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OCCURRENCE OF ALGAL FLORA AT WATERBODIES FROM BHOKARDAN REGION OF JALNA (M.S.) INDIA

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ABSTRACT: During the present study 16 algal species of algae viz. *Microcystis pulveria*, *Chroococcus montanus*, *Gloeocapsa polydermatica*, *Aphanocapsa koodersi*, *Aphanocapsa bififormis*, *Synechocystis pevalekii*, *Merismopedia punctata*, *Chroococcidiopsis indica*, *Oscillatoria chlorina*, *Oscillatoria terebriformis*, *Oscillatoria subbrevis*, *Oscillatoria vizagapatensis*, *Phormidium fragile*, *Phormidium tenue*, *Lyngbyarubida* and *Microcoleus chthonoplastes* were recorded from the water bodies in Bhokardhan region of Jalna district in Maharashtra. A brief report is presented in this communication.

KEYWORDS: Bhokardhan, Waterbodies, Algae, Chlorophyceae.

INTRODUCTION: The Bhokardhan region is located in the Jalna district of Maharashtra. This area is having several water bodies like ponds, puddles, small lakes, water streams, etc. In these water bodies, water is stagnant and few places are running. Some of the water bodies are deep, while some water bodies are shallow on their rear sides. At these places, the depth of water body is about one meter and has different types of vegetation. In order to study the diversity of algal forms in these water bodies, a survey was undertaken from December-2018 to February 2020.

MATERIALS AND METHODS: Random sampling technique has been used for the collection of algal samples. Sample collections were made during the period of December-2018 to February 2020. The algal samples were cultured in the laboratory. After full growth of the samples these were preserved in 4% formalin. Morphological observations were recorded and the specimens were identified by using Desikachary (1959), Dhingra and Ahluwalia (2007), Dwivedi *et al.*, (2009), Dwivedi *et al.*, (2008), Hegde (1988), Kumar and Rai (2005), Mahajan and Mahajan (1990), Misra and Srivastava (2003), Nandan (1983), Patel and Asoka Kumar (1980), Patel and George (1980) and other relevant literature.

RESULTS AND DISCUSSION: During the present investigation 16 species of algae were observed which are described as under.

1) *Microcystis pulveria* (Wood) Forti

Desikachaty, 1959, p 96, Pl 1, F2

Colonies rounded to ellipsoidal, many together. Units of colonial mucilage distinct, cells spherical to ellipsoidal. Closely arranged 3 μ broad, blue green or olive green in colour.

2) *Chroococcus montanus* Hansgirg

Desikachary, 1959, p 108. Pl 1, F 5

Thallus slimy, gelatinous, yellowish or brownish, cells 5 μ in diameter, single more colonies with sheath 20 μ diameter. Colonial sheath lamellate.

3) *Gloeocapsa polydermatica* Kuetz.

Desikachary, 1959, P 114, Pl 1, F 4

Thallus mucilaginous, cells spherical without sheath 3 μ in diameter, blue green, sheath colourless and thick, distinctively lamellate, lamella 2-3 μ .

4) *Aphanocapsa koodersi* Storm

Desikachary, 1959, P 132, Pl 1, F 8

Colony spherical, blue green, cells loosely arranged in groups of two; spherion, 2.5 μ in diameter.

5) *Aphanocapsa bififormis* A.Br.

Desikachary, 1959, P 134, Pl 1, F 7

Thallus olive green, cells 5 μ in diameter, spherical, characteristically with a special envelope, loosely arranged, 2-4 together in a common mucilaginous envelope.

6) *Synechocystis pevalekii* Ercegovic

Desikachary, 1959, P 145 Pl 1, f 13

Cells spherical, 3.5 μ broad; single or two together, contents blue green, homogeneous, thallus indefinite.

7) *Merismopedia punctata* Meyen

Desikachary, 1959, P 155, Pl 1, F 15

Colonies small, 4-16 cells, about 16 μ broad. Cells loosely arranged, spherical or ovoid, 2.5 μ broad. Pale blue green in colour.

8) *Chroococciopsis indica* Desik.

Desikachary, 1959, P 167, Pl 2, F 28

Cells solitary, spherical or sub spherical, 5 μ broad; with a firm wall, endospores 6-20.

9) *Oscillatoria chlorina* Kuetz ex Gomont

Desikachary, 1959, P 215, Pl 1, F 23

Thallus very thin, yellowish-green, trichomes curved, slightly constricted at the cross walls, 3.5 μ broad, gas vacuoles absent, cells longer than broad, 5 μ long, cross-walls not granulated, calyptras absent.

10) *Oscillatoria terebriformis* Ag.ex Gomont

Desikachary, 1959, P 217, Pl 1, F 24

Thallus dull blue, trichomes end bent in a screw like manner, slightly attenuated, unconstructed at the cross walls, 5 μ broad, 3.5 μ long, and end cell rounded.

11) *Oscillatoria subbrevis* Schmidle

Desikachary, 1959, P 205. Pl 1, F 19

The trichomes are single, single 5 μ long, ungranulated at the cross walls, end cell rounded, calyptras absent.

12) *Oscillatoria vizagapatensis* Rao C.B. Rao

Desikachary, 1959, P 207, Pl 1, F 21

Thallus blue green, trichomes straight /bent, pale blue green, uniformly broad, without constriction at cross walls, cells much shorter than broad 2 μ long contents granular, end cell rounded forming a cap with the slightly thickened outer wall.

13) *Phormidium fragile* (Meneghini) Gomont

Desikachary, 1959, P 253, Pl 2, F 30

Thallus mucilaginous, lamellate, yellowish, sheath diffluent, trichomes flexuous, parallel to entangled, distinctly constricted at the cross walls, septa not granulated, attenuated at the ends, 2.5 μ broad, pale blue green, cells quadrate, 2-3 μ long, end cells acute conical.

14) *Phormidium tenue* (Meneghini) Gomont

Desikachary, 1959, P 259, Pl 2, F 31

Thallus pale blue-green, thin, trichomes straight & bent, slightly constricted at the cross, pale blue-green, sheath thin, 5 μ long, end cells conical.

15) *Lyngbyarubida* Frey

Desikachary, 1959, P 287, Pl 2, F 34

Thallus brownish, filaments straight, very long, 5.8-6.2 μ broad; sheath firm, unlamellated, colorless, trichomes blue-green, not constricted at the cross walls, 5 μ broad; cells 7.5 μ long end cells rounded, cross-walls not granulated.

16) *Microcoleus chthonoplastes* Thuret ex Gomont

Desikachary, 1959, P 343, Pl 2, F 37

Thallus expanded, filaments single or interwoven, dark green, sheath thick, uneven, having many closely grouped trichomes, trichomes constricted at the cross walls; 3 μ broad, cells blue-green, 5 μ long, end cell pointed and conical.

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