

MICROALGAL DIVERSITY OF DAYYAM VAGU, A PERENNIAL RIVER OF ETTUNAGARAM WILDLIFE SANCTUARY, WARANGAL DISTRICT, TELANGANA, INDIA

J.W. Prakash*

Bishop Jesudasan Junior College, Ettunagaram, Warangal (Dist.), Telangana- 506165

Email: jwprakash@gmail.com

Received-18.05.2016, Revised-02.09.2016

Abstract: In the present research an attempt has been made to assess the distribution pattern of Micro algal diversity of DayyamVagu, a perennial river of Ettunagaram Wildlife sanctuary, Warangal District, Telangana, India. Comparative study of various stations of the river is unique. This type of study is new to this perennial river. As the river is passing through the entire stretch of the sanctuary, it is quite possible that there is some difference in algal composition among the different river stations. This paper deals with the micro algal diversity of DayyamVagu which passes through the Ettunagaram wildlife sanctuary of Telangana. This study was carried out during the year 2016. The samples were taken from four fixed stations of the river during the dry season of the year. During the study period 48 species of algae were observed from various stations, during the year 2016. In the present study 12 Bascillariophyceae, 19 Chlorophyceae, and 17 Cyanophyceae members were observed.

Keywords : Wildlife sanctuary, Perennial River, Micro algae, Diversity

REFERENCES

- Anand, N.** (1998). Indian freshwater microalgae. Bishen Singh Mahindra Pal Singh (Publisher). Dehradun. Pp. 22-98.
- Ariyadej, C., Tansakul, R., Tansakul, P. and Angsupanich, S.** (2004). Phytoplankton diversity and its relationships to the physico-chemical environment in the Banglang Reservoir, Yala Province Songklanakarin J. Sci. Technol., 26(5) : 595-607
- Barnes, R.S.K.** (1980). Coastal Lagoons. 2nd Edn., Cambridge University Press, London, pp: 106.
- Chinnaiah, B. Ramesh Babu, M. and Digamber Rao, B.** (2011). Phycoplankton diversity and population dynamics of Ramappa Lake, (A.P) *India.Ad.Plant.Sci.* 24 (II):527-529.
- Conde, D., Bonilla, S., Aubriot, L., de León, R., Pintos, W.** (2007). Relative contribution of planktonic and benthic microalgae production in a eutrophic coastal lagoon of South America.
- Davies, O.A., Abowei J.F.N., Tawari, C.C.** (2009). Phytoplankton Community of Elechi Creek, Niger Delta, Nigeria-A Nutrient-Polluted Tropical Creek. *American Journal of Applied Sciences* 6 (6): 1143-1152.
- Desikachary, T.V.** (1959). Cyanophyta, New Delhi, India. 686.
- Dup Singh, L., Ella Swamy, N., Kumara Swamy, B. and Digamber Rao, B.** (2014). Freshwater algae of Laknavaram Lake from Warangal District, Telengana State, India *J. Algal Biomass Utln.* 5 (4): 37-43
- Kobbia, I.A., Hassan, S. K. M., Shoukhami, M. A.** (1991). Dynamics of Phytoplankton in the River Nile at Minia (Upper Egypt); as influenced by agricultural runoff, *Journal of Islamic Academy of Sciences* 4:3, 234-241,
- Leela Bhosale, J., Patil, S.M, Sureka Duml, N. and Anjaiah Sabale, B.** (2010). Occurrence of Phytoplankton in the Lakes in and around Kolhapur city (Maharashtra). *Indian Hydrobiology.* 12(2):133-142.
- Leela Bhosale, J., Patil, S.M, Sureka Duml, N. and Anjaiah Sabale, B.** (2010). Occurrence of Phytoplankton in the Lakes in and around Kolhapur city (Maharashtra). *Indian Hydrobiology.* 12(2):133-142.
- Lokhande, M. V., Shembekar, V. S.,** (2009). Studies on Phytoplankton diversity of Dhanegaon Reservoir, Dhanegaon Dist. Osmanabad, Maharashtra, Shodh, SamikshaaurMulyankan (International Research Journal)— Vol. II, Issue-7
- Mathivanan, V., Vijayan, P., Selvi, Sabhanayakam, Jeyachitra, O.** (2007). An assessment of plankton population of Cauvery River with reference to pollution. *J. Environ. Biol.,* 28, 523-526 (7).
- Prescott, G.W.** (1978). How to know Freshwater Algae 3 rd Edn. Wes. C. Brown Company Publication, Iwona, USA – 1 – 280pp.
- Ramadosu, A. and Siva Kumar, K.** (2010). Seasonal variation of phytoplankton in relation to physico-chemical characteristics at Perumal Lake, Tamilnadu. *Indian Hydrobiology.* 12(2):149-158.
- Saravanakumar, A., Rajkumar, M., Thivakaran, G. A. and SeshSerebiah, J.** (2008). Abundance and seasonal variations of phytoplankton in the creekwaters of western mangrove of Kachchh-Gujarat. *J. Environ. Biol.,* 29, 271-274
- Sivakumar, K., Senthilkumar, R.** (2008). Studies on phytoplankton diversity in response to abiotic factors In Veeranam Lake in the Cuddalore district of

*Corresponding Author

Tamil Nadu., Journal of Environmental Biology, September 2008, 29(5) 747-752

Sridhar, R., Thangaradjou, T., Senthil Kumar, S. and Kannan, L. (2006). Water quality and phytoplankton characteristics in the Palk Bay, south east coast of India. J. Environ. Biol., 27, 561-566

Tas, Beyhan, Arif, Gonulol (2007). An ecologic and taxonomic study on phytoplankton of a shallow lake, Turkey. J. Environ. Biol., 28:439-445

Townsend, C.R., Harper, J.L., Begon, M., (2000). Essentials of Ecology. 3rd Edn., Blackwell Science Publishers, London.pp: 530.

Vollenweider R.A. (1974). A manual on methods for measuring primary production in aquatic environments. London: Blackwell Sci.225

Wehr, J.D., Descy, J.P., (1998). Use of phytoplankton in large river management. J. Phycol., 34: 741-749.