

**GLOEOTHECE LINEARIS VAR.COMPOSITA G.M.SMITH (CHROOCOCCACEAE-CYANOPHYCEAE): A NEW RECORD FOR THE CYANOBACTERIAL FLORA OF INDIA**


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ABSTRACT: *Gloeotheca linearis* var.*composita* G.M.Smith (Chroococcaceae - Cyanophyceae), earlier known from Wisconsin (United States) and New Zeland, is reported for the first time in India. Brief description, illustration and photographs are provided.

Key words: *Gloeotheca linearis* var.*composita*, cyanophyceae, new record, India.

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INTRODUCTION

The genus *Gloeotheca* has 50 species of which 9 species were reported from India [3] [4] [5] [8] [9]. The genus has only two species reported from Kerala [1] [2] [6].

During cyanobacterial exploration, the *Gloeotheca* species has been collected from the rocky substratum (epilithic) which appears in dark colour. Earlier studies revealed that the species was reported from planktonic or tychoplanktonic habitats. Critical studies revealed that the species to be *Gloeotheca linearis* var.*composita*, a species so far known from Wisconsin, United States [7] [11] and New Zeland [8]. The present cyanobacterium was collected from Thenjipalam (11° 8' 11" N 75° 53' 26" E) in Malappuram District during September 2014. This is the first report of its occurrence in India and is of great important because the type of habitat is very different from that originally described for this species. The genus *Gloeotheca* can be described by the cells cylindrical to ellipsoidal in shape whereas the sheath and colonies similar to *Gloeocapsa*. The collected samples were deposited at Cyanobacterial germ plasm collection in Plant Diversity Division, University of Calicut for further isolation and culturing. Microscopic examination was done in the live condition for the identification of cyanobacterium. Microphotographs were taken using Leica DM 1000 LED Compound Microscope at 40x and 100x objectives.

Systematic descriptions

Gloeotheca linearis var.*composita* G.M.Smith

Cells shorter, stouter and in small number of individuals within in broad colonial sheath, cell sheath not confluent; cells without sheath 3.0-3.5 µm broad, 4-7.5 µm long; sheaths 11-12 µm broad, 19-32 µm long.

Locality: Thenjipalam, Malappuram, Kerala.

Collection No. CU139320



Fig 1. Habitat

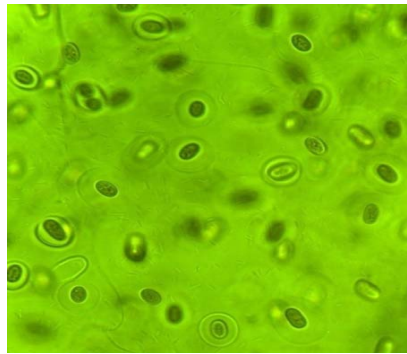


Fig 2. *Gloeotheca linearis var. composita*

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