

Euglenoids of Ranchi, Bihar, India

Rajendra Kumar Gupta & Onkar Nath Srivastava*

Botanical Survey of India, Eastern Circle, Shillong-3
* Department of Botany, Ranchi University, Ranchi-834 008

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A checklist of 27 taxa of euglenoids belonging to the genera *Euglena* and *Phacus*, collected from a wide variety of freshwater habitats in the environs of Ranchi is given. All the taxa reported here are new to phycoflora of Bihar State.

Key-words—Algae, *Euglena*, *Phacus*, Ranchi, Bihar.

INTRODUCTION

THE genera *Euglena* Ehrenb. and *Phacus* Dujardin belonging to the family Euglenaceae (Fritsch, 1935) are represented in India by ca 260 species distributed among 16 genera (Waghodekar & Patel, 1988). The studies on this group have received considerable attention in India (Bhatia, 1930; Suxena, 1955; Naidu, 1962, 1966; Kamat, 1963, 64, 67, 68; Kamat & Freitas, 1976; Nasar & Munshi, 1976; Patel & Waghodekar, 1981; Ashteker, 1982; Hegde & Bharati, 1983; Hoshani & Bharati, 1983; Philipose, 1984; Waghodekar & Patel, 1988; Habib & Pandey, 1990; Shaji & Patel, 1991; Waghodekar & Patel, 1991) but not much work has been done from this part of the state so far the survey of the algal flora of Ranchi is concerned.

The study conducted on freshwater euglenoids of Ranchi and its vicinity, however, has revealed 27 taxa of euglenoids hitherto unknown to Bihar phycoflora.

MATERIAL AND METHOD

Forthightly collection of algal material were made with the help of planktonnet and bottle from road side ditches, paddy fields, pools, puddles, sewage-water, permanent pond, lakes, tanks and rivers from all parts of Ranchi during 1989- 1990. Investigation were carried out on both fresh as well as pre-served material. The material was preserved in 4% formalin solution for further detailed study and systematic identifications.

The euglenoids were identified with the help of relevant monographs by (Huber-Pestalozzi, 1955; Prescott, 1962). The following checklist of the euglenoids provides the dimension habitat and the year of collection of each taxon.

ALGAL SPECTRUM

Euglena Ehrenb.

Euglena acus Ehrenb. - Cells 97.7 μm long, 6.7 μm broad. Puddle January - April 1989.

E. acus var. *hyalina* Klebs - Cells 141.6 - 148.6 μm long, 13.4 μm broad. Puddle, January - March 1989.

E. anabaena Mainx - Cells 87.6 μm long, 23.5 μm broad. Hatma pond, November - March 1990.

E. anabaena var. *minima* Mainx - Cells 37.0 μm long, 13.4 μm broad. Ram Krishna Mission Ashram pond, September - January 1989.

E. archaeoplastidiata Chadefaud - Cells 26.9 μm long 16.0 μm broad. Puddle, December - April 1990.

E. caudata Hubner - Cells 55.0-77.0 μm long, 15.0-17.0 μm broad. Karamtoli pond, December 1990.

E. choretes Schiller - Cells 40.4-43.8 μm long, 16.0-17.6 μm broad. Rajendera Medical College Hospital pond and Khaujharria pond, May-December 1990.

E. elastica Prescott - Cells 82.5 μm long, 43.8 μm broad. Tagore hill pond, August -January 1990.

E. flava Dangeard - Cells 43.8 μm long, 20.2 μm broad. Puddle, February-May 1989.

E. minuta Prescott - Cells 16.0-20.0 μm long, 3.3-8.3 μm broad. Rajendra Medical College Hospital pond, October-November 1990.

E. multiformis Schiller - Cells 43.8 μm long, 17.6 μm broad. Ram Krishna Mission Ashram pond, December 1990.

E. orientalis Walton - Cells 64.0 μm long, 23.5 μm broad. Rajendra Medical College Hospital pond, August - March 1989.

E. proxima Dangeard - Cells 70.7 - 74.1 μm long, 13.4 - 21.8 μm broad. Ram Krishna Mission Ashram pond, September - March 1990.

E. pusilla Playf - Cells 26.0-30.0 µm long, 9.0-10.0 µm broad. Puddle, April - May 1990.

E. rustica Schiller - Cells 37.0-47.1 µm long, 20.2 µm broad. Puddle, February - September 1989.

E. sanguinea Ehrenb. - Cells 53.9-60.6 µm long, 17.6-30.3 µm broad. Tagore hill pond, September - March 1990.

E. spathirhyncha Skuja-Cells 50.5 µm long, 16.0 µm broad. Puddle, August-September 1990.

E. spirogyra Ehrenb. -Cells 100.0-110.0 µm long, 13.0-14.0 µm broad. Puddle, January-March 1989.

E. spirogyra var. *suprema* Skuja - Cells 158.6 µm long, 16.0 µm broad. Puddle April-May 1990.

Phacus Dujardin

Phacus acuminatus Stokes - Cells 30.33 µm long, 23.59 µm broad. Khaujharria pond, April - June 1989.

P. anomalus Fritsch *et* Rich - Cells 23.59 µm long, 20.22 µm broad. Puddle, March-April 1989.

P. caudatus Huebner - Cells 26.96 µm long, 16.05 µm broad. Ram Krishna Mission Ashram pond, March - April 1989.

P. curvicauda Swirenko - Cells 37.08 µm long, 20.22 µm broad. Paddy field, October - November 1989.

P. longicauda (Ehrenb.) Dujardin - Cells 107.87 µm long, 70.79 µm broad. Tagore hill pond; April - May 1989.

P. orbicularis Huebner - Cells 57.30-64.04 µm long, 20.22-23.59 µm broad. Khaujharria pond, April - July 1989.

P. pleuronectes (Muell.) Dujardin - Cells 57.30 µm long, 40.45 µm broad. Rajendra Medical College Hospital pond, April - May 1989.

P. pseudoswirenkoi Prescott - Cells 50.56 µm long, 26.96 µm broad. Puddle, March - May 1989.

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