

A new report of *Characiosiphon* from west Nimar District of Madhya Pradesh

S.K. Mahajan

Ex-Professor of Botany, Govt.P.G.College, Khargone (M.P.) INDIA

Abstract

Characiosiphon belongs to the order Chlorococcales of the class Chlorophyceae. It was reported for the first time from India in 1936 by M.O.P. Iyengar who collected it from a stream situated near Tiruchirapalli (Tamilnadu). Later this green alga was reported from various parts of the country i.e. Gwalior (Agarkar, 1953), Tirupati (Rao, 1954), Jodhpur (Bhandari, 1955) and Indore (Sharma, 1958). The thallus of this algae shows wide variations with respect to its length, width and the number and shape of protoplasts. The material collected from Banihar dam of West Nimar of Madhya Pradesh shows much resemblance with that of *C. rivularis* Iyengar except that it possesses larger dimensions. The abnormalities described by Bhandari (1955) in *C. rivularis* has not been observed in the present material. The occurrence of *Characiosiphon* is a new report from west Nimar district of Madhya Pradesh.

Keywords:- Phycology, Fresh water algae, Chlorophyceae, Chlorococcales

Introduction

West Nimar is one of the tribal districts of Madhya Pradesh. Khargone is the district headquarter which is situated at 21°45'N latitude, 75°37' E Longitude and 250.38 m above mean sea level. It has a number of water bodies both of temporary and permanent nature. Very little is known about the algal flora of West Nimar except few reports (Seerwani, 1963; Mahajan, 1986, 1987, 1988 a and b, 1990, 1991 a and b, 1994, 2004, 2005a and b and 2006). As early as in 1936, Iyengar had reported *Characiosiphon* from a stream situated near Tiruchirapalli. Later on it was reported from various parts of India viz. from Gwalior (Agarkar, 1953), Tirupati (Rao, 1954), Jodhpur (Bhandari, 1955) and Indore (Sharma, 1958). This alga generally prefers standing water and temporary stream. Bhandari (1955) has described certain abnormalities in *C. rivularis*, collected from Umed bund near Jodhpur (Rajasthan). The present investigation deals with the occurrence of *Characiosiphon* for the first time from this area.

Materials and Method

During algal collection by Post-graduate students of Botany of Govt.P.G. College, Khargone in 2006-07, this new algae was collected from Banihar dam which is about 5 km away from Khargone bus stand. The material was identified after consulting the standard literature (Philipose, 1967 and Fritsch, 1945). The collected material is deposited in the Botany Department, Govt.P.G.College, Khargone for record under Regd. No. PGDB 954.

Results and Discussion

The thallus of the present alga is 560 µ long and 38 µ broad with round apex and gradually tapering towards the base where it is attached to the substratum. Protoplasts in the majority of the thalli are separate from each other and appear round to ellipsoidal in surface view but in few thalli they are compactly arranged in the upper part due to mutual pressure and look angular (pentagonal to hexagonal) in surface view. Cell wall is thick and lamellated. Protoplasts are 14 to 18 µ in diameter. The thallus shows wide variations with respect to the length, width and number of protoplasts. The present material shows much resemblances with that of *C. rivularis* Iyengar except that it possesses larger dimensions.

Abnormality in shape reported by Bhandari (1955) has not been observed in the material collected from Banihar dam.

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