mandibles; 364, base of antenna; 365, maxilliped of 1st pair; 366, telson; 367, tip of telson.
- Fig 368 - 369. *Mysidella typhlops*: 368, ♂, front end, dorsal view; 369, eye.

References

For other references, see pamphlets 19, 20 and 25.

Distribution	Species
(Mysini, Heteromysini, Mysidellinae)	
Iceland	76, 77, 87.
N of Norway	76, 77, 81, 92.
W of Norway	74, 75, 76, 79, 80, 81, 87, 95, 96.
S of Norway	74, 75, 76, 79, 80, 81, 82, 87, 91, 93.
Skaggerak	74, 75, 76, 79, 80, 81, 82, 87, 89, 91.
Kattegat	74, 76, 79, 80, 81, 82, 87, 89, 91.
Øresund	76, 79, 80, 81, 82, 87, 89, 91.
Baltic (entrance)	76, 79, (80), 81, 82, 87, 89, 91.
" (S and centre)	76, 77, 78, 79, 81, 91.
" (Gulf of Bothnia)	76, 77, 78, 79, 91.
N of Scotland, Shetlands, Faeroes	79, 81, 82, (87, 88), 91.
E of Scotland	74, 79, 81, 82, (87, 88), 89, 91, 93.
SW of North Sea	74, (75?), 79, 80, 81, 82, 84, 87, 88, 89, 90, 91, 93.
SE of North Sea	74, 79, 80, 81, 82, 87, 88, 89, 91.
Channel	74, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 93, 93b, 94.
W of Scotland	74, 79, 80, 81, 82, 84, (87, 88), (89), 91.
W & SW of Ireland	74, 79, 80, 81, 82, 84, (87, 88), 89, 90, 91, 93, 95.
Irish Sea	74, 79, 80, 81, 82, 84, 87, 88, 90, 91.
Bay of Biscay	79, (82), (84), 85, 87, (88), 89, 91.
Arctic seas	76, 77, 81, 92.
White Sea	76, 77, 81, 91.
Kara and Barents Seas	(76), (79?), 81, 92.

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Autres références: voir fiches 19, 20, et 25.

Distribution (Mytili, Heteromytili, Mytilidinae)	Espères
Islande	76, 77, 87.
N. de la Norvège	76, 77, 81, 92.
W. —	74, 75, 76, 79, 80, 81, 87, 95, 96.
S. —	74, 75, 76, 79, 80, 81, 82, 87, 91, 93.
Skagerrak	74, 75, 76, 79, 80, 81, 82, 87, 89, 91.
Kattegat	74, 76, 79, 80, 81, 82, 87, 89, 91.
Sund	76, 79, 80, 81, 82, 87, 89, 91.
Baltique (Entrée)	76, 79, (80), 81, 82, 87, 89, 91.
— (S. et Centre)	76, 77, 78, 79, 81, 91.
— (Golfe de Botnie)	76, 77, 78, 79, 91.
N. de l'Ecosse, Shetland, Féroé	79, 81, 82, (87, 88), 91.
E. de l'Ecosse	74, 79, 81, 82 (87, 88), 89, 91, 93.
S.-W. de la Mer du Nord	74, (75?), 79, 80, 81, 82, 84, 87, 88, 89, 90, 91, 93.
S.-E. —	74, 79, 80, 81, 82, 87, 88, 89, 91.
Manche	74, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 93, 93 bis, 94.
W. de l'Ecosse	74, 79, 80, 81, 82, 84, (87, 88), (89), 91.
W., S.-W. de l'Irlande	74, 79, 80, 81, 82, 84, (87, 88), 89, 90, 91, 93, 95.
Mer d'Irlande	74, 79, 80, 81, 82, 84, 87, 88, 90, 91.
Golfe de Gascogne	79, (82), (84), 85, 87, (88), 89, 91.
Mers arctiques	76, 77, 81, 92.
Mer Blanche	76, 77, 81, 91.
Mer de Kara, de Barents	(76), (79?), 81, 92.