

## **Biology of *Monocystis clubae* sp. nov. (Apicomplexa: Eugregarinida) from an Indian earthworm *Lampito mauritii* (Annelida: Oligochaeta) of India**

PROBIR K. BANDYOPADHYAY\*, AMLAN KUMAR MITRA & PARTHA MALLIK  
*Parasitology Laboratory, Department of Zoology, University of Kalyani, Kalyani 741235, West Bengal, India*  
\* Address for Correspondence: Parasitology Laboratory, Department of Zoology, University of Kalyani, Kalyani 741235, West Bengal, India. E-mail: prabir0432@hotmail.com

### **Abstract**

Surveys of the endoparasitic acephaline gregarines in West Bengal revealed a new species of the genus *Monocystis* Stein, 1848, that resides in the seminal vesicle of the earthworm *Lampito mauritii*. *Monocystis clubae* sp. nov. is characterized by a club-shaped gamont having a tail-like structure at the posterior end and measures 104.0–179.0 (160.0±24.5) µm x 62.5–71.0 (64.0±6.5) µm. Shape of the gametocysts are rounded to ovoid and measures 88.0–107.0 (104.0±1.3) µm x 86.0–102.0 µm (96.0±1.9) µm in diameter. Oocysts are navicular in shape and measures 9.6–11.0 (10.4±0.3) µm x 7.3–8.0 (7.6±0.2) µm.

**Key words:** *Monocystis clubae* sp. nov., gregarine, earthworm, seminal vesicle, India

### **Introduction**

During surveys of acephaline gregarines in the oligochaete hosts in the Nadia district of West Bengal, India a new species belonging to the genus *Monocystis* Stein, 1848 was obtained from the seminal vesicles of the earthworm *Lampito mauritii*. Till now, there are only 11 species of *Monocystis* published from India (Ghosh 1923; Bhatia & Chatterjee, 1925; Kar 1946; Kalavati 1979; Subbarao *et al.* 1979; Pradhan & Dasgupta, 1982; Bandyopadhyay & Mitra 2005, Bandyopadhyay *et al.* 2005). The present paper deals with morphology, life history and systematics of a new species of the genus *Monocystis* Stein, 1848 found in the seminal vesicles of the earthworm *Lampito mauritii*.