

STUDY ON PRIMARY PRODUCTIVITY IN LOTIC WATER OF RIVER SARYU AND GANGA AT SARAN DISTRICT, BIHAR, INDIA

Kumari Uma¹ & Dhruv Kumar Singh²

¹Research Scholar, Department of Zoology, Chapra University, Chapra, Bihar, India

²Assistant Professor, Department of Zoology, Chapra University, Chapra, Bihar, India

Received: 10 Mar 2018

Accepted: 25 Jun 2018

Published: 30 Jun 2018

ABSTRACT

Primary productivity can be defined as the rate at which the solar energy is stored by the photosynthetic activities of primary producers. Primary productivity depends upon the photosynthetic activities of the autotrophic organisms which are capable to transfer carbon dioxide into organic matter. It helps in measuring the ability of a water body to support a biological phenomena on which the entire biodiversity is depended. Information on primary productivity of lotic ecosystem of our county is still scanty. The present study deals with the study of the primary production of different sites of rivers Saryu and Ganga in Saran district, Bihar as the stretch remained unexplored. The light and dark bottle method of Gaarder and Gran (1927) was used to determine the primary productivity of phytoplankton with the incubation of 4 hrs. In situ. The values of Gross Primary Productivity, Net Primary Productivity, NP/GP ratio and Respiration values parameters were higher in Ganga river than Saryu river. The present study would help in exploring the biodiversity of freshwater ecosystems.

KEYWORDS: Lotic Water, Saryu River, Ganga River, Gross Primary Productivity, Net Primary Productivity