

ON SOME RARE TAXA OF *NITZSCHIA* HASSALL FROM INDIA

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ABSTRACT

The paper describes three taxa belonging to the genus *Nitzschia* Hassall, found in the course of investigations on algal flora of Andaman and Nicobar Islands. Out of these, two taxa, viz. *N. angularis* Wm. Smith var. *affinis* Grun. and *N. constricta* (Greg.) Grun. are new records for the Indian flora and *N. panduriformis* Grun. is being reported for the second time from India.

INTRODUCTION

The Andaman and Nicobar group with over three hundred islands in the Bay of Bengal, are situated between 6°45' to 13°45' of North latitude and 90°15' to 94° of East longitude. The Andamans form a compact chain of islands while, on the other hand, the Nicobars lie far separated from one another. The climate of these islands is tropical and humid with mean maxima and minima of temperature varying between 30.2°C to 32.6°C and 22.5°C to 23.1°C.

The fresh-water algal flora of Andaman and Nicobar archipelago is very little known so far (c.f. BISWAS, 1949; SRINIVASAN, 1965; PRASAD & MEHROTRA, 1977; PRASAD & MISRA 1979a, b, 1981; PRASAD *et al.*, 1980; SINGH *et al.*, 1981; PRASAD & SRIVASTAVA, 1981a, b, 1982a, b). While studying the fresh-water diatoms of these islands, the authors came across a number of diatoms among which, three taxa of genus *Nitzschia* Hassall were identified. Of these two taxa *Nitzschia angularis* Wm. Smith var. *affinis* Grun. and *N. constricta* (Greg.) Grun. have not yet been described and recorded in the Indian flora.

SYSTEMATIC DESCRIPTION

1. *Nitzschia angularis* Wm. Smith. var. *affinis* Grun. (Fig. 1)

Heurck, V.H., 1896; p. 393, pl. 16, fig. 522.

Valve linear, narrowly lanceolate, gently attenuated with sub-obtuse apices, central keel distinct, striae very fine, lineate, delicate, parallel throughout the valve. Length 63 μm , breadth 5 μm , striae 28-30 in 10 μm , central keel 9-11 in 10 μm .

Habitat Planktonic with other algae in a fresh-water pond.

Locality Batrapur, South Andaman.

Coll. No. AN 35.

Date 27.1.1978.

2. *Nitzschia constricta* (Greg.) Grun. (Fig. 2)

Chia-Wei-Li, 1978; p. 796, pl. 13, fig. 8.

Valve elliptical, constricted at the median portion with rostrate apices. Keel puncta present, seen with difficulty. Striae fine, lineate, transverse and oblique both,

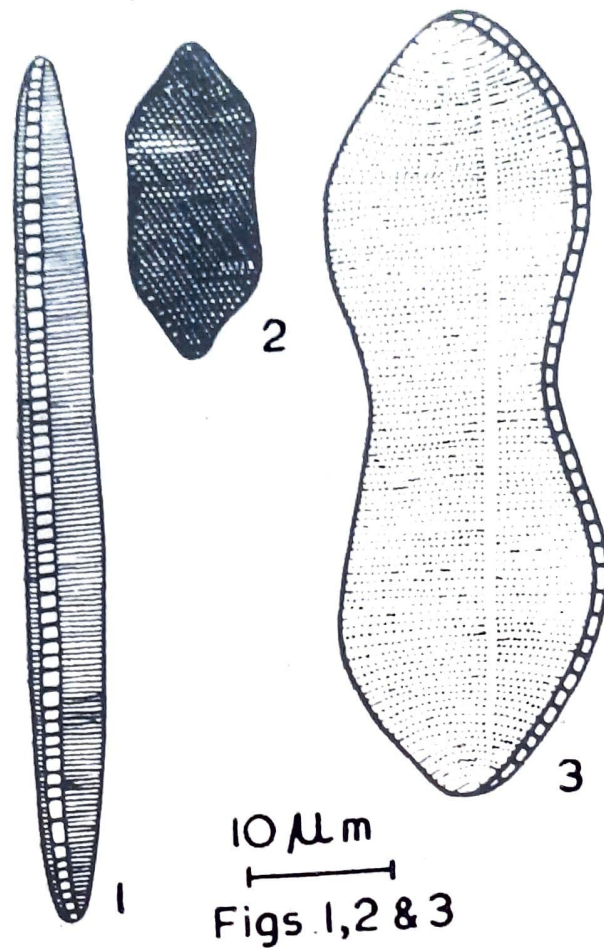


Fig. 1. *Nitzschia angularis* W. Sm. var. *affinis* Grun. 2. *Nitzschia constricta* (Greg.) Grun. 3. *Nitzschia panduriformis* Grun.

forming net like structure. Length 21.5 μm , breadth 9 μm , keel puncta 12-14 in 10 μm , striae 22-24 in 10 μm .

Habitat Free-floating with other algae in a fresh-water pond.
Locality Astinabad (Port Blair).
Coll. No. AN 253.
Date 8.11.1978.

3. *Nitzschia panduriformis* Grun. (Fig. 3)

Heurck, V.H., 1896; p. 386, pl. 15, fig. 500.

Valve broadly elliptical, strongly constricted at the median portion with subrostrate apices. Sulcus strongly marked and furnished with a hyaline line. Carinal dots well marked. Striae fine, punctate, parallel, straight in the middle portion but curved at apices. Length, 54 μm ; breadth, 13.5 μm ; carinal dots 8-9 in 10 μm , striae 18-20 in 10 μm .

Habitat Free-floating with other algae in a fresh water pond.
Locality Astinabad (Port Blair).
Coll. No. AN 253.
Date 8.11.1978.

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