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Title:	A Red Bloom of Euglena Shafiqii, a New Species, in Dal Lake, Srinagar, Kashmir
Keywords:	Colour change, Dal lake, Environmental stress, Euglena shafiqii, Pigment spectra, Red-bloom, Shape transformation
Year:	1988
Name of journal:	Water, Air, and Soil Pollution
Volume & Issue	108(1-2)
Page No:	69-82
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Abstract

A bloom of Euglena was observed at the surface of Dal Lake, Kashmir, in the last week of June, 1991. The species exhibited a circadian colour change, from green at dawn to blood-red during the day and again green at dusk. The present new species is, therefore, named Euglena shafiqii. It is distinguished from the cogenus by the structure and occurrence of Z-tubules, chromatophores, nucleus shape and by a coloured pulsating structure at the posterior end. A stress induced transformation from an elongated egg to a round shape is also peculiar. The light absorption spectra of the pigment showed λ maxima at 416, 441, 467 and 485 nm. The red bloom was found in the part of the lake basins which receives waste effluents.

DOI 10.1023/A:1005037531147