Studies on the distribution and abundance of phytoplankton in river Damodar of Bermo sub-division of Jharkhand

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SUMMARY

The present study elucidate the species diversity and richness of phytoplanktons in river Damodar of Bermo sub-division. Damodar river is well known for establishment of coal mining industries along its basin areas. For this biosurvey 30Kms.stretch of river Damodar and three most productive collieries of Bermo sub-division namely Bokaro, Kargali and Dhori were selected. These selected stations releases tremendous amount of pollutants per day like coal dust, fly ashes, oils, grease, flocculation agents etc. which are directly added to river without recycling. This reflects the biological profile of the river Damodar. Pollution in this river has changed physico-chemical regime, which in turn have led to changes in biotic community. Phytoplanktons were collected regularly for a period of 12 months (Nov. 08 to Nov. 09). Altogether 51 taxa of three different classes viz., Cyanophyceae, Chlorophyceae and Bacillariophyceae has been recorded. The species rich genera are Microcystis, Lyngbya, Scenedesmus, Oedogonium, Zygnema, Closterium, Gyrosigma and Navicula. Results indicate wide range of seasonal fluctuations in quality and quantity of phytoplankton.

Key words : Bermo sub-division, Damodar river, Phytoplankton, Seasonal variation  Species diversity