

Key for Larval Crustacean Species found in Sundaparandian

Pattinam and Manamelkudi, Tamil Nadu, India (9-10° N, Arabian Sea).

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The present note consists of a single key for larval crustacean identification. Their classification is presented below following the classification of Edmondson (1959), Davis (1955) and Omeri and Ikeda (1984). Key to the copepods given here are modified from Kasturirangan (1963) and Newell and Newell (1973). Taxonomic Account of Microzooplankton occurring in S.P. Pattinam and Manamelkudi During July 2005 to June 2006.

A. First three pairs of head appendages setose, other absent appendages or rudimentary

Nauplius

B. Setose expedites on some or all of the thoracic appendages. Pleopods absent

or rudimentary Zoea.

Megalopa stages, often abundant, are readily recognizable by their setose pleopods and can be identified by reference to the plates.

Category A. Nauplius.

1. (i) Fronto-lateral spines present.
(ii) Fronto-lateral spines absent.
2. (i) Triangular outline, long posterior spine
(ii) Rounded outline, short posterior spine, rounded distal end to labrum
3. (i) Postero-lateral spines present
(ii) Postero-lateral spines absent, rounded tip to the labrum; long fronto-lateral spines.
4. (i) Tip of labrum truncated.....*Balanus balanoides*
5. (i) Appendages with distinct segments in early stages. No yolk in body.

Copepoda.

(ii) Appendages with no distinct segments in early stages. No masticatory hooks on the antenna and mandible. Body full of yolk. A transitory larva phase, that passes through all stages within twenty-four hours.

Category B. Zoea.

1. (i) Carapace dorso-ventrally flattened, rounded in outline, and transparent;
..... phyllosoma
- (ii) Carapace spherical dorsal and rostral spines usually present. When present, rostral spine points ventrally.
- (iii) Length of carapace considerably greater than breadth or depth, rostrum pointing forwards.
2. (i) Rostral, dorsal and lateral spines present.
- (ii) Rostral and lateral spines absent *Inachus dorsettensis*
- (iii) Rostral and dorsal spines absent, lateral spines minute ... *Ebalia tuberosa*.
- (iv) Lateral spines absent, rostral and dorsal spines present *Carcinus maenas*.
3. (i) Both dorsal and rostral spines curved. Rostral spine distinctly shorter than dorsal spine. Lateral spines longer than in
- (ii) greenish with yellow and black chromatophores.....*Maia squinado*
4. (i) Postero-lateral margins of carapace produced into a spine on each side, or denticulate, or with both spines and denticles.
- (ii) Postero-lateral margins of carapace not produced into spines and not denticulate.
5. (i) Rostrum extremely elongate; longer than the body. Postero-lateral spines extending beyond the telson. ... (Porcellanidae)
- (ii) Rostrum shorter than body. Postero-lateral spines not extending beyond the telson.
- 6 (i) Posterior spines one third the length of the rostral spine..... *P. longicornis*
7. (i) Margins of spine smooth. Eyes longer antero-posteriorly than the width of the abdomen. Paguridae
8. (i) Large lateral spines on fifth abdominal segment; rostrum reaches the tip of the antennal scale. *Pagurus pubescens*.

9. (i) Telson ending in two sharp prongs or legs 1-3 chelate or with both these characters. Setose exopods on maxillipeds and legs 1-5 in all stages of most species. ... Last zoeas of Penaeidea
10. (i) Base of antennules separated by more than the width of one of them. Eye-stalks usually tapering. Peduncles of antennules slender and curved.
(ii) Base of antennules separated by not more than the width of one of them. Eystalks cylindrical. Peduncles of antennules stout and nearly straight..... (Hippolytidae)
11. (i) A pair of small lateral spines on the fifth abdominal segment. Three spines on the ventro-lateral margin of the carapace..... *Hippolyte varians*.
12. (i) Rostrum usually long and is toothed in late zoeas. Antennal scale usually segmented at tip in early zoeas. Exopods on legs 1-3 in late stage zoeas..... (*Pandalidae*)
(ii) Rostrum small or absent, never toothed. Antennal scale never segmented. Exopods on legs 1-4 in late zoeas.
13. (i) First zoea 3-4 mm. long with a full complement of limb rudiments. Long rostrum projecting in front of the eyes..... *Pandalus montagui*.

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