



## **Freshwater rotifers of Andhra Pradesh – Checklist**

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### **Abstract**

The rotifers are one of the most important faunal component and bioindicators of the freshwater bodies. The present work is a comprehensive and updated checklist of freshwater rotifers of Andhra Pradesh, India with current valid nomenclature. A total of 114 species of freshwater rotifers have been reported from the state, of which 113 species belonging to Monogononta (03 orders, 22 families, 39 genera) and only one species belonging to Bdelloidea. The family Lecanidae has high species richness with 26 species followed by Brachionidae with 24 species. The following described species of rotifers viz., *Brachionus havaensis*, *Diplois daviesiae*, *Philodina resoeola* and *Lecane chandramohan* sp. nov., *L. radhakrishnai* sp. nov. and *Lecane paradeciopiens* reported from this state are need further taxonomic revisionary study for confirmation, and most of species there is no record of deposition.

**Key words:** Checklist, Rotifer species and Andhra Pradesh.

### **Introduction**

Geographically, Andhra Pradesh constitutes most of the eastern half of the Deccan plateau, the plains to the east of the Eastern Ghats lies between 12°41' - 22°48'N latitude and 77°24' - 84°40'E longitude (Fig. - 1). The four important rivers of India, Godavari, Krishna, Penna, and Thungabhadra flow through the state. It has the second largest wetland habitats with an area of around 1,03,88,787 ha in India Panigrahy *et al.* (2011), including 98 small reservoirs, 2800 tanks, 32 medium reservoir and 7 large reservoirs with a total surface water area of 4,58,507 ha Sugunan (1995).

Zooplankton groups are one of the most common components of the water bodies. Among the various zooplankton, rotifers are pseudocoelomate animals with a size ranging 50-2000 $\mu$ m and commonly known as "wheel animalcules" because

of their characteristic 'wheel organ'. They are ubiquitous, occurring in all types of fresh and brackish water habitats. Nearly, 95% of species are reported from freshwater habitats and remaining 5% are from marine environment, Sharma (1996). Rotifers play a vital role in interlinking the aquatic food chain, nutrient recycling and considered as a bioindicators of the habitats, Sharma (1996) and Segers (2008). They also serve as valuable indicators of water quality Sladecek (1983), Berzins and Pejler (1989).

About 2030 species of rotifers are reported worldwide, Segers (2007, 2008, 2012). Sharma (1996) reported 325 species from India and subsequently many species have been added to the list. The rotiferan fauna of Eastern and Northeastern Indian regions are well documented than the other regions of the country (Sharma, 1998; Sharma and Sumita, 2005). Thirupathiah *et al.*

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(2011) reported 360 species from Indian region, but there is no comprehensive list. The studies on taxonomic and limnological aspects of the rotifers of Andhra Pradesh made several authors such as Naidu (1967), Dhanapathi (1973, 1974 a, b, 1975, 1976a, b, 1977, 1978, 2000 and 2004), Rao and Chandra Mohan (1976, 1977a, b and 1982), Babu Rao *et al.* (1981), Arshaduddin and Khan (1991), Siddiqi and Khan (2002), Patil and Panda (2003), and Chandrasekhar (2007a, b, 2010 and 2011) are notable. It is almost three decades over as the earlier checklist was published by Dhanapathi, 1974. Due to several overlooked taxonomic studies of the rotifers in several occasions, the same species was named with other nomenclature and created confusion over listing of the rotifer fauna. Keeping in view of the nomenclature mystification, the present study provides an updated checklist of rotifers from the freshwater bodies of Andhra Pradesh with current valid nomenclature.



**Fig. 1. The map showing the areas of rotiferan fauna reported in the state of Andhra Pradesh**

A total of 114 species of freshwater rotifers reported from the state, of which 113 species belonging to Subclass Monogonota consists of 03 orders under 22 families in 39 genera and one

species belonging to Subclass Bdelloidea (Table - 1). The family Lecanidae representing 26 species followed by Brachionidae 24 species, Euchlanidae and Notommatidae 8 species, Lepadellidae 7 species. The families Scaridiidae, Lindiidae, Trochosphaeridae, Atrochidae and Philodinidae have one species whereas rests of the families are represented by two to four species. About 6 species, *Brachionus durgae*, *Platiyas quadricornis andhraensis*, *Pseudoeuchlanis longipedes*, *L. bidentata*, *L. eswari*, and *Asplanchnopus bhimavaramensis* are endemic to Andhra Pradesh. Most of the previous studies were made in the costal districts of Andhra Pradesh, whereas very few studies have been carried out from the North-West and South-West parts of Andhra Pradesh. Moreover, the studies were made on the rotiferan fauna of ponds, tanks, and pools, but the studies on larger water bodies like lakes and reservoirs was limited. The major contribution to rotiferan fauna of Andhra Pradesh was made by Dhanapathi (1973-2004), discovered 9 new species and 18 new records from India. In Andhra Pradesh 91 species of rotifers are reported belonging to 18 families Dhanapathi (2000). While summarizing the present checklist, it is found that 20 species of rotifers which were reported from the state including two new species were synonyms (Table - 2).

*Brachionus plicatilis* reported earlier from backwaters of Andhra Pradesh Rao and Chandra Mohan (1977b), there is no record from fresh water habitats of this region. Sukumaran and Das (2004) reported three other species viz. *Brachionus havaensis*, *Diplois daviesiae* and *Conochilus unicornis*, from various reservoirs of Andhra Pradesh. But other reports shows that the occurrence of *B. havaensis* is only from the Neoartic and Neotropical regions and genus *Diplois* and species *daviesiae* are inquirendus. Thirupathaiah *et al.* (2011) reported two species *Synchaeta oblonga* and *Philodina resoeola* from Kamalapur, Karimnagar District, Andhra Pradesh. But there is no record of *Philodina resoeola* in the oriental region and it needs further

studies to confirm its status. Besides, the species *Synchaeta oblonga* was reported earlier only from Northern India, Sumita and Sharma (2008), so further study is needed for confirming its occurrence. Rao (1991) reported three *Lecane* species from Andhra Pradesh, of these two species, *Lecane chandramohan* Sp. nov., *L. radhakrishnai* Sp. nov. and *Lecane paradeciopiens* Nayar, 1968 are new to India. The rotifer *Lecane chandramohani* closely resemble to *L. curvicornis*, *L. radhakrishnai* to *L. ungulate*, and *L. paradeciopiens* to *L. lunaris*. Further detailed study on these three species for confirmation of their status is needed. In view of their controversial status, they have not been included in the present checklist. In addition to this further rotiferan studies from the freshwater bodies of the state certainly add many more species to the current list. But, depositions of specimens are not mentioned in their publication which may be due to difficulty in sorting the specimens. The present checklist would help further study of rotifers from Andhra Pradesh.

**Table - 1. Systematic list of rotifers recorded from Andhra Pradesh (\* Indicating Endemic rotifers)**

**Phylum: Rotifera**

**Class: Eurotatoria**

**Subclass: Monogononta**

**Order: Ploima**

**Family: Epiphanidae**

1. *Epiphanes clavulata* (Ehrenberg, 1832)
2. *E. macrourus* (Barrois and Dady, 1894)
3. *Proalides subtilis* Rodewald, 1940

**Family: Brachionidae**

4. *Anuraeopsis fissa* Gosse, 1851
5. *Brachionus angularis* Gosse, 1851
6. *B. bidentatus* Anderson, 1889
7. *B. calyciflorus* Pallas, 1776
8. *B. calyciflorus calyciflorus* Pallas, 1776
9. *B. calyciflorus* var *hymani* Dhanapathi 1974
10. *B. caudatus* Barrois and Daday, 1894
11. *B. caudatus aculeatus* var. *lateralis* (Hauer, 1937).

12. *B. diversicornis* (Daday 1883)
13. *B. durgae* Dhanapathi, 1974\*
14. *B. falcatus* Zacharias, 1898
15. *B. falcatus* var *lyratus* Lammerman, 1908
16. *B. forficula* Wierzejski, 1891
17. *B. forficula* *typicus-urawensis* Sudzuki, 1955
18. *B. patulus* Muller, 1786
19. *B. quadridentatus* Hermann, 1783.
20. *B. quadridentatus melhemi* Barrois and Daday, 1894
21. *B. rubens* Ehrenberg, 1838
22. *B. urceolaris* Muller, 1773
23. *B. urceolaris* var. *urawensis* Sudzuki, 1964
24. *Keratella cochlearis* (Gosse 1851)
25. *Keratella tropica* (Apstein, 1907)
26. *K. procurva* (Thorpe, 2007)
27. *K. quadrata* (Muller, 1786)
28. *Platiyas quadricornis* (Ehrenberg, 1832)
29. *Platiyas quadricornis andhraensis* Dhanapathi, 1974\*

**Family: Euchlanidae**

30. *Beauchampiella eudactylotum* Remane, 1929
31. *Diplois daviesiae* Gosse, 1886
32. *Euchlanis dilatata* Ehrenberg, 1832
33. *E. triquetra* Ehrenberg, 1838
34. *E. orophila* Gosse, 1887
35. *Dipleuchlanis propatula* (Gosse, 1886)
36. *Trilpeuchlanis plicata* (Levander, 1894)\*
37. *Pseudoeuchlanis longipedes* Dhanapathi, 1978\*

**Family: Mytilinidae**

38. *Mytilina ventralis* (Ehrenberg, 1830)
39. *M. ventralis brevispina* (Ehrenberg, 1830)

**Family: Trichotriidae**

40. *Trichotria tetractis* (Ehrenberg, 1830)
41. *T. tertactis similis* (Stenroos, 1898)
42. *Macrochaetus sericus* (Thorpe, 1893)
43. *M. subquadratus* (Perty, 1850)

**Family: Lepadellidae**

44. *Colurella obtusa* (Gosse, 1886)
45. *Lepadella* (*Heterolepadella*) *ehrenbergii* (Perty, 1850)
46. *L. (Heterolepadella) heterostyla* (Murray, 1913)
47. *Lepadella* (*Lepadella*) *dactylieta* (Stenroos, 1898)

- 48. *L. (Lepadella) ovalis* (Muller, 1786)
- 49. *L. (Lepadella) patella persimilis* De Ridder, 1961
- 50. *L. (Lepadella) rhomboides* (Gosse, 1886)
- Family: Lecanidae**
  - 51. *Lecane acronychal* (Hauer and Murry, 1913)
  - 52. *L. aculeata* (Jakubski, 1912)
  - 53. *L. bidentata* Dhanapathi, 1976\*
  - 54. *L. bulla* (Gosse, 1851)
  - 55. *L. closterocerca* (Schmarda, 1859)
  - 56. *L. curvicornis* (Murray, 1913)
  - 57. *L. eswari* Dhanapathi, 1976\*
  - 58. *L. hamata* (Stokes, 1896)
  - 59. *L. hastate* (Murray, 1913)
  - 60. *L. hornemannii* (Ehrenberg, 1834)
  - 61. *L. inopinata* (Harring and Myers, 1926)
  - 62. *L. lauterbornni* Haure, 1924
  - 63. *L. leontina* (Turner, 1892)
  - 64. *L. ludwigii* (Eckstein, 1883)
  - 65. *L. luna* (O. F Muller, 1776)
  - 66. *L. lunaris* (Ehrenberg, 1832)
  - 67. *L. obtusa* (Murray, 1913)
  - 68. *L. papuana* (Murray, 1913)
  - 69. *L. plochnensis* (Voigt 1902)
  - 70. *L. quadridentata* (Ehrenberg, 1830)
  - 71. *L. stenroosi* (Meissner, 1908)
  - 72. *L. styrax* (Harring and Myers, 1926)
  - 73. *L. furcata* (Murray, 1913)
  - 74. *L. tryphema* Harring and Myers, 1926
  - 75. *L. ungulata* (Gosse, 1887)
  - 76. *L. unguitata* (Fadeev, 1925)
- Family: Notommatidae**
  - 77. *Cephalodella forficula* (Ehrenberg, 1830)
  - 78. *C. gibba* (Ehrenberg, 1830)
  - 79. *C. hiulca* Myers, 1924
  - 80. *Esophora anthadis* Harring and Myers 1921
  - 81. *E. najas* Ehrenberg, 1830
  - 82. *Notommata copeus* Ehrenberg, 1834
  - 83. *N. pseudocereberus* de Beauchamp, 1908
  - 84. *Taphrocampa selenura* Gosse, 1887
- Family: Scaridiidae**
  - 85. *Scaridium longicaudum* (Muller, 1786)
- Family: Lindiidae**
  - 86. *Lindia intermedia* Dhanapathi and Rama Sarma, 2000
- Family: Trichocercidae**
  - 87. *Trichocerca cylindrical* (Imhoff, 1891)
  - 88. *T. longiseta* (Schrank, 1802)
  - 89. *T. ratus* (Muller, 1776)
- Family: Asplanchnidae**
  - 90. *Asplanchna brightwellii* Gosse, 1850
  - 91. *A. intermedia* Hudson, 1886.
  - 92. *Asplanchnopus bhimavaramensis* Dhanapathi, 1975\*
  - 93. *A. hyalinus* Harring, 1913
- Family: Synchaetidae**
  - 94. *Polyarthra longiremis* Carlin, 1934
  - 95. *P. vulgaris* Carlin, 1943
  - 96. *Synchaeta oblonga* Ehrenberg, 1832
- Family: Dicaranophoridae**
  - 97. *Dicranophorus dolorus* Harring and Myers 1928
  - 98. *D. tegillus* Harring and Myers 1928
- Order: Folosculariacea**
  - Family: Flosculariidae**
    - 99. *Floscularia ringens* (Linnaeus, 1758)
    - 100. *Lacinularia flosculosa* (Muller, 1773)
    - 101. *Limnias melicerta* Weisse, 1848
    - 102. *Sinantherina spinosa* (Thorpe, 1893)
- Family: Conochilidae**
  - 103. *Conochilus arboreus* Rajendran, 1971
  - 104. *Conochilus (Conochiloides) dossuarius* Hudson, 1885
- Family: Filiniidae**
  - 105. *Filinia longiseta* (Ehrenberg, 1834)
  - 106. *F. opoliensis* (Zacharias, 1898)
  - 107. *F. pejleri* Hutchinson, 1964
- Family: Hexarthridae**
  - 108. *Hexartha intermedia* (Wiszniewski, 1929)
  - 109. *H. mira* (Hudson, 1871)
- Family: Testudinellidae**
  - 110. *Testudinella mucronata* (Gosse, 1886)
  - 111. *T. patina* (Hermann, 1783)
- Family: Trochosphaeridae**
  - 112. *Horaella brehmi* Donner, 1949
- Order: Collothecaceae**
  - Family: Atrochidae**
    - 113. *Cupelopagis vorax* (Leidy, 1957)
- Sub class: Bdelloidea**
  - Family: Philodinidae**
    - 114. *Rotaria neptunia* (Ehrenberg, 1830)

**Table - 2. List of Rotifer species reported from Andhra Pradesh by various authors**

Sl.No.	Species	Locality	District	Authors
1.	<i>Epiphanes clavulata</i> (Ehrenberg)	Edwards tank, Bhimavaram; L. K tank, Palakol	West Godavari	Dhanapathi, 1974b
2.	<i>E. macrourus</i> (Borrois & Dady)	Freshwater fish pond, Bibinagar	Nalgonda	Patil and Panda, 2003
3.	<i>Proalides subtilis</i> Rodewald	Osmaina University pond	Hyderabad	Arshaduddin and Khan, 1991 Syn: <i>Liliferotrocha subtilis</i> Sudzuki
4.	<i>Anuraeopsis fissa</i> Gosse	Freshwater fish pond, Bibinagar	Nalgonda	Dhanapathi, 1978 Patil and Panda, 2003
5.	<i>Brachionus angularis</i> Gosse	College tank, Bhimavaram; Pampa reservoir, Annavaram; Freshwater fish pond, Bibinagar	West Godavari East Godavari Nalgonda	Dhanapathi, 1978 Patil and Panda, 2003
6.	<i>B. bidentatus</i> Anderson	College tank, Bhimavaram	West Godavari	Dhanapathi, 1974
7.	<i>B. calyciflorus</i> Pallas	Rain water puddle Hussain Sagar	Vijayawada Hyderabad	Naidu, 1967 Dhanapathi, 1974; Chandrasekhar, 2007
8.	<i>B. calyciflorus calyciflorus</i> Pallas	Hussain Sagar	Hyderabad	Dhanapathi, 1974 & 1977 Syn: <i>B. calyciflorus f. amphiceros</i> Ehrenberg Syn: <i>B. calyciflorus f. borgerti</i> Apstein Syn: <i>B. calyciflorus</i> var <i>dorcas</i> Gosse
9.	<i>B. calyciflorus</i> var <i>hymani</i> Dhanapathi	B. Tank, Vizianagaram	Visakhapatnam	Dhanapathi, 1974
10.	<i>B. caudatus</i> Barrois and Daday	Hussain Sagar Freshwater fish pond, Bibinagar	Hyderabad Nalgonda	Dhanapathi, 1974; Babu Rao <i>et al.</i> , 1981 Patil and Panda, 2003
11.	<i>B. caudatus aculeatus</i> var <i>lateralis</i> (Hauer)	Rajrajeswari tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000
12.	<i>B. diversicornis</i> (Daday)	College tank, Bhimavaram	West Godavari	Dhanapathi, 1974
13.	<i>B. durgae</i> Dhanapathi	Hussain Sagar	Hyderabad	Dhanapathi, 1974
14.	<i>B. falcatus</i> Zacharias	R.R tank, Bhimavaram Freshwater fish pond, Bibinagar	West Godavari Nalgonda	Dhanapathi, 1974 Patil and Panda, 2003
15.	<i>B. falcatus</i> var <i>lyratus</i> Lammerman	R.R tank, Bhimavaram	West Godavari	Dhanpathi, 1974

16.	<i>B. forficula</i> Wierzejski	Freshwater fish pond, Bibinagar Hussain Sagar	Nalgonda Hyderabad	Patil and Panda, 2003 Chandrasekhar, 2007
17.	<i>B. forficula f typicus-urawensis</i> Sudzuki	College tank, Bhimavaram	West Godavari	Dhanapathi, 1974
18.	<i>B. quadridentatus</i> Hermann	Ditch water. Edwards tank, Bhimavaram Hussain Sagar Freshwater fish pond, Bibinagar	Vijayawada West Godavari Hyderabad Nalgonda	Naidu, 1967 Dhanapathi, 1974 Babu Rao <i>et al.</i> , 1981 Patil and Panda, 2003 Syn: <i>B. quadridentatus</i> var <i>enzi</i> (France)
19.	<i>B. quadridentatus melhemi</i> Barrois & Daday	Edwards tank, R R tank, college tank, Bhimavaram	West Godavari	Dhanapathi, 1978, 1997
20.	<i>B. rubens</i> Ehrenberg	Freshwater fish pond, Bibinagar	Nalgonda	Patil and Panda, 2003
21.	<i>B. urceolaris</i> Muller	Hussain Sagar W. tank, Narsapur,	Hyderabad West Godavari	Babu Rao <i>et al.</i> , 1981 Dhanapathi and Sarma, 2000
22.	<i>B. urceolaris</i> var. <i>urawensis</i> Sudzuki	Rain water puddle	Vijayawada	Naidu, 1967
23.	<i>Keratella cochlearis</i> (Gosse)	College tank, Bhimavarm Freshwater fish tank, Bibinagar	West Godavari Nalgonda	Dhanapathi, 1974 Patil and Panda, 2003
24.	<i>Keratella tropica</i> (Apstein)	Hussain Sagar	Hyderabad	Babu Rao <i>et al.</i> , 1981
25.	<i>K. procurva</i> (Thorpe)	Osman Sagar	Hyderabad	Chandrasekhar, 2007
26.	<i>K. quadrata</i> (Muller)	Hussain Sagar	Hyderabad	Siddiqi and Khan, 2002
27.	<i>Plationus patulus</i> , (Muller) =[ <i>Brachionus patulus</i> Muller]	Edwards tank, R.R tank, Bhimavaram Hussain Sagar	West Godavari Hyderabad	Dhanapathi, 1974
28.	<i>Platiyas quadricornis</i> (Ehrenberg)	Edwards tank, R.R tank, Bhimavaram Hussain Sagar	West Godavari Hyderabad	Dhanapathi, 1974 Babu Rao <i>et al.</i> , 1981
29.	<i>Platiyas quadricornis andhraensis</i> Dhanapathi	Hussian Sagar	Hyderabad	Dhanapathi, 1974
30.	<i>Beauchampiella eudactylotum</i> Remane	Edwards tank, Bhimavarm	West Godavari	Dhanapathi, 1974
31.	<i>Diplois daviesiae</i> Gosse	Rajrajeswari tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000
32.	<i>Euchlanis dilatata</i> Ehrenberg	Freshwater fish pond, Bibinagar	Nalgonda	Dhanapathi, 1976 Patil and Panda, 2003
33.	<i>E. triquetra</i> Ehrenberg	-	-	Dhanapathi, 1976 Syn: <i>E. brahmae</i> Dhanapathi
34.	<i>E. oropha</i> Gosse	Municipal tank, Kalkalur	Krishna	Dhanapathi, 1976

35.	<i>Dipleuchlanis propatula</i> (Gosse)			Dhanapathi 1978
36.	<i>Trilpeuchlanis plicata</i> (Levander)	Municipal tank, Kalkalur	Krishna	Dhanapathi, 1974
37.	<i>Pseudoeuchlanis longipedes</i> Dhanapathi			Dhanapathi, 1978
38.	<i>Mytilina ventralis</i> (Ehrenberg)	Edwards tank, Bhimavaram Hussain Sagar	West Godavari Hyderabad	Dhanapathi, 1974, Chandrasekhar, 2007, Dhanapathi, 1978, 1997 Syn: <i>M. ventralis macracantha</i> (Gosse)
39.	<i>M. ventralis brevispina</i> (Ehrenberg)	-	-	Dhanapathi, 1978, 1997
40.	<i>Trichotria tetractis</i> (Ehrenberg)	Edwards tank, R. R. Tank, Bhimavaram; L. K tank, Palakol; Municipal tank, Kaikalur	West Godavari Krishna	Dhanapathi, 1974
41.	<i>T. tertactis similis</i> (Stenoos)	Rajrajeswari Municipal tank Bhimavarm	West Godavari	Dhanapathi, 2004
42.	<i>Macrochaetus sericus</i> (Thorpe)	Edwards tank, R. R. Tank, Bhimavaram	West Godavari	Dhanapathi, 1974
43.	<i>M. subquadratus</i> (Perty)	Freshwater well	Cuddapah	Naidu, 1967
44.	<i>Colurella obtusa</i> (Gosse)	Osmaina University Pond	Hyderabad	Arshaduddin and Khan, 1991
45.	<i>Lepadella</i> ( <i>Lepadella</i> ) <i>dactyliseta</i> (Stenoos)	Well	Chittoor	Naidu, 1967
46.	<i>Lepadella</i> ( <i>Heterolepadella</i> ) <i>ehrenbergii</i> (Perty)	Osmaina University Pond	Hyderabad	Arshaduddin and Khan, 1991
47.	<i>Lepadella</i> ( <i>Heterolepadella</i> ) <i>heterostyla</i> (Murray)	Osmaina University Pond	Hyderabad	Arshaduddin and Khan, 1991
48.	<i>Lepadella</i> ( <i>Lepadella</i> ) <i>ovalis</i> (Muller)	Osmaina University Pond	Hyderabad	Arshaduddin and Khan, 1991
49.	<i>L.</i> ( <i>Lepadella</i> ) <i>rhomboides</i> (Gosse)	Osmaina University Pond	Hyderabad	Arshaduddin and Khan, 1991
50.	<i>Lepadella</i> ( <i>Lepadella</i> ) <i>patella persimilis</i> De Ridder	Well	Cuddapah	Naidu, 1967 Syn: <i>Metopidia similis</i> Lucks
51.	<i>Lecane acronychal</i> (Hauer & Murry)	-	Visakhapatnam	Rao and Mohan, 1982
52.	<i>Lecane aculeata</i> (Jakubski)	Hussain Sagar	Hyderabad	Siddiqi and Khan, 2002
53.	<i>L. bidentata</i> Dhanapathi	Edwards tank, Bhimavaram	West Godavari	Dhanapathi, 1976
54.	<i>L. bulla</i> (Gosse)	All habitats	All districts	Dhanapathi, 1976 Syn: <i>Monostyla bulla</i> Gosse

55.	<i>L. closterocerca</i> (Schmarda)	Bhimili pond	Visakhapatnam	Rao & Mohan, 1982 <i>Syn: Monostyla closterocerca</i> Schmarda
56.	<i>L. curvicornis</i> (Murray)	Edwards tank Bhimavaram Municipal tank, Kaikalur	West Godavari Krishna and Visakhapatnam	Dhanapathi, 1976 Rao & Mohan, 1982 <i>Syn: L. curvicornis</i> var. <i>pauespares</i> Arora
57.	<i>L. eswari</i> Dhanapathi	Municipal tank, Kaikalur L. K Tank, Palakol	Krishna West Godavari	Dhanapathi, 1976(b)
58.	<i>L. hamata</i> (Stokes)	College tank, Bhimavaram	West Godavari	Dhanapathi, 1976 <i>Syn: Monostyla hamata</i> Stokes
59.	<i>L. hastate</i> (Murray)	Osmaina University Pond	Hyderabad	Arshaduddin and Khan, 1991
60.	<i>L. hornemannii</i> (Ehrenberg)	Municipal tank, Kaikalur L. K Tank, Palakol W. Tank, Narasapur	Krishna West Godavari	Dhanapathi, 1976
61.	<i>L. inopinata</i> (Harring and Myers)	Municipal tank, Kaikalur	Krishna	Dhanapathi, 1976 <i>Syn: L. (Hemimonostyla)</i> <i>inopinata</i> Harring &Mayers
62.	<i>L. lauterbornii</i> Haure	Municipal tank, Kaikalur L. K Tank, Palakol	Krishna West Godavari	Dhanapathi, 1976
63.	<i>L. leontina</i> (Turner)	Edwards tank Bhimavaram L. K Tank, Palakol Municipal tank, Kaikalur	West Godavari West Godavari Krishna	Dhanapathi, 1976
64.	<i>L. ludwigii</i> (Eckstein)	L. K Tank, Palakol W. Tank, Narasapur	West Godavari	Dhanapathi, 1976
65.	<i>L. luna</i> (O. F Muller)	Edwards tank Bhimavaram L. K Tank, Palakol Municipal tank, Kaikalur Bukka Pond, Srikakulam	West Godavari West Godavari Krishna Srikakulam	Dhanapathi, 1976
66.	<i>L. lunaris</i> (Ehrenberg)	Old Well	Cuddaph	Naidu,1967 <i>Syn:</i> <i>Monostyla lunaris</i> Ehrenberg
67.	<i>L. obtusa</i> (Murray)	Osmania University pond	Visakahapatnam Hyderabad	Rao and Mohan, 1977 Arshaduddin and khan, 1991 <i>Syn: Monostyla obtusa</i> Murray
68.	<i>L. papuana</i> (Murray)	Well Municipal tank, Kaikalur W. Tank, Narasapur	Cuddaph, Krishna, West Godavari	Naidu,1967 Dhanapathi, 1976

69.	<i>L. plocnensis</i> (Voigt)	Osmania University Pond	Hyderabad	Arshaduddin and Khan, 1991
70.	<i>L. quadridentata</i> (Ehrenberg)	All habitats	All districts	Dhanapathi, 1976
71.	<i>L. stenroosi</i> (Meissner)	Municipal tank, Kaikalur W. Tank, Narasapur	Krishna	Dhanapathi, 1976 Syn: <i>Monostyla stenroosi</i> Meissner
72.	<i>L. styrax</i> (Harring & Myers)	Edwards tank, Bhimavaram W. Tank, Narasapur	West Godavari	Dhanapathi, 1976 Syn: <i>Monostyla styrax</i> Harring & Myers
73.	<i>Lecane furcata</i> (Murray)	College tank, Bhimavaram	West Godavari	Dhanapathi, 1976 Syn: <i>Monostyla tethis</i> (Harring & Myers)
74.	<i>L. tryphema</i> Harring & Myers	Municipal tank, Mudasarlova	Visakhapatnam	Rao & Mohan, 1982
75.	<i>L. ungulata</i> (Gosse)	Edwards tank, Bhimavaram; L. K. Tank, Palakol	West Godavari	Dhanapathi, 1976 Syn: <i>L. donnerianus</i> Dhanapathi
76.	<i>L. unguitata</i> (Fadeev)	Garden pond, Andhra University	Visakhapatnam	Rao & Mohan, 1982 Syn: <i>Monostyla unguitata</i> Fadeev
77.	<i>Cephalodella forficula</i> (Ehrenberg)	Edwards tank, Bhimavarm; Municipal tank, Kaikalur	West Godavari Krishna	Dhanapathi, 1975
78.	<i>Cephalodella gibba</i> (Ehrenberg)	Osmania University garden Pond, hyderabad	Hyderabad	Arshaduddin and Khan, 1991
79.	<i>C. hiulca</i> Myers	Edwards tank, Bhimavarm	West Godavari	Dhanapathi, 1975
80.	<i>Esophora anthadis</i> Harring & Myers	W. Tank, Narsapur	West Godavari	Dhanapathi, 1975
81.	<i>E. najas</i> Ehrenberg	Edwards tank, Bhimavarm, L. K tank, Palakol	West Godavari	Dhanapathi, 1975
82.	<i>Notommata copeus</i> Ehrenberg	W. Tank, Narsapur	West Godavari	Dhanapathi, 1975
83.	<i>N. pseudocereberus</i> de Beauchamp	W. Tank, Narsapur	West Godavari	Dhanapathi, 1975
84.	<i>Taphrocampa selenura</i> Gosse	Railway station tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000.
85.	<i>Scaridium longicaudum</i> (Muller)		West Godavari	Dhanapathi, 1978
86.	<i>Lindia intermedia</i> Dhanapathi and Rama Sarma	Railway station tank, Bhimavram	West Godavari	Dhanapathi and Sarma, 2000

87.	<i>Trichocerca cylindrical</i> (Imhoff)	Freshwater fish pond, Bibinagar	Nalgonda	Patil and Panda, 2003
88.	<i>T. longiseta</i> (Schrank)	Hussain Sagar	Hyderabad	Siddiqi and Khan, 2002
89.	<i>T. rattus</i> (Muller)	Railway station tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000.
90.	<i>Asplanchna brightwellii</i> Gosse	Edwards tank, Bhimavarm; Allipuram tank; Osmania University pond	West Godavari Visakhapatnam Hyderabad	Dhanapathi, 1975 Rao and Mohan, 1975 Arshaduddin and Khan, 1991 <i>Syn: A. sieboldii urawaensis</i> Sudzuki
91.	<i>A. intermedia</i> Hudson.	Panchayati tank, Gudlavalleru Freshwater fishpond, Bibinagar	Krishna Nalgonda	Dhanapathi, 1975 Patil and Panda, 2003
92.	<i>Asplanchnopus bhimavaramensis</i> Dhanapathi	Edwards tank, Bhimavarm	West Godavari	Dhanapathi, 1975
93.	<i>A. hyalinus</i> Harring	L. K tank, Palakol	West Godavari	Dhanapathi, 1975
94.	<i>Polyarthra longiremis</i> Carlin	Ditch water	Vijayawada	Naidu, 1967
95.	<i>P. vulgaris</i> Carlin	Freshwater fish tank, Bibinagar	Nalgonda	Patil and Panda, 2003
96.	<i>Synchaeta oblonga</i> Ehrenberg	Kamalapur village tank	Karimnagar	Thirupathaiah et al., 2011
97.	<i>Dicranophorus dolerus</i> Harring & Myers	L. K tank, Palakol	West Godavari	Dhanapathi, 1975
98.	<i>D. tegillus</i> Harring & Myers	Edwards tank, Bhimavarm	West Godavari	Dhanapathi, 1975
99.	<i>Floscularia ringens</i> (Linnaeus)	Municipal tank, Kaikalur Rajrajeswari tank, Bhimavaram	Krishna West Godavari	Dhanapathi and Sarma, 2000
100.	<i>Lacinularia flosculosa</i> (Muller)	Municipal tank, Kaikalur	Krishna	Dhanapathi and Sarma, 2000
101.	<i>Limnia melicerta</i> Weisse	Osmania University garden Pond, hyderabad	Hyderabad	Arshaduddin and Khan, 1991
102.	<i>Sinantherina spinosa</i> (Thorpe)	Rajrajeswari tank, Bhimavaram; L. K tank, Palkot	West Godavari	Dhanapathi and Sarma, 2000
103.	<i>Conochilus arboreus</i> Rajendran	Hussain Sagar, Hyderabad	Hyderabad	Siddiqi and Khan, 2002
104.	<i>Conochilus (Conochiloides) dossuarius</i> Hudson	Edward's tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000
105.	<i>Filinia longiseta</i> (Ehrenberg)	Washerman pond, Ramachandrapuram; Village tank, Relangi	East Godavari West Godavari	Dhanapathi and Sarma, 2000
106.	<i>F. opoliensis</i> (Zacharias)	Railway station tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000

107.	<i>F. pejleri</i> Hutchinson	College tank, Bhimavaram	West Godavari	Dhanapathi, 1976
108.	<i>Hexartha intermedia</i> (Wiszniewski)	Rajraeswari tank, Railway station tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000
109.	<i>H. mira</i> (Hudson)	College tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000
110.	<i>Testudinella mucronata</i> (Gosse)	Railway station tank, Bhimavaram	West Godavari	Dhanapathi and Sarma, 2000
111.	<i>T. patina</i> (Hermann)	Well College tank, Bhimavaram Bukka pond, Srikakulam	Cuddapha Chittoor West Godavari Srikakulam	Naidu, 1967  Dhanapathi and Sarma, 2000
112.	<i>Horaella brehmi</i> Donner	Panchyat tank, Gudlavalleru; Municipal tank, Kaikalur	Krishna	Dhanapathi and Sarma, 2000
113.	<i>Cupelopagis vorax</i> (Leidy)	Municipal tank, Kaikalur Railway station tank, Bhimavaram	Krishna West Godavari	Dhanapathi and Sarma, 2000
114.	<i>Rotaria neptunia</i> (Ehrenberg)	Pond in the agricultural field, Bhimavaram	West Godavari	Dhanapathi, 1973

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