



A REVIEW

Role of Cyanobacteria in crop production

Tarasankar Pattanaik¹, Priyanka Priyadarsani Pati², B. Praveen* and Saurav Barman³

Department of Plant Pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, R Sitapur, Paralakhemundi, Gajapati (Odisha) India
(Email: bpraveen@cutm.ac.in)

Abstract : Microorganisms make a deal in the field of agro-ecosystem and environment (7). Continuous in global human population may hamper in the field related to soil fertility, (39) energy crisis, food security for further generation (40). These conditions could be regulated by using synthetic fertilizers (8). Although synthetic fertilizers are effective but have deleterious effect on the field. This article focuses on the role of Cyanobacteria with context to the field of crop production (13). Cyanobacteria aka blue green algae belongs to apimordialdescent of photo-oxygenic bacteria. They also form symbiotic association capable to fix atmospheric Nitrogen into utilise form and make it available to the plants. Its extra ordinary development rate shows its use in the field of biotechnology, medicine, agriculture, bio energy. The exo-polysaccharide of Cyanobacteria balances soil ecology and they have the ability to compete with flora and fauna. Several Cyanobacteria have high biomass yield, generation of useful by-products, bio fuel and enhancing sustainable development in the field of science. In this review article describes the latent use of the bacteria in the crop field, different area of science field and mass production of cyanobacteria bio fertilizer in agriculture to overcome the use of chemical fertilizers.

Key Words : Cyanobacteria, Crops, Morphology, Bio remediation, Bio fertilizers, Bio fuel

View Point Article : Pattanaik, Tarasankar, Pati, Priyanka Priyadarsani, Praveen, B. and Barman, Saurav (2021). Role of Cyanobacteria in crop production. *Internat. J. agric. Sci.*, 17 (2) : 751-758, DOI:10.15740/HAS/IJAS/17.2/751-758. Copyright@2021: Hind Agri-Horticultural Society.

Article History : Received : 05.03.2021; Accepted : 20.03.2021

* Author for correspondence

¹Department of Botany, Centurion University of Technology and Management, R Sitapur, Paralakhemundi, Gajapati (Odisha) India

²Department of Plant Pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, R Sitapur, Paralakhemundi, Gajapati (Odisha) India

³Department of Soil Science and Agricultural Chemistry, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, R Sitapur, Paralakhemundi, Gajapati (Odisha) India