

ON A COLLECTION OF CLADOCERA FROM DIMNA AND JUBLEE PARK LAKES, JAMSHEDPUR, JHARKHAND

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Gurney (1907), Brehm (1950), Nasar (1977), and, Rai and Sharma (1989) are some of the major contributions to the literature on cladocerans. Of the two perennial lakes (each ca. 35ha) chosen for the study, Dimna Lake the oligotrophic one, is the main source of drinking water to Jamshedpur Town (22°50'N and 86°10'E) and the eutrophic Jublee Park Lake is used for boating purpose. The Jublee Park Lake is eutrophicated completely and covered with micro and macrophytes. Out of the 19 species of Cladocerans reported earlier from Bihar State (Michael & Sharma, 1988), nine species belonging to five genera and spread in three families, were recorded from the two lakes. This study has gained its significance due its first attempt to study the fauna of the two water bodies, now in Jharkhand State.

Plankton samples were collected by the second author by diving the plankton net (No. 25) with a 50ml capacity plastic container tied at its end on the sub-surface of the two lakes, in the month of February, 2002 (between 0800 and 0900hr). Samples were preserved with 4% formaldehyde solution. Cladoceran fauna was identified by the first author with the aid of standard keys (Michael & Sharma, 1988; Battish, 1992).

Systematic account

Family: **Daphniidae**

Ceriodaphnia cornuta Sars, 1885

Material examined: Female, length 0.32mm, width 0.28mm, Dimna Lake and Jublee Park Lake.

Distribution: India: West Bengal, Bihar, Quilon, Rajasthan, Meghalaya

Ceriodaphnia reticulata (Jurine, 1820)

Material examined: Female, length 0.38mm, width 0.36mm, Jublee Park Lake.

Distribution: India: Rajasthan, Bihar.

Simocephalus vetulus (O.F. Muller)

Material examined: Female, length 0.96mm, width 0.68mm, Jublee Park Lake.

Distribution: India: Punjab, Kashmir, Rajasthan, Bihar, West Bengal.

Simocephalus exspinosus (Koch, 1841)

Material examined: Female, length 0.9mm, width 0.6mm, Dimna Lake and Jublee Park Lake.

Distribution: India: Meghalaya, West Bengal.

Family: **Moinidae**

Moinodaphnia macleayi (King, 1853)

Material examined: Female, length 0.6mm, width 0.5mm, Dimna Lake

Distribution: India: Southern India, West Bengal.

Family: **Chydoridae**

Subfamily: **Chydorinae**

Chydorus sphaericus (O.F. Muller)

Material examined: Female, length 0.54mm, width 0.45mm, Dimna Lake

Distribution: India: West Bengal, Bihar, Kashmir, Ladakh, Nilgiri Hills and Meghalaya; elsewhere-cosmopolitan.

Chydorus parvus (Daday, 1898)

Material examined: Female; length 0.42mm, width 0.39mm, Dimna Lake

Distribution: India: West Bengal.

Chydorus hermanni Brehm 1933

Material examined: Female, length 0.4mm, width 0.37mm, Dimna Lake and Jublee Park Lake

Distribution: India: Southern India.

Subfamily: **Aloninae**

Alona rectangula rectangula Sars, 1862

Material examined: Female, length 0.48mm, width 0.36mm, Dimna Lake and Jublee Park Lake.

Distribution: India: Ladakh, Gujarat, Rajasthan, Kashmir, Meghalaya and West Bengal.

Of the nine species *Ceriodaphnia cornuta*, *Simocephalus exspinosus*, *Chydorus hermanni* and *Alona rectangula rectangula* were found from both the lakes. *Moinodaphnia macleayi*, *Chydorus sphaericus* and *Chydorus parvus* were observed only from Dimna Lake. According to Das (1989), the presence of *Chydorus sphaericus* and *Simocephalus* sp. indicate that the water body is oligotrophic and the presence of *Ceriodaphnia* sp. indicate eutrophication. On the basis of the study it can be said that Dimna Lake and Jublee Park Lake are

oligotrophic and eutrophic respectively.

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NOTE

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A PRELIMINARY LIST OF BUTTERFLIES OF RAMANATHAPURAM DISTRICT, TAMIL NADU

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A survey was carried out as a part of an inventory of insect faunal composition in Ramanathapuram District in 2001, details of which will be published separately. Ramanathapuram District is situated on the southeastern coast of the Indian peninsula

between 11^o and 12^oN and 77^o28' and 78^o50'E. The district is by and large hot and dry with low rainfall. The average maximum temperature and minimum temperature is 34.6^oC and 22.11^oC respectively. The average rainfall is 816mm with a relative humidity between 60-70% in summer and 75-95% in winter. The butterflies were identified based on Gunathilagaraj *et al.* (1998). The butterflies recorded during the study period is listed in table 1.

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Reference

- Gunathilagaraj, K., T.N.A. Perumal, K. Jayaram, and M. Ganeshkumar (1998).** *Some South Indian Butterflies*. Nilgiri Wildlife and Environment Association, Udthagamandalam, 274pp.

Table 1. Butterflies of Ramanathapuram District

Scientific name	Common name
Acraeidae	
<i>Acraea violae</i> (Fabricius)	Tawny Coster
Danaidae	
<i>Danaus chrysippus chrysippus</i> (Linnaeus)	Plain Tiger
Lycaenidae	
<i>Azanus ubaldus</i> Cramer	Bright Babul Blue
Nymphalidae	
<i>Precis almana almana</i> (Linnaeus)	Peacock Pansy
<i>Precis peirta peirta</i> (Linnaeus)	Yellow Pansy
<i>Precis lemonias lemonias</i> (Linnaeus)	Lemon Pansy
Papilionidae	
<i>Graphium agamemnon menides</i> Felder & Felder	Tailed Jay
<i>Papilio demoleus</i> Linnaeus	Lime Butterfly
<i>Papilio polytes stichius</i> (Hubner)	Common Mormon
Pieridae	
<i>Catopsilia crocale</i> (Cramer)	Common Emigrant
<i>Catopsilia pyranthe</i> (Linnaeus)	Mottled Migrant
<i>Delias eucharis</i> (Drury)	Common Jezebel
<i>Eurema hecabe simulata</i> Moore	Common Grass Yellow
Satyridae	
<i>Melanitis leda leda</i> (Drury)	Common Evening Brown