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ZOOLOGICAL SURVEY OF INDIA

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ARTHROPODA: CRUSTACEA: CUMACEA

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FAUNA OF INDIA CHECKLIST



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Introduction: Cumacea is an Order of small marine Crustaceans placed under the Superorder Peracarida of the Class Malacostraca which are known as Hooded shrimp or Comma shrimp. They mostly live in soft bottom of the marine environment ranging from intertidal to 8000m depth and are also reported from brackish water. Their size ranges from 1.0 to 10mm in length. Studies on Indian cumaceans were initiated by Calman (1904) and is followed by several other renowned researchers (Kemp, 1916; Kurian, 1951, 1954, 1961, 1965, 1967, 1985; Kurian and Radhadevi, 1983, 1984; Radhadevi and Kurian, 1981, 1990; Radhadevi, 1983, Haye, 2004 and Petrescu, I and Chatterjee, T. 2011).

Global diversity: Globally more than 1600 species of Cumaceans belonging to 125 genera were placed under 8 families are known (Biju and Pillai, 2020).

Diversity in India: Chatterjee and Pešić (2010) listed 69 species of Cumaceans belonging to 3 families and 18 genera. Recently Biju and Pillai (2020) made a checklist on the Cumaceans of Indian Coasts and listed 71 species of Cumaceans belonging to 3 families and 18 genera. The present study reveals the occurrence of 86 species of Cumaceans belonging to 21 genera and 4 families in India including Andaman & Nicobar Island and Lakshadweep of which the status of seven species are unknown

Diversity in States (Table)

Sl. No.	Region	No. Species	No. Endemic Species
1	Andhra Pradesh	1	
2	Arunachal Pradesh	0	
3	Assam	0	
4	Bihar	0	
5	Chhattisgarh	0	
6	Gujarat	0	
7	Goa	0	
8	Haryana	0	
9	Himachal Pradesh	0	
10	Jharkhand	0	
11	Karnataka	2	
12	Kerala	48	
13	Madhya Pradesh	0	
14	Maharashtra	0	



Sl. No.	Region	No. Species	No. Endemic Species
15	Manipur	0	
16	Meghalaya	0	
17	Mizoram	0	
18	Nagaland	0	
19	Odisha	6	
20	Punjab	0	
21	Rajasthan	0	
22	Sikkim	0	
23	Tamil Nadu	30	
24	Telangana	0	
25	Tripura	0	
26	Uttarpradesh	0	
27	Uttarakhand	0	
28	West Bengal	0	
29	Andaman & Nicobar	25	
30	Chandigarh	0	
31	Dadra Nagar Haveli, Daman & Diu	0	
32	Delhi	0	
33	Jammu & Kashmir	0	
34	Ladakh	0	
35	Lakshadweep	16	
36	Puducherry	0	
	West Coast		47
	East Coast		40
	Gulf of Mannar		9

Endemism: Maximum diversity and endemic species are observed in Kerala.

Habitat: They are predominantly marine dwellers and also available in estuarine and backwaters, though there is no freshwater species there some species which are known to intrude the freshwater environment

Ecological Significance: Cumaceans feed on the microorganisms and organic material from the mud and in turn they were consumed by many fishes so they act as significant organism in marine food chain.

Human Significance: Directly they don't have any significance for human but they form an important element in the marine ecosystem

and food chain.

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

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

Species under CITES: Indian Cumaceans are not listed under any appendices of CITES.

Invasive alien species: No Cumacean species are reported to be invasive in Indian waters.

Gap areas: Indian Cumaceans are very poorly explored and only few workers have concentrated on this group when compared to



global diversity Indian diversity is very less, further intensive and extensive studies are

essential for this under explored group of Crustacean.

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
 Superorder PERACARIDA, Calman, 1904
 Order CUMACEA Kroyer, 1846
 Family BODOTRIIDAE T. Scott, 1901
 Subfamily Bodotriinae
 Genus *Austrocuma* Day, 1978
 1. *Austrocuma kornfeldi* Haye, 2004
 Genus *Bodotria* Goodsir, 1843
 2. *Bodotria andamanensis* Petrescu & Chatterjee, 2011**
 3. *Bodotria biocellata* Radhadevi & Kurian, 1989
 4. *Bodotria choprai* Kurian, 1951
 5. *Bodotria cochinchensis* Radhadevi & Kurian, 1989**
 6. *Bodotria minuta* Kurian, 1961
 7. *Bodotria platybasis* Radhadevi & Kurian, 1981
 8. *Bodotria pulchella* (Sars, 1878)
 9. *Bodotria pulex* (Zimmer, 1903)
 10. *Bodotria setoensis* Harada, 1967
 11. *Bodotria similis* Calman, 1907
 12. *Bodotria siamensis* Calman, 1907
 13. *Bodotria sublevis* Calman, 1907
 Genus *Iphinoe* Bate, 1856
 14. *Iphinoe brevipes* Hansen, 1895
 15. *Iphinoe calmani* Fage, 1945
 16. *Iphinoe crassipes* Hansen, 1895
 17. *Iphinoe inermis* Sars, 1878
 18. *Iphinoe macrobrachium* Calman 1904**
 19. *Iphinoe pigmenta* Kurian, 1961
 20. *Iphinoe sanguinea* Kemp, 1916
 21. *Iphinoe serrata* Norman, 1867
 22. *Iphinoe tenella* G.O.Sars, 1878
 Genus *Cyclaspis* Sars, 1865
 23. *Cyclaspis bengalensis* Kurian, 1954
 24. *Cyclaspis cingulata* Calman, 1907
 25. *Cyclaspis coelebs* Calman, 1917
 26. *Cyclaspis costata* Calman, 1904
 27. *Cyclaspis cretata* Hale, 1944
 28. *Cyclaspis herdmani* Calman, 1904
 29. *Cyclaspis hornelli* Calman, 1904
 30. *Cyclaspis juxta* Hale, 1948
 31. *Cyclaspis levis* Thomson, 1892
 32. *Cyclaspis longicaudata* Sars, 1865
 33. *Cyclaspis munda* Hale, 1944
 34. *Cyclaspis picta* Calman, 1904
 35. *Cyclaspis quadruplicata* Kurian, 1951



36. *Cyclaspis strigilis* Hale, 1944
37. *Cyclaspis strumosa* Hale, 1948
38. *Cyclaspis uniplicata* Calman, 1907
39. *Cyclaspis varians* Calman, 1912
- Genus **Eocuma** Marcusen, 1894
40. *Eocuma affine* Calman, 1904
41. *Eocuma hilgendorfi* Marcusen, 1894
42. *Eocuma kemp* Kurian, 1954
43. *Eocuma latum* Calman, 1907
44. *Eocuma longicorne* Calman, 1907
45. *Eocuma sanguineum* Kurian & Radhadevi 1983**
46. *Eocuma stelliferum* Calman, 1907
47. *Eocuma striatum* Kurian & Radha Devi, 1983
48. *Eocuma taprobanicum* Calman, 1904
49. *Eocuma travancoricum* Kurian, 1951
- Genus **Zygosiphon** Calman, 1907
50. *Zygosiphon mortenseni* Calman, 1907
- Subfamily VAUNTHOMPSONIINAE
- Genus **Gigacuma** Kurian, 1951
51. *Gigacuma halei* Kurian, 1951
- Genus **Cumopsis** G.O.Sars, 1878
52. *Heterocuma africanum* (Zimmer, 1908)
53. *Heterocuma andamani* (Kurian, 1954)
54. *Heterocuma armatum* (Kurian, 1954)
55. *Heterocuma sarsi* (Miers, 1879)
- Genus **Picrocuma** Hale, 1936
56. *Picrocuma poecilatum* Hale, 1936
- Genus **Pseudosympodomma** Kurian, 1954
57. *Pseudosympodomma indicum* Kurian, 1954
- Genus **Vaunthompsonia** Bate, 1858
58. *Vaunthompsonia arabica* Calman, 1907
- Family DIASTYLIDAE Bate, 1856
- Genus **Dimorphostylis** Zimmer, 1921
59. *Dimorphostylis horai* Kurian, 1956
60. *Dimorphostylis longitelson* Kurian, 1963
- Genus **Paradiastylis** Calman, 1904
61. *Paradiastylis belone* Fage, 1945
62. *Paradiastylis brachyura* Calman, 1904
63. *Paradiastylis culicoides* Kemp, 1916
64. *Paradiastylis longipes* Calman, 1905
- Genus **Makrokylindrus** Stebbing, 1912
65. *Makrokylindrus (Adiastylis) fistularis* (Calman), 1911
- Family GYNODIASTYLIDAE Stebbing, 1912
- Genus **Gynodiastylis** Calman, 1911
66. *Gynodiastylis bacescui* Petrescu & Chatterjee, 2011**
67. *Gynodiastylis lata* Hale, 1946
- Family NANNASTACIDAE Bate, 1866
- Genus **Nannastacus** Bate, 1865
68. *Nannastacus gibbosus* Calman, 1911
69. *Nannastacus goniatus* Gamo, 1962
70. *Nannastacus inflatus* Hale, 1945
71. *Nannastacus johnstoni* Hale, 1945
72. *Nannastacus lepturus* Calman 1911**



73. *Nannastacus stebbingi* Calman, 1904
74. *Nannastacus zimneri* Calman, 1911
- Genus **Cumella** G.O. Sars, 1865
75. *Cumella (Cumella) forficuloides* Bacescu & Muradian, 1975
76. *Cumella (Cumella) laevis* Calman, 1911
77. *Cumella (Cumella) turgidula* Hale, 1945
- Genus **Campylaspis** G.O. Sars, 1865
78. *Campylaspis latidactyla* Hale, 1945
79. *Campylaspis maculata* Zimmer, 1907
80. *Campylaspis minor* Hale, 1945
81. *Campylaspis minuta* Radhadevi & Kurian, 1989
82. *Campylaspis platyuropus* Calman, 1911
83. *Campylaspis robusta* Radhadevi & Kurian, 1989**
- Genus **Scherocumella** Watling, 1991
84. *Scherocumella nichollsi* (Hale, 1949)
- Genus **Schizotrema** Calman, 1911
85. *Schizotrema bifrons* Calman, 1911
- Genus **Gigacuma** Kurian, 1951
86. *Gigacuma halei* Kurian, 1951

**Status unknown.

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