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ARTHROPODA: CRUSTACEA : MALACOSTRACA: PERACARIDA: MYSIDA AND LOPHOGASTRIDA (OPOSSUM SHRIMPS)

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FAUNA OF INDIA CHECKLIST

ARTHROPODA: CRUSTACEA : MALACOSTRACA: PERACARIDA: MYSIDA AND LOPHOGASTRIDA (OPOSSUM SHRIMPS)

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Introduction: The Mysida, Lophogastrida and Stygiomysida are shrimp-like crustaceans containing a 'brood pouch' are popularly known as **"Opposum-shrimps".** They are mostly marine, inhabiting all oceans from deep water to brackish coastal waters, a few species, however, also occur in freshwater. They are very common especially in estuaries and coastal waters, where they often congregate in large swarms. They are not as familiar as the decapods shrimps and prawns and as such are of limited commercial importance. Tattersall (1906, 1908, 1914, 1915, 1922, and 1923), Pillai (1957, 1961, 1963, 1964, 1967), Panampunnayil (1977) and Panampunnayil and Viswakumar (1991) made a significant contribution to the Indian Mysids. Recently the contribution made by Biju (2008), Biju and Panampunnayil (2009, 2010, 2011), Biju *et al.* (2006) and Mahabatro *et al.* (2011) are noteworthy.

Global Diversity: Earlier Mysida including Lophogastrida and Stygiomysida was placed under the order "Mysidacea", which consists of approximately 1200 species and 187 genera found throughout the world (Biju & Pillai, 2020).

Diversity in India: Venkataraman et al (2016) has mentioned the availability of 93 species in India. Recently Biju and Pillai (2018, 2020, and 2021) listed 37 species from Andaman and Nicobar Island, 58 species from Indian coastal zone, 21 species from deep sea. The present study reveals occurrence of 111 species of Mysids, 5 species of Lophogastrids and 2 species of Stygiomysids in India

Diversity in Coasts and Islands of India:
East Coast – 47 species
West Coast- 37 species
Andaman & Nicobar Islands- 42
Lakshadweep -7

Habitat: They are mostly brackish water inhabitants and few species are available in freshwater ecosystems also.

Ecological Significance: They play a significant role in the food chain and acts as a prey for various aquatic animals.

Human Significance: In some parts of South-east Asia, China and Korea, mysidacea are fished by local fishers when they occur in swarms. Patil and Sankolli (1991) have discussed about the Kolim (Mysid) fishery of North Konkan coast of India. Mainly used in aquaculture industries.

Threatened species: Species from India are not assessed for IUCN threat categories.

Protected Species as per WPA (2022): Mysids are not listed under any schedules of Wildlife Protection Act (2022).

Species under CITES: Mysids are not listed under any appendices of CITES.

Invasive alien species: There is no report of invasive Mysids in India

Gap areas: Further exploration on Indian Mysids and Lophogastrids needs to be encouraged.

Systematic list:

Phylum ARTHROPODA Gravenhorst, 1843
Subphylum CRUSTACEA Brunnich, 1772
Superclass MULTICRUSTACEA Regier, Shultz, Zwick, Hussey, Ball, Wetzer, Martin & Cunningham, 2010
Class MALACOSTRACA Latreille, 1802
Subclass EUMALACOSTRACA
Super Order PERACARIDA Calman, 1904
Order MYSIDA Baos, 1883
Family MYSIDAE Haworth, 1825
Subfamily BOREOMYSINAE Holt & Tattersall, 1905
Genus ***Boreomysis*** G.O. Sars, 1869
Subgenus ***Boreomysis (Boreomysis)*** G.O. Sars, 1869

1. *Boreomysis (Boreomysis) plebeja* Hansen, 1910
2. *Boreomysis (Boreomysis) sibogae* Hansen, 1910
3. *Boreomysis (Boreomysis) tattarsalli* O. Tattersall, 1955
4. *Boreomysis (Boreomysis) verrucosa* W.M.Tattersall, 1939

Subgenus ***Boreomysis (Petryashovia)*** Daneliya, 2023

5. *Boreomysis (Petryashovia) kistnae* Pillai, 1973

Subfamily ERYTHROPINAE Hansen, 1910
Genus ***Dactylamblyops*** Holt & Tattersall, 1906

6. *Dactylamblyops murrayi* W.M.Tattersall, 1939

Genus ***Erythrops*** Sars, 1869

7. *Erythrops minutus* Hansen, 1910
8. *Erythrops nanus* W. Tattersall, 1922

Genus ***Euchaetomera*** G.O. Sars, 1883

9. *Euchaetomera glyphidophthalmica* Illig, 1906
10. *Euchaetomera spinosa* Biju, Jasmine & Panampunnayil, 2010
11. *Euchaetomera tenuis* G. O. Sars, 1883
12. *Euchaetomera typica* Sars, 1884

Genus ***Gibberythrops*** (Illig, 1930)

13. *Gibberythrops acanthurus* (Illig, 1906)

Genus ***Gymnerythrops*** Hansen, 1910

14. *Gymnerythrops macrops* Pillai, 1973

Genus ***Illigiella*** Murano, 1981

15. *Illigiella brevisquamosa* (Illig, 1906)

Genus ***Meierythrops*** Murano, 1981

16. *Meierythrops triangulatus* (Panampunnayil, 1977)

Genus ***Hypererythrops*** Holt & Tattersall, 1905

17. *Hypererythrops spiniferus* (Hansen, 1910)

Genus ***Pseuderythrops*** Coifmann, 1936

18. *Pseuderythrops abrahami* Biju and Pannapunayil 2011
19. *Pseuderythrops gracilis* Coifmann, 1936

Genus ***Pleurerythrops*** Ii, 1964

20. *Pleurerythrops constrictus* Panampunnayil, 1977

Genus ***Synerythrops*** Hansen, 1910

21. *Synerythrops intermedius* Hansen, 1910

Genus ***Thalassomysis*** W.M. Tattersall, 1939

22. *Thalassomysis sewelli* W.M. Tattersall, 1939

Subfamily LEPTOMYSINAE Czerniavsky, 1882

Genus ***Afromysis*** Zimmer, 1916

23. *Afromysis dentisinus* Pillai, 1957
24. *Afromysis macropsis* W. Tattersall, 1922

Genus ***Mysidopsis*** Sars, 1864

25. *Mysidopsis indica* W. Tattersall, 1922
26. *Mysidopsis kempi* W. Tattersall, 1922

Genus ***Paraleptomysis*** Liu & Wang, 1983

27. *Paraleptomysis apiops* (G.O. Sars, 1877)
28. *Paraleptomysis xenops* (W. Tattersall, 1922)

Genus ***Prionomysis*** W. Tattersall, 1922

29. *Prionomysis stenolepis* W. Tattersall, 1922

Genus ***Promysis*** Dana, 1852

30. *Promysis orientalis* Dana, 1852

Genus ***Dioptromysis*** Zimmer, 1915

31. *Dioptromysis perspicillata* Zimmer, 1915

Genus ***Doxomysis*** Hansen, 1912

32. *Doxomysis anomala* W. Tattersall, 1922
33. *Doxomysis longiura* Pillai, 1963
34. *Doxomysis nicobaris* Panampunnayil, 2002
35. *Doxomysis quadrispinosa* (Illig, 1906)

Genus ***Neodoxomysis*** Murano, 1999

36. *Neodoxomysis littoralis* (Tattersall, 1922)

Subfamily **GASTROSACCINAE** Norman, 1892

Genus ***Anchialina*** Norman & Scott, 1906

37. *Anchialina dentata* Pillai, 1964
38. *Anchialina grossa* Hansen, 1910
39. *Anchialina media* Ii, 1964
40. *Anchialina penicillata,* Zimmer, 1915
41. *Anchialina typica orientalis* Nouvel, 1971
42. *Anchialina typica typica* (Krøyer, 1861)

Genus ***Gastrosaccus*** Norman, 1868

43. *Gastrosaccus dunckeri* Zimmer, 1915
44. *Gastrosaccus kempi* W. Tattersall, 1922
45. *Gastrosaccus spinifer* (Goës, 1864)
46. *Gastrosaccus sanctus* (Van Beneden, 1861)

Genus ***Eurobowmaniella*** Murano, 1995

47. *Eurobowmaniella muticus* (W. Tattersall, 1915)
48. *Eurobowmaniella simulans* (W. Tattersall, 1915)

Genus ***Haplostylus*** Kossmann, 1880

49. *Haplostylus bengalensis* (Hansen, 1910)
50. *Haplostylus indicus* (Hansen, 1910)
51. *Haplostylus pacificus* (Hansen, 1912)
52. *Haplostylus pusillus* (Coifmann, 1937)

Genus ***Pseudanchialina*** Hansen, 1910

53. *Pseudanchialina inermis* (Illig, 1906)
54. *Pseudanchialina pusilla* (G.O. Sars, 1883)

Subfamily HETEROMYSINAE Norman, 1892

Genus ***Deltamysis*** Bowman & Orsi, 1992

55. *Deltamysis holmquistae* Bowman & Orsi, 1992

Genus ***Heteromysis (Heteromysis)*** Bacescu, 1968

56. *Heteromysis (Heteromysis) gymnura* W. Tattersall, 1922
57. *Heteromysis (Heteromysis)macropsis* Pillai, 1961
58. *Heteromysis (Heteromysis) proxima* W. Tattersall, 1922

Genus ***Heteromysis (Olivemysis)*** Bacescu, 1968

59. *Heteromysis (Olivemysis) zeylanica* W. Tattersall, 1922

Genus ***Pseudomysidetes*** W. Tattersall, 1936

60. *Pseudomysidetes cochinensis* Panampunnayil, 1977

Subfamily **MYSINAE** Haworth, 1825

Genus ***Acanthomysis*** Czerniavsky, 1882

61. *Acanthomysis anomala* Pillai, 1961
62. *Acanthomysis indica* (W. Tattersall, 1922)
63. *Acanthomysis macrops* Pillai, 1973
64. *Acanthomysis microps* Biju & Panampunnayil, 2009
65. *Acanthomysis pelagica* (Pillai, 1957)
66. *Acanthomysis platycauda* (Pillai, 1961)

Genus ***Anisomysis*** Hansen, 1910

Sub genus (***Anisomysis***) Hansen, 1910

67. *Anisomysis (Anisomysis) bacescui* Pillai, 1976
68. *Anisomysis (Anisomysis) spinata* Panampunnayil, 1993
69. *Anisomysis (Anisomysis) truncata* Panampunnayil, 1993

Subgenus ***Anisomysis (Carnegieomysis)*** W. Tattersall, 1943

70. *Anisomysis (Carnegieomysis) hispida* Pillai, 1973
71. *Anisomysis (Carnegieomysis) tattersallae* Pillai, 1973

Sub genus (***Paranisomysis***) Bacescu, 1973

72. *Anisomysis (Paranisomysis) laccadivei* Panampunnayil, 1981
73. *Anisomysis (Paranisomysis) minicoyensis* Biju, Panampunnayil & Prabhakaran, 2006

Genus ***Indomysis*** W. Tattersall, 1914

74. *Indomysis annandalei* W. Tattersall, 1914
75. *Indomysis nybini* Biju & Panampunnayil, 2010

Genus ***Gangemysis*** Derzhavin, 1924

76. *Gangemysis assimilis* (W. Tattersall, 1908)

Genus ***Mesopodopsis*** Czerniavsky, 1882

77. *Mesopodopsis orientalis* (W. Tattersall, 1908)
78. *Mesopodopsis zeylanica* Nouvel, 1954

Genus ***Notacanthomysis*** Fukuoka & Murano, 2000

79. *Notacanthomysis hodgarti* (W. Tattersall, 1922)

Genus ***Idiomysis*** W. Tattersall, 1922

80. *Idiomysis inermis* W. Tattersall, 1922

Genus ***Lycomysis*** Hansen, 1910

81. *Lycomysis spinicauda* Hansen, 1910

Subfamily RHOPALOPHTHALMINAE Hansen , 1910

Genus ***Rhopalophthalmus*** Illig, 1906

82. *Rhopalophthalmus africanus* O. Tattersall, 1957
83. *Rhopalophthalmus anishi* Panampunnayil & Biju, 2006
84. *Rhopalophthalmus chilkensis* O. Tattersall, 1957
85. *Rhopalophthalmus egregius* Hansen, 1910
86. *Rhopalophthalmus indicus* Pillai, 1961
87. *Rhopalophthalmus kempi* O. Tattersall, 1957
88. *Rhopalophthalmus macropsis* Pillai, 1964
89. *Rhopalophthalmus mumbayensis* Panampunnayil & Biju, 2006
90. *Rhopalophthalmus murudana* Panampunnayil & Biju, 2006

91. *Rhopalophthalmus tattersallae* Pillai, 1961
92. *Rhopalophthalmus vijayai* Panampunnayil & Biju, 2006

Subfamily SIRIELLINAE Czerniavsky, 1882

Genus ***Siriella*** Dana, 1850

93. *Siriella aequiremis* Hansen, 1910
94. *Siriella affinis* Hansen, 1910
95. *Siriella armata* (Milne Edwards, 1837)
96. *Siriella australiensis* Panampunnayil, 1995
97. *Siriella brevicaudata* Paul'son, 1875
98. *Siriella brevispina* Biju, Jasmine & Panampunnayil, 2010
99. *Siriella dubia* Hansen, 1910
100. *Siriella gracilis* Dana, 1852
101. *Siriella hanseni* W. Tattersall, 1922
102. *Siriella jonesi* Pillai, 1964
103. *Siriella paulsoni* Czerniavsky, 1882
104. *Siriella quadrispinosa* Hansen, 1910
105. *Siriella quilonensis* Pillai, 1961
106. *Siriella thompsonii* (H. Milne Edwards, 1837)
107. *Siriella vulgaris* Hansen, 1910

Genus ***Hemisiriella*** Hansen, 1910

108. *Hemisiriella parva* Hansen, 1910
109. *Hemisiriella pulchra* Hansen, 1910

Family PETALOPHTHALMIDAE Czerniavsky, 1882

Subfamily PATALOPHTHALMINAE Czerniavsky, 1882

Genus ***Ipirothalmus*** Wittmann, 2020

110. *Ipirothalmus oculatus* (Illig, 1906)

Genus ***Petalophthalmus*** Willemoes-Suhm, 1874

111. *Petalophthalmus armiger* Willemoes-Suhm, 1875

Order LOPHOGASTRIDA Baos, 1883

Family EUCOPIIDAE G.O. Sars, 1885

Genus ***Eucopia*** Dana, 1852

112. *Eucopia australis* Dana, 1852
113. *Eucopia sculpticauda* Faxon, 1893

Family LOPHOGASTRIDAE G.O. Sars, 1870

Genus ***Lophogaster*** M. Sars, 1857

114. *Lophogaster intermedius* Hansen, 1910

Family GNATHOPHAUSIIDAE Udrescu, 1984

Genus ***Gnathophausia*** Willemoes-Suhm, 1873

115. *Gnathophausia zoea* Willemoes-Suhm, 1873-

Genus ***Fagegnathophausia*** Petryashov, 2015

116. *Fagegnathophausia gracilis* (Willemoes-Suhm, 1875)

Order STYGIOMYSIDA Tchindova, 1981

Family LEPIDOMYSIDAE Clarke, 1961

Genus ***Spelaeomysis*** Caroli, 1924

117. *Spelaeomysis cochinensis* Panampunnayil & Viswakumar, 1991
118. *Spelaeomysis longipes* (Pillai & Mariamma, 1964)

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