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FRESHWATER OSTRACODA (CRUSTACEA) OF INDIA - A CHECKLIST

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Ostracoda is one of the most diverse groups of crustaceans living in all aquatic ecosystems: marine, brackish, and freshwater (including subterranean ecosystems). They are cosmopolitan in distribution and play a vital role in the food chain and energy flow in the aquatic ecosystem. Ostracoda is considered as a separate class under Crustacea and it has been divided into the subclasses Myodocopa (only marine representatives) and Podocopa (Martin & Davis 2001; Horne et al. 2002). The subclass Podocopa has the following three orders: Platycopida, which includes marine and a very few brackish water forms; Podocopida which is present in both freshwater and the marine environment; and Palaeocopida known only from fossils records (Karanovic 2012). Globally, there are about 2103 species of non-marine Ostracoda and they are classified into 209 genera, 15 families and three superfamilies: Darwinuloidae, Cytheroidea, and Cypridoidea (Martens & Savatnalinton 2011; Karanovic 2012). Among the different zoogeographic regions, the oriental region has 200 species, of which 83% are endemic and the Australian region alone accounts for 176 species (Martens et al. 2008). Freshwater habitat exhibits a high Ostracoda diversity inspite of a rapid decline in freshwater biodiversity (Dudgeon et al. 2006, Martens & Savatnalinton 2011).

The taxonomic studies on Indian Ostracods were initiated by Baird (1859). Later, Victor & Fernando (1979) listed about 56 freshwater Ostracoda species

from the Indian subcontinent. Further, Venkataraman & Krishnamoorthy (1998) estimated that there were 120 species of Ostracoda from freshwater and marine habitats, which included 24 genera and four families, but there was no comprehensive list. Therefore, based on the review of published data in Baird (1859), Gurney (1907), Klie (1927), Arora (1931), Brehm (1950), Hartmann (1964), Deb (1972, 1973a,b,c, 1983), Victor & Michael (1975), Victor & Fernando (1979, 1981), Battish (1978, 1981, 1998), Harshey & Victor (1983), Harshey & Shrivastava (1983), Gupta (1984, 1988 & 1991), Harshey & Srinivasan (1984), Harshey et al. (1987), Harshey & Patil (1988), Harshey (1996, 2008), George (1993), Jayasree et al. (1994) Venkataraman (1999), Patil (2002), George & Martens (2002, 2003, 2004), Patil & Talmale (2005a,b, 2012), Karanovic & Reddy (2008) and Harshey & Thilak (2011), we compile a checklist of Indian Ostracoda and discuss their status.

In the present review of Indian freshwater ostracods, we list 152 valid species belonging to 39 genera, five families and two super families (Tables 1,2). Further,

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the status of the uncertain species is marked with hash sign (#) in the checklist. It is found that 50 species reported from India have been synonymised (Martens & Savatnalinton 2011; Karanovic 2012) and their current valid nomenclature is also given in Table 3.

Literature reveals that there were several new species described in the past few decades from the Indian subcontinent by various workers, but the descriptions of most of the species seem to be insufficient to give the status of new species. Although most Indian taxonomists emphasized carapace morphology in ostracod identification, recent studies highlight that, in fact, soft parts morphology was crucial for their proper systematic placement. It was also observed that most of the species reported from India lack voucher and type locality information, which additionally contributes to the instability of the current Ostracoda nomenclature and validity of the species. Hence, the present checklist uses the type locality information provided in Karanovic (2012).

Freshwater faunal studies of Indian Ostracoda are limited and scattered, when compared to the global studies. In fact, the studies in this country are confined to a few states like Tamil Nadu, Kerala, Maharashtra, Madhya Pradesh, Chhattisgarh, Rajasthan, and a few parts of Delhi. India is one of the biodiversity rich countries in the world. The oriental region is the hotspot of ostracoda diversity with 200 species, of which 83%

are endemic (Martens et al. 2008) and nearly 58% of the species are endemic to India within the oriental region. This study emphasizes the need for further detailed investigation to confirm the validity and status of the majority of ostracod species reported from India.

Systematic list of Indian Freshwater Ostracoda

Class: Ostracoda

Subclass: Prodocopa

Order: Podocopida

Suborder: Cypridocopina

Super family: Cypridoidea

Family: Cyprididae

Subfamily: Cypridinae

1. *Cypretta alagarkoilensis* Victor & Michael, 1975
2. *Cypretta fontinalis* Hartman, 1964
3. *Cypretta foveata* Hartmann, 1964
4. *Cypretta gargi* Deb, 1983
5. *Cypretta globosa* (Brady, 1886)
6. *Cypretta globula* (Sars, 1889)
7. *Cypretta patialaensis* Battish, 1982
8. *Cypretta raciborskii* (Grochmalicki, 1915)
9. *Cypretta ramai* Deb, 1984
10. *Cypretta seurati* Gauthier, 1929
11. *Cypretta turgida* Sars, 1896
12. *Pseudocypretta maculata* Klie, 1932

Subfamily: Cypricerinae

13. *Astenocypris papyracea* (Sars, 1903)
14. *Bradleycypris vittata* (Sars, 1903)
15. *Bradleystrandesia dani* (George & Martens, 1993)
16. *Bradleystrandesia mollis* (Furtos, 1936)
17. *Bradleystrandesia parva* (Hartmann, 1964)
18. *Bradleystrandesia reticulata* (Zaddach, 1844)
19. *Bradleystrandesia trichurensis* (Victor et al., 1980)
20. *Bradleystrandesia weberi* (Moniez, 1892)
21. *Bradleytribella tuberculata* (Hartmann, 1964)
22. *Cypricercus indrani* Deb, 1983 #
23. *Cypricercus munshii* Deb and Nasar, 1977 #
24. *Cypricercus setosus* Farkas, 1957
25. *Cypricercus vietsi* Farkas, 1957
26. *Strandesia antetuberculata* Hartmann & Petersen, 1985
27. *Strandesia bicornuta* Hartmann, 1964
28. *Strandesia flavescens* Klie, 1932
29. *Strandesia calapanensis* Tressler, 1937
30. *Strandesia gopinathani* George & Martens, 1993
31. *Strandesia hartmanni* Victor et al., 1980
32. *Strandesia labiata* Hartmann, 1964
33. *Strandesia madhuriae* Harshey & Srinivasan 1984
34. *Strandesia odiosa* (Moniez, 1892)

Table 1. Status of the freshwater Ostracoda of the world and India

		World	Oriental region	India
1	Superfamilies	4	1	2
2	Families	15	6	5
3	Subfamilies	34	16	15
4	Genera	209	46	39
5	Species	2103	200	152

Table 2. Family wise Ostracoda species account from India

	Families	World	Oriental region	India
1	Cyprididae	998	154	119
2	Candonidae	545	17	12
3	Ilyocyprididae	33	8	6
4	Notodromadidae	36	15	14
5	Darwinulidae	29	4	1
6	Limnocytheridae	144	1	-
7	Laxoconchidae	4	1	-

(World and Oriental region data source from Martens et al. 2008)

35. *Strandesia perakensis* Victor & Fernando, 1981
 36. *Strandesia bornemiszae* Klie, 1935
 37. *Strandesia purpurascens* (Brady, 1886)
 38. *Strandesia quasirotonda* Hartmann & Petersen, 1985
 39. *Strandesia vinciguerrae* (Masi, 1905)
 40. *Strandesia saetosa* Hartmann, 1964
 41. *Strandesia victori* Harshey & Srinivasan, 1984
 42. *Tanycypris pellucida pellucida* (Klie, 1932)
 Subfamily: Cypridinae
 43. *Cypris debi* Deb, 1983 #
 44. *Cypris decaryi* Gauthier, 1933
 45. *Cypris dravidensis* Victor & Michael, 1975 #
 46. *Cypris elongata* Deb, 1983 #
 47. *Cypris globosa* Deb, 1983 #
 48. *Cypris kumari* (Arora, 1931) #
 49. *Cypris protuberata* Victor & Fernando, 1978 #
 50. *Cypris subglobosa* Sowerby, 1840
 51. *Pseudocypris patialaensis* Battish, 1977
 Subfamily: Cypridopsinae
 52. *Cypridopsis maduraiensis* Victor & Michael, 1975
 53. *Klieopsis horai* (Klie, 1927)
 54. *Plesiocypridopsis angularis* (Victor & Michael, 1975)
 55. *Plesiocypridopsis dispar* (Hartmann, 1964)
 56. *Plesiocypridopsis newtoni* (Brady & Robertson, 1870)
 57. *Potamocypris dubia* (Masi, 1905)
 58. *Potamocypris narayanani* George & Martens, 2002
 59. *Sarscypridopsis ochracea* (Sars, 1924)
 Subfamily Cyprinotinae
 60. *Cyprinotus cingalensis* Brady, 1886
 61. *Hemicypris anomala* (Klie, 1938)
 62. *Hemicypris arorai* (Battish, 1981)
 63. *Hemicypris bairdi* Martens & Wouters 1985
 64. *Hemicypris bhatiai* Battish, 1981
 65. *Hemicypris dentatomarginata* (Baird, 1859)
 66. *Hemicypris derweshensis* Battish, 1981
 67. *Hemicypris dissonus* Victor & Fernando, 1976
 68. *Hemicypris falcatus* Victor & Fernando 1976
 69. *Hemicypris gillensis* (Battish, 1981)
 70. *Hemicypris malerkotlaensis* Battish, 1981
 71. *Hemicypris megalops* Sars, 1903
 72. *Hemicypris ovata* Sars, 1903
 73. *Hemicypris pailensis* Battish, 1981
 74. *Hemicypris pyxidata* (Moniez, 1892)
 75. *Heterocypris anitae* Battish, 1981
 76. *Heterocypris aurea* Sars, 1895
 77. *Heterocypris chandrai* (Arora, 1931)
 78. *Heterocypris fluviatilis* (Furtos, 1933)
 79. *Heterocypris giesbrechti* (G.W. Müller, 1898)
 80. *Heterocypris incongruens* (Ramdohr, 1808)
 81. *Heterocypris indica* (Battish, 1981)
 82. *Heterocypris makuia* (Tressler, 1937)
 83. *Heterocypris malini* Deb, 1983
 84. *Heterocypris nuda* (Victor & Michael, 1975)
 85. *Heterocypris salina* (Brady, 1868)
 Subfamily: Dolerocypridinae
 86. *Dolerocypris sinensis* Sars, 1903
 Subfamily: Eucypridinae
 87. *Eucypris biharensis* Deb, 1984
 88. *Eucypris bispinosa* (Victor & Michael, 1975)
 89. *Eucypris compressa* Deb, 1983
 90. *Eucypris ellipticalis* Deb, 1983
 91. *Eucypris gomti* Deb, 1983
 92. *Eucypris himani* Deb, 1983
 93. *Eucypris indica* Deb, 1983
 94. *Eucypris inaequalis* Deb, 1983
 95. *Eucypris munia* Deb, 1983
 96. *Eucypris sonia* Deb, 1983
 Subfamily: Herpetocypridinae
 97. *Chrissia achandii* (George & Martens, 1993)
 98. *Chrissia biswasi* (Deb, 1972)
 99. *Chrissia canaliculata* (Hartmann, 1964)
 100. *Chrissia dyalpurensis* Battish, 1998
 101. *Chrissia fasciculata* (Daday, 1910)
 102. *Chrissia formosa* (Klie, 1938)
 103. *Chrissia fuelleborni* (Daday, 1910)
 104. *Chrissia goddeerisi* (George et al., 1993)
 105. *Chrissia halyi* (Ferguson, 1969)
 106. *Chrissia hislopi* (Ferguson, 1969)
 107. *Chrissia humilis* (Klie, 1932)
 108. *Chrissia humilis indica* Hartmann, 1964
 109. *Chrissia khopoliensis* (Deb, 1983)
 110. *Chrissia krishnakantai* (Deb, 1972)
 111. *Chrissia spinosa* (Tressler, 1937)
 112. *Herpetocypris ludhianensis* Battish, 1982
 113. *Humphcypris sewelli* (Klie, 1927)
 114. *Stenocypris derupta* Vavra, 1906
 115. *Stenocypris distincta* Victor & Fernando, 1978
 116. *Stenocypris jabalpurensis* Harshey & Patil, 1988
 117. *Stenocypris major* (Baird, 1859)
 118. *Stenocypris sohni* Deb, 1983
 Subfamily: Megalocypridinae
 119. *Sclerocypris rajasthanensis* Deb, 1973
Family: Candonidae
 Subfamily: Candoninae
 120. *Candonopsis (Candonopsis) putealis* Klie, 1932
 121. *Candonopsis (Candonopsis) urmilae* Gupta, 1988
 122. *Indocandona krishnakanti* Gupta, 1984
 123. *Indocandona nagarjuna* Karanovic & Ranga Reedy, 2008

Subfamily: Cyclocypridinae

124. *Cypria brevisetigera* Cole, 1965
 125. *Cypria devai* (Arora, 1931)
 126. *Cypria javana javana* G.W. Müller, 1906
 127. *Cypria minutua* (Victor & Michael, 1975)
 128. *Cypria sharmai* Battish, 1985
 129. *Physocypria armata* (G.W. Muller, 1897)
 130. *Physocypria crenulata* (Sars, 1903)
 131. *Physocypria furfuracea* (Brady, 1886)

Family: Ilyocyprididae

Subfamily: Ilyocypridinae

132. *Ilyocypris australiensis* Sars, 1889
 133. *Ilyocypris bradyi* Sars, 1890
 134. *Ilyocypris dentifera* Sars, 1903
 135. *Ilyocypris gibba* (Ramdohr, 1808)
 136. *Ilyocypris mckenziei* Bhatia & Mannikeri, 1975
 137. *Ilyocypris nagamalaiensis* Victor & Michael, 1975

Family: Notodromadidae

Subfamily: Indiacypridinae

138. *Indiacypris chalakkudensis* George & Martens, 2004.
 139. *Indiacypris dispar* Hartman, 1964

Subfamily: Notodromadinae

140. *Centrocypris bhagirathiae* Battish, 1981
 141. *Centrocypris horrida* (Vavra, 1895)
 142. *Centrocypris indica* Gupta, 1991
 143. *Centrocypris madani* Battish, 1981
 144. *Centrocypris matthaii* (Arora, 1931)
 145. *Gurayacypris kangraensis* Battish, 1987
 146. *Newnhamia dumonti* George & Martens, 2004
 147. *Newnhamia fenestrata* King, 1855
 148. *Notodromas serrata* Deb, 1984

Subfamily: Oncocypridinae

149. *Oncocypris bhatiai* Battish, 1982
 150. *Oncocypris voeltzkowi* G.W. Muller, 1898
 151. *Sataracypris gibbosa* (Baird, 1837) #

Super family: Darwinuloidea

Family: Darwinulidae

152. *Darwinula stevensoni* (Brady & Robertson, 1885)
 # Uncertain species

References

- Arora, G.L. (1931). Fauna of Lahore 2 Entomostraca (Water fleas) of Lahore. *Bulletin of the Department of Zoology University of the Punjab* 1: 62–100.
- Baird, W. (1859). Description of some new recent Entomostraca from Nagpur collected by Rev. S. Hislope. *Proceedings of the Zoological Society of London* 1859: 213–234.
- Battish, S.K. (1978). A new genus and new species of Cypridid Ostracod from India, with notes on its biology. *Zoological Journal of the Linnean Society* 64: 283–292; <http://dx.doi.org/10.1111/j.1096-3642.1978.tb01074.x>
- Battish, S.K. (1981). Freshwater Ostracods of the subfamily Cyprinotinae from Punjab, India with description of eight new species. *Journal of Natural History Society* 15: 645–669; <http://dx.doi.org/10.1080/00222938100770461>
- Battish, S.K. (1998). A new species of Cypridid Ostracod from India. *Proceedings of the Zoological Society of Calcutta* 52(1): 33–37.
- Brehm, V. (1950). Contributions to the freshwater fauna of India. *Records of the Indian Museum* 48(2): 9–28.
- Deb, M. (1972). Two new species of *Stenocypris* Sars, 1889. *Journal of the Zoological Society of India* 1: 91–95.
- Deb, M. (1973a). First record of the genus *Sclerocypris*, Sars 1924 (Crustacea: Ostracods) from India with description of two new species. *Journal of the Zoological Society of India* 25: 47–52.
- Deb, M. (1973b). Fauna of Rajasthan (India): Crustacea-Ostracoda. *Records of the Zoological Survey of India* 67: 233–259.
- Deb, M. (1973c). Notes on a collection of Ostracoda from Delhi. *Records of the Zoological Survey of India* 67: 309–313.
- Deb, M. (1983). Brief descriptions of new species on Ostracoda: Crustacea from Maharashtra state (India). *Records of the Zoological Survey of India* 81: 135–166.
- Dudgeon, D., A.H. Arthington, M.O. Gessner, Z. Kawabata, D.J. Knowler, C. Leveque, R.J. Naiman, A. Prieur-Richard, D. Soto, M.L.J. Stiassny, & C.A. Sullivan (2006). Freshwater Biodiversity: Importance, threats, status and conservation challenges. *Biological Reviews* 81: 163–182.
- George, S., K. Martens & C.K.G. Nayar (1993). Two new species of freshwater Ostracoda of the genus *Parastenocypris* Hartmann, 1964 from Kerala, India. *Hydrobiologia* 254: 183–193; <http://dx.doi.org/10.1007/BF00014112>
- George, S. & K. Martens (2002). On a new species of *Potamocypris* (Crustacea, Ostracoda) from Chalakkudy River, Kerala (India), with a checklist of the *Potamocypris* species of the world. *Zootaxa* 66: 1–15.
- George, S. & K. Martens (2003). On a new species of the genus *Newnhamia* King, 1855 (Crustacea, Ostracoda) raised from Chalakkudy River sand, (Kerala, India), with notes on the taxonomy and distribution of the Notodromadidae. *Hydrobiologia* 497: 25–37; <http://dx.doi.org/10.1023/a:1025453302991>
- George, S & K. Martens (2004). On the taxonomic position of Indiacypridinae (Crustacea, Ostracoda) with description of a new species of *Indiacypris* Hartmann, 1964 from Chalakkudy River (Kerala, India). *Journal of Natural History* 38: 537–548; <http://dx.doi.org/10.1080/0022293021000013870>
- Gupta, L.P. (1984). *Indocandona krishnakanti* gen. et. sp. nov. (Crustacea: Ostracoda: Candonidae) from subterranean water of Bihar, India. *Records of the Zoological Survey of India* 81: 291–298.
- Gupta, L.P. (1988). *Candonopsis urmilae*, a new species of subterranean Crustacea (Ostracoda: Candonidae) from India. *Records of the Zoological Survey of India* 85: 419–427.
- Gupta, L.P. (1991). Studies on Crustacea (Ostracoda) of Bihar, India. II. *Centrocypris indicus* sp. nov. *Records of the Zoological Survey of India* 89: 147–153.
- Harshey, D.K. (1996). On some new records of fresh water Ostracods (Crustacea: Entomostraca) from India. *Records of the Zoological Survey of India* 95(3–4): 215–227.
- Harshey, D.K. (2008). Crustacea (Ostracoda). *Faunal Diversity of Jabalpur District, Madhya Pradesh*. Edited by the Director, Zoological Survey of India, Kolkata. 63–75.
- Harshey, D.K. & J. Thilak (2011). Freshwater Ostracods (Arthropoda: Crustacea). *Zoological Survey of India, Fauna of Madhya Pradesh (including Chhattisgarh), State Fauna Series* 15(3): 31–44.
- Harshey, D.K. & R. Victor (1983). On *Parastenocypris biswasi* (Deb), 1972-A freshwater Ostracoda (Crustacea: Ostracoda) from India. *Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut* 80: 177–182.
- Harshey, D.K. & A.K. Srinivasan (1984). A new species of *Strandesia* Vavra, 1895 (Crustacea: Ostracoda) from India. *Biovigyanam* 13(2): 104–106.

Table 3. List of Indian freshwater Ostracoda current valid names and synonyms

	Current valid Name	Synonyms
1	<i>Bradleycypris vittata</i> (Sars, 1903)	<i>Cypris vittata</i> Sars, 1903
2	<i>Bradleystrandesia mollis</i> (Furtos, 1936)	<i>Cypricercus mollis</i> Furtos, 1936
3	<i>Bradleystrandesia reticulata</i> (Zaddach, 1844)	<i>Cypris reticulata</i> Zaddach, 1844
4	<i>Bradleystrandesia trichurensis</i> (Victor et al., 1980)	<i>Strandesia trichurensis</i> Victor et al., 1980
5	<i>Bradleystrandesia weberi</i> (Moniez, 1892)	<i>Strandesia weberi</i> Moniez, 1982
6	<i>Bradleyriebella tuberculata</i> (Hartmann, 1964)	<i>Strandesia tuberculata</i> Hartmann, 1964
7	<i>Candonopsis (Candonopsis) putealis</i> Klie, 1932	<i>Candonopsis putealis</i> Klie, 1932
8	<i>Centrocypris matthaii</i> (Arora, 1931)	<i>Eucypris matthaii</i> Arora, 1931
9	<i>Chrissia achandii</i> (George & Martens, 1993)	<i>Parastenocypris achandii</i> George & Martens, 1993
10	<i>Chrissia biswasi</i> (Deb, 1972)	<i>Parastenocypris biswasi</i> (Deb, 1972) <i>Stenocypris biswasi</i> Deb, 1972
11	<i>Chrissia canaliculata</i> (Hartmann, 1964)	<i>Parastenocypris canaliculata</i> Hartmann, 1964
12	<i>Chrissia fasciculata</i> (Daday, 1910)	<i>Stenocypris fasciculata</i> Daday, 1910
13	<i>Chrissia fulleborni</i> (Daday, 1910)	<i>Stenocypris fulleborni</i> Daday, 1910
14	<i>Chrissia goddeerisi</i> (George, Martens & Nayar, 1993)	<i>Parastenocypris goddeerisi</i> George, Martens & Nayar, 1993
15	<i>Chrissia hislopi</i> (Ferguson, 1969)	<i>Stenocypris hislopi</i> Ferguson, 1969
16	<i>Chrissia khopoliensis</i> (Deb, 1983)	<i>Stenocypris khopoliensis</i> Deb, 1983
17	<i>Chrissia spinosa</i> (Tressler, 1937)	<i>Stenocypris spinosa</i> Tressler, 1937
18	<i>Cypris decaryi</i> Gauthier, 1933	<i>Cypris ravenala</i> Brehm, 1934
19	<i>Cypris kumari</i> (Arora, 1931)	<i>Eucypris kumari</i> Arora, 1931
20	<i>Eucypris bispinosa</i> (Victor & Michael, 1975)	<i>Cyprinotus bispinosa</i> Victor & Michael, 1975
21	<i>Hemicypris ovata</i> Sars 1903	<i>Cyprinotus ovatus</i> (Sars, 1903)
22	<i>Heterocypris aurea</i> (Sar, 1895)	<i>Cyprinotus aureus</i> Sars, 1895
23	<i>Heterocypris chandrai</i> (Arora, 1931)	<i>Cyprinotus chandrai</i> Arora, 1931
24	<i>Heterocypris fluviatilis</i> (Furtos, 1933)	<i>Cyprinotus fluviatilis</i> Furtos, 1933
25	<i>Heterocypris giesbrechtii</i> (G. W. Muller, 1898)	<i>Cyprinotus giesbrechtii</i> G. W. Muller, 1898 <i>Cyprinotus gunning</i> (Methuen, 1910)
26	<i>Heterocypris incongruens</i> (Ramdohr, 1808)	<i>Cyprisnotus incongruens</i> Ramdohr, 1808
27	<i>Heterocypris indica</i> (Battish, 1981)	<i>Cyprinotus indica</i> Battish, 1981
28	<i>Heterocypris makua</i> (Tressler, 1937)	<i>Cyprinotus makua</i> Tressler, 1937
29	<i>Heterocypris malini</i> (Deb, 1983)	<i>Cyprinotus malini</i> Deb, 1983
30	<i>Heterocypris megalops</i> Sars, 1903	<i>Cyprinotus megalops</i> (Sars, 1903)
31	<i>Heterocypris nudus</i> (Victor & Michael, 1975)	<i>Cyprinotus nudus</i> Victor & Michael, 1975
32	<i>Heterocypris salina</i> (Brady, 1868)	<i>Cyprinotus salina</i> Brady, 1868
33	<i>Himicypris gillensis</i> (Battish, 1981)	<i>Heterocypris gillensis</i> (Battish, 1981)
34	<i>Humphcypris sewelli</i> (Klie, 1927)	<i>Stenocypris sewelli</i> Klie, 1927
35	<i>Indiacypris dispar</i> Hartmann, 1964	<i>Ilyocypris dispar</i> Hartmann, 1964
36	<i>Klieopsis horai</i> (Klie, 1927)	<i>Cypridopsis horai</i> Klie, 1927
37	<i>Oncocypris voeltzkowi</i> G. W. Muller, 1898	<i>Oncocypris pustulosa</i> Gurney, 1916
38	<i>Plesiocypridopsis angularis</i> (Victor & Michael, 1975)	<i>Cypridopsis angularis</i> Victor & Michael, 1975
39	<i>Plesiocypridopsis dispar</i> (Hartmann, 1964)	<i>Cypridopsis dispar</i> Hartmann, 1964
40	<i>Plesiocypridopsis newtoni</i> (Brady & Robertson, 1870)	<i>Cypridopsis newtoni</i> Brady & Robertson, 1870
41	<i>Potamocypris dubia</i> (Masi, 1905)	<i>Cypridopsis dubia</i> Masi, 1905
42	<i>Pseudocypris dravidensis</i> (Victor & Michael, 1979)	<i>Cypris dravidensis</i> Victor & Michael, 1979
43	<i>Sclerocypris rajasthaniensis</i> (Deb, 1973)	<i>Bharatcypris indica</i> Deb, 1983 <i>Bharatcypris mackenziei</i> Battish, 1978 <i>Bharatcypris dentata</i> (Victor & Michael, 1975)
44	<i>Strandesia pupurascens</i> (Brady, 1886)	<i>Strandesia meghnae</i> Harshey & Shrivastava 1987
45	<i>Strandesia victori</i> Harshey & Srinivasan, 1984	<i>Strandesia neelimae</i> Harshey & Shrivastava, 1987
46	<i>Sarscypridopsis ochracea</i> (Sars, 1924)	<i>Cypridopsis ochracea</i> Sars, 1924
47	<i>Stenocypris major</i> (Baird, 1859)	<i>Stenocypris cylindrica</i> major Baird, 1859
48	<i>Strandesia bornemiszaei</i> Klie, 1935	<i>Strandesia prava</i> Klie, 1935
49	<i>Strandesia calapanensis</i> Tressler, 1937	<i>Strandesia elongata</i> Hartmann, 1964 <i>Strandesia indica</i> Hartmann, 1964
50	<i>Strandesia vinciguerrae</i> (Masi, 1905)	<i>Strandesia rotunda</i> (Tressler, 1950)

Harshey, D.K & A.K. Shrivastava (1983). Some new recodes of freshwater ostracods from India. *Current Science* 52(15): 741–742.

Harshey, D.K., A.K. Shrivastava & S.G. Patil (1987). Three new species of *Strandesia* Vavra, 1895 (Crustacea: Entomostraca) from India. *Journal of Current Bioscience* 45(2): 43–48.

Harshey, D.K & S.G. Patil (1988). New species of *Strandesia jabalpurensis* from India. *Journal of Biosciences* 5(1): 6–10.

Hartmann, G. (1964). Asiatische Ostracoden, Systematische und Zoogeographische untersuchungen. *Internationale Revue der*

Gesamten Hydrobiologie und Systematische Beihefte 3: 1–155.

Horne, D.J., A. Cohen & K. Martens (2002). Taxonomy, morphology and biology of quaternary and living ostracoda, pp. 5–36. In: Holmes J.A. & A.R. Chivas (eds.). *The Ostracoda Applications in Quaternary Research. Geophysics Monograph*-131.

Jayasree, T., K.S. Rao, K.A. Singh & K. Sunil (1994). Observations on the Ostracoda fauna of central India with special reference to the western Narmada basin. *Journal of Aquatic Biology and Fisheries* 1(2): 41–50.

- Karanovic, I. (2012).** *Recent freshwater Ostracods of the World - Crustacea, Ostracoda, Podocopida*. Published by Springer, London. 1–608.
- Karanovic, I. & Y.R. Reddy (2008).** The second representatives of the genus *Indocandona* Gupta (Crustacea, Ostracoda) from a well in southeastern India. *Crustaceana* 72: 603–610
- Klie, W. (1927).** Zur Kenntnis der Mikrofauna von British Indien. *Records of the Indian Museum* 1: 157–165.
- Martens, K & Savatnalinton (2011).** Monograph: A subjective checklist of the Recent, free-living non-marine Ostracoda (Crustacea). *Zootaxa* 2855: 1–79.
- Martens, K., I. Schon, C. Meisch & D.J. Horne (2008).** Global diversity of Ostracods (Ostracoda, Crustacea) in freshwater. *Hydrobiologia* 595: 185–193; <http://dx.doi.org/10.1007/s10750-007-9245-4>
- Martin, J.W. & G.E. Davis (2001).** An updated classification of the recent Crustacea. *Natural History Museum of Los Angeles, Science series* 39: 1–124.
- Patil, S.G. (2002).** Freshwater Ostracoda, pp. 87–90. In: *Fauna of Ujani*. Zoological Survey of India, Wetland Ecosystem Series 3.
- Patil, S.G & S.S. Talmale (2005a).** The freshwater Ostracoda, pp. 63–75. In: Anon. (ed.). *Fauna of Nathasagar Wetland*. Zoological Survey of India, Wetland Ecosystem Series 7.
- Patil, S.G. & S.S. Talmale (2005b).** A checklist of freshwater Ostracods (Ostracoda: Crustacea) of Maharashtra, India. *Zoos' Print Journal* 20(5): 1872–1873; <http://dx.doi.org/10.11609/JoTT.ZPJ.1007.1872-3>
- Patil, S.G. & S.S. Talmale (2012).** Freshwater Ostracods, pp. 309–319. In: Director (ed.). *Fauna of Maharashtra Part-2 Invertebrate*. Zoological Survey of India, State Fauna series 20.
- Venkataraman, K. (1999).** Three species of freshwater Ostracoda (Crustacea) from Tamilnadu. *Records of the Zoological Survey of India* 97(3): 91–96.
- Venkataraman, K. & Krishnamoorthy (1998).** Crustacea - Faunal Diversity in India. Published by ENVIS center, Zoological survey of India, Calcutta, 134–144.
- Victor, R. & C.H. Fernando (1979).** The freshwater Ostracods (Crustacea: Ostracoda) of India. *Records of the Zoological Survey of India* 74(2): 147–242.
- Victor, R. & C.H. Fernando (1981).** Freshwater Ostracods (Crustacea: Ostracoda) of the subfamily Dolerocypridinae Triebel, 1961 from Southeast Asia. *Zoological Journal of the Linnean Society* 72: 107–116.
- Victor, R. & R.G. Michael (1975).** Nine new species of freshwater Ostracods from Madurai area in southern India. *Florida Museum of Natural History* 9: 361–376; <http://dx.doi.org/10.1080/00222937500770261>

