

RECORD OF *CHARACIOSIPHON* FROM NORTHERN INDIA

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A monotypic, rare genus *Characiosiphon rivularis* Iyenger has been recorded for the first time from Jammu (J & K State), Northern India.

Keywords : *Characiosiphon rivularis*.

With the establishment of monotypic genus *Characiosiphon rivularis* by Iyenger (1936), collected from South India (Vaiyampatti near Trichinopoly), it was later recorded from Gwalior (Agarkar, 1953); Tirupati (Rao, 1954); Jodhpur (Bhandari, 1955) and Indore (Sharma, 1958) but none of these reports pertain to Northern India. During the course of survey of fresh water algae of Jammu province (J & K state), *Characiosiphon rivularis* was collected once on 20th August, 1988 from Hiranagar, Jammu, growing in a slow moving, shallow stream forming clusters on small pebbles and stones.

Thallus green, 1-1.7 cm long and 2-3 mm broad, young thalli narrow at the basal portion and globular at the apex with prominent lobing, mature thalli club-shaped, without lobing; protoplasts in the basal part of thallus loosely arranged and round in surface view, but compactly arranged and pentagonal in surface view in upper

part of the thallus; individual protoplast 12-14 μ in diameter (Figs. 1 and 2).

Characiosiphon rivularis has been recorded from lotic as well as lentic waters. However, authors collected this plant from a shallow stream growing on pebbles though there are

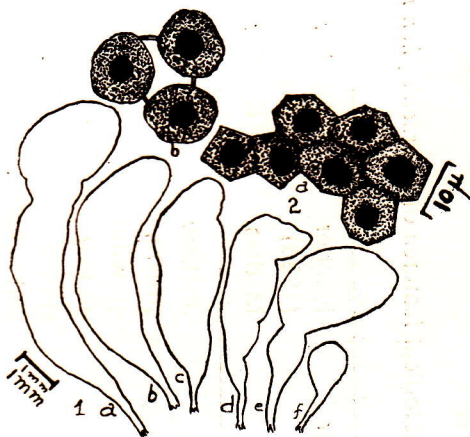


Fig. 1. *Characiosiphon rivularis* thallus;
Fig. 2. Protoplasts in upper and basal part of thallus.

Table 1. Morphological features of *Characiosiphon rivularis* recorded by different workers from different places.

| No. | Character | Iyenger (1936) Madras | Agarkar (1953) Gwalior | Rao (1954) Tirupati | Bhandari (1955) Jodhpur | Sharma (1958) Indore | Authors (1988) Jammu |
|-----|----------------|-----------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|
| 1. | Habitat | Shallow stream, growing on tiny stones and pebbles. | Channel, growing on pebbles and leaf twigs. | Semi-permanent stream, growing on stones, floating pieces of sticks and submerged plants. | Permanent standing water and temporary stream, on pebbles, and decaying leaves. | City drain, on tiny object it could catch. | Temporary, shallow stream, growing on pebbles. |
| 2. | Growing Period | — | — | Oct.-Dec. | August | Sept.-Oct. | August |
| 3. | Thallus | — | — | — | — | — | — |
| | (i) Colour | Green | — | — | — | — | Green |
| | (ii) Length | 1 cm | 1 cm | 1.2-1.3 cm | 1.3-1.5 cm | 1.1 cm | 1-1.7 cm |
| | (iii) Breadth | 0.5-1 mm | 3-4 mm | 1.5-2 mm | 2-3 mm | — | 2-3 mm |
| | (iv) Lobing | Not recorded | Thallus 2 or more lobed | No lobation | No lobation | Lobation in young thalli | In young thalli |

reports that this plant grows on leaves, twigs and other submerged parts of the plants (Table 1). The length of the present specimen agrees in total with the specimens described by Bhandari (1955) but so far as its lobing pattern is concerned, it resembles Agarkar (1953) and Sharma (1958) (Table 1). The present alga agrees in all regards with the type material described by Iyenger (1936). Thus, it forms the first record from the North India as a whole and Jammu in particular. The voucher specimen and original drawings have been deposited in Herbarium section

of Department of Bio-sciences, Jammu University.

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