

## TWO NEW ALGAE FROM PESHAWAR VALLEY, PAKISTAN.

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### Abstract

*Nitzschia angustata* var. *himayatii* Anjum & Hussain and *Selanastrum faridii* Anjum & Hussain, collected from polluted ponds have been described from Peshawar Valley, Pakistan.

*Nitzschia angustata* var. *himayatii* var. nov.

Cellulae 8.0 - 10.5 x 22.5 - 67.5  $\mu\text{m}$ ; a cingulo visae rectangulares; valvae lineares ad lineari-lanceolates, Polis cuneati-rotundatis ad truncatos; media in parts satis constictae cum valvae lineares; striationes 15-20 per 10  $\mu\text{m}$ , incinspicue punctatae; puncta carinae 10-15  $\mu\text{m}$  per 10  $\mu\text{m}$ ; spatium inter pilos 1.5  $\mu\text{m}$ ; pili 3-8  $\mu\text{m}$  long (Fig. 1, ab).

*Habitatio*: Specimen e stagno inquinato quod materiam ortanicam accipit, M.Oct. 1979, in loco Yar Hussain, Mardan district dicto collectum.

Cells 8.0 - 10.5 x 22.5 - 67.5  $\mu\text{m}$ ; rectangular in girdle view; valves linear to linear-lanceolate with cuneate rounded to truncate poles; somewhat medianly constricted when the valves are linear; striations 15 - 20 in 10  $\mu\text{m}$ , faintly punctate; keel punctae 10-15 in 10  $\mu\text{m}$ ; distance between hairs 1.5  $\mu\text{m}$ , hairs 3-8  $\mu\text{m}$  long (Fig. 1, ab).

*Habitat*: The specimen was collected from polluted pond, receiving organic matter, in Yar Hussain, District Mardan.

Date of Collection: Oct. 10, 1979.

The variety resembles the other varieties of *Nitzschia angustata* except in its hairy nature (Tiffany & Eritton, 1952; Huber-Pestalozzi, 1962). Besides, the poles are rounded.

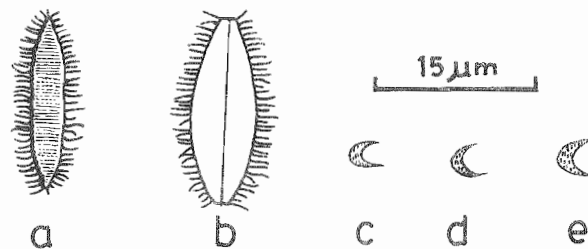


Fig 1, ab. *Nitzschia angustata* var. *himayatii* cde. *Selanastrum faridii*

to truncate. It has been named after Dr Himayat Hussain Naqvi of Peshawar University.

*Selanastrum faridii* sp. nov.

Cellulae singulares, libere fluitantes, curvatae, fere  $2/3$  partim circuli perficientes, ad apices attenuatae, extremis acutis,  $1.5 - 2.5 \mu\text{m}$  diam.,  $4.5-7.5 \mu\text{m}$  long; contentum cellulae aspectu glauco-venetum, homogoneum, interdium granulosum (Fig. 1, cde).

*Habitatio*: Plantae cum *Spirogyra* et *Scenedesmus* consocciatae in stagno quod effusionem e pistrinum quod chartam fabricat accipit, in Nowshera dicto collectae.

Cells solitary, free-floating, curved, completing nearly  $1/2$  to  $2/3$  of a circle, tapering towards the apices, ends acute,  $1.5-2.5 \mu\text{m}$  in diam.,  $4.5-7.5 \mu\text{m}$  long; cells appearing blue-green, homogeneous, sometimes granular Iodine test confirms it to be green alga. (Fig. 1, cde).

*Habitat*: Associated with *Spirogyra* and *Scenedesmus* in pond fed with paper mill effluents, Nowshera.

Date of Collection: Sept. 12, 1979.

The species differs from other species of *Selanastrum* by having acute ends, solitary free-floating cells which taper towards apices (Prescott, 1951). The cells appear blue-green in colour and could be mistaken for blue-green alga. The shape suggests the possibility of being *Kirchneriella subsolitaria*. However iodine test confirms it as a green alga. The species has been named after Professor Dr M.A.F. Faridi, a world-known Phycologist.

Holotypes of both the plants have been deposited in Herbarium, Botany Department, University of Peshawar, Peshawar and with the senior author.

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