

INTRODUCTION AND TERMINOLOGY OF HYPERIID AMPHIPODS

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For the different divisions of the body the term, head, pereon, pleon and urosome have been used. Here the term cephalon instead of head and pleon is used for the post pereonic part of the body. The term double urosomite to designate the segment formed by the fusion of the 5th and 6th pleon segments. This term has been adopted with the difference that this composite segment is called double pleon segment. Instead of pereonite, pleonite and urosomite, the terms pereon segment, pleon segment and urosome are used respectively.

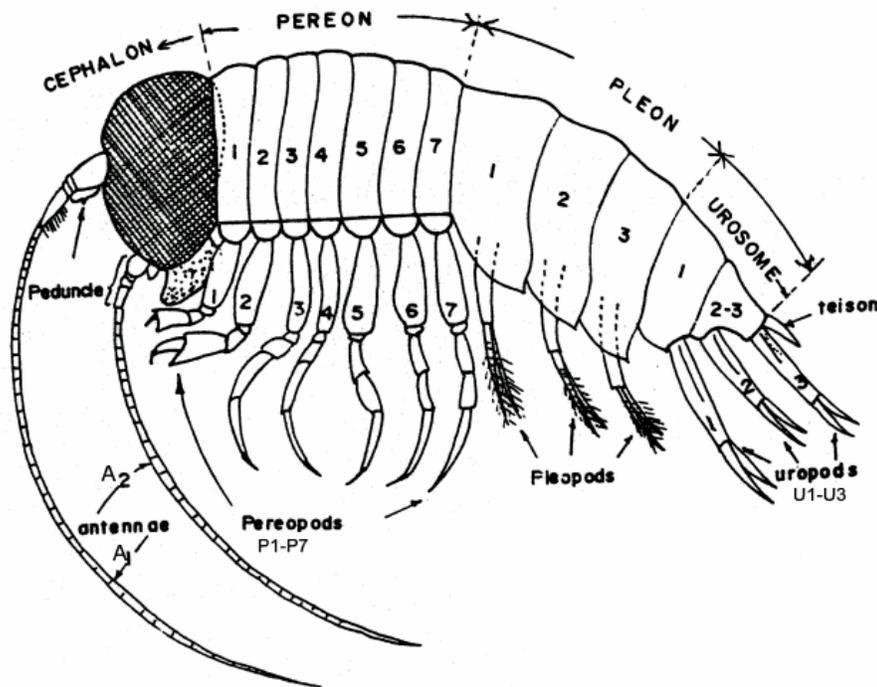


Figure 1 – Diagram of a hyperiid amphipod, based on male *Hyperia*.

In the description of the appendages, the margin of the appendage which faces the cephalon is described as the outer-side and the opposite the inner. However, this applies only to the two pairs of antennae and the first two pairs of pereopods which are generally directed forwards. In the remaining three pairs of pereopods which are normally directed backwards, the side facing the cephalon is designated as inner and the opposite the outer. Bowman and Gruner have named the various segments of a pereopod as coxa, basis, ischium, merus, carpus, propus and dactyl. Instead of coxa the author has given coxal plate, propodus instead of propus and dactylus for dactyl.

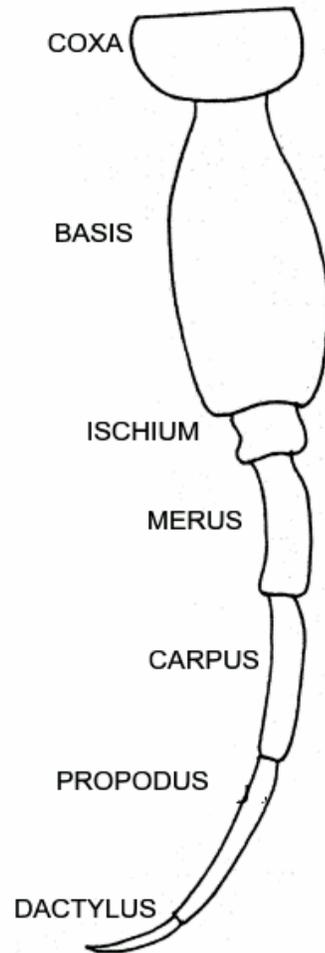


Figure 2 – Diagram of an amphipod pereopod

The first two pereopods, which correspond to the gnathopods of gammaridians, are generally converted into prehensile organs of different types. The term introduced by Bowman and Gruner namely chelate, sub-chelate and weakly chelates are appropriate and useful. Instead of the term gills the term branchiae and for oostegites the term brood lamellae is used.

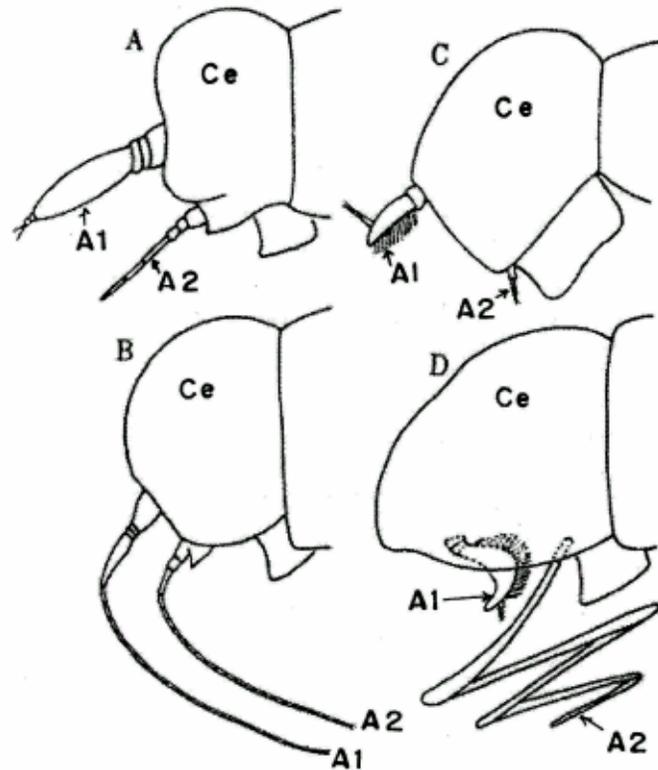


Figure 3 – Diagrams of male heads of the 4 superfamilies of Physocephalata:
 A, Vibilioidea; B, Phronimoidea; C, Lycaeopsoidea; D, Platysceloidea
 A1- first antenna, A2- second antenna, Ce- cephalon

Body short and tumid, or very slender, with thin and pellucid integument. Cephalon and pereon generally tumid, pereon with 7 segments and rounded in cross section or flattened dorso-ventrally. Coxal plates (which are fixed to the lateral surface of the pereon segments) are small or wanting. Branchiae (gills) on pereon segments 2-6 or on 5-6. Median to the branchiae on mature females are the brood lamellae (oostegites), commonly on pereon segments 2-5. They are thin plates, which overlap to form a pouch beneath the pereon where the eggs and young ones are brood. The compound eyes enormously developed or small as in physosomata. Pleon powerfully developed contains 3 segments. Urosome is two segmented where the last segment is formed with the fusion of urosome segments 2 and 3 and is termed the double pleon segment. Telson is never divided or incised distally. First antenna without a secondary flagellum. Both antennae

are reduced in females, especially antenna 2, which may be rudimentary or absent. Mouthparts are much reduced. Mandibles may or may not have three-segmented palp. Maxillae I has an inner lobe in the Physosomata, but not in Physocephalata. Maxilla 1 and 2 may be rudimentary or absent.

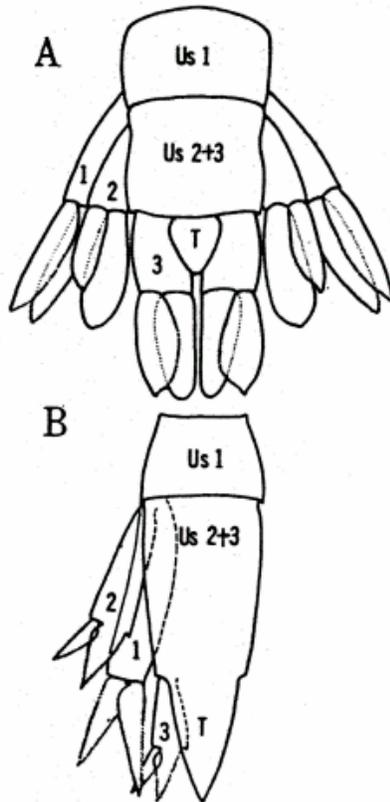


Figure 4 – Urosome: A, *Pronoe capita* (telson not fused with double urosomite; endopods not fused with protopods); B, *Oxycephalus piscator* (telson fused with double urosomite; endopods of uropods 2 and 3 fused with protopods).

CLASSIFICATION OF HYPERIID AMPHIPODA
(after Thomas E. Bowman & Hans-Eckhard Gruner, 1973)

Phylum:	Arthropoda
Sub Phylum:	Mandibulata
Class:	Crustacea
Sub- Class:	Malacostraca
Super Order:	Peracarida
Order:	Amphipoda
Suborder :	Hyperiidea
Infraorder:	Physosomata
Superfamily:	Lanceolidea
Family:	Lanceolidae
	Chuneolidae
	Microphasmidae
Superfamily :	Scinoidea
Family:	Archaeoscinidae
	Scinidae
	Mimonectidae
	Proscinidae
Infra order :	Physocephalata
Superfamily:	Vibiliodea
Family:	Cystisomatidae
	Vibiliidae
	Paraphronimidae
Superfamily:	Phronimoidea
Family :	Hyperiidae
	Dariellidae
	Anchylomeridae
	Phronimidae
Superfamily :	Lycaeopsoidea
Family :	Lycaeopsidae
Superfamily:	Platysceloidea
Family:	Pronoidae
	Anapronoidae
	Lycaeidae
	Oxycephalidae
	Brachyscelidae
	Platyscelidae
	Parascelidae