

RESEARCH ARTICLE

Nitrogen fixer nostocs found in rice field of Ranchi district

■ Ashmrita Mahto and Radha Sahu

SUMMARY

Nostocs are motile, filamentous mucilaginous gelatinous colonial form of algal taxa belonging to order Nostocales and family of Nostecaceae. This is a common alga of both terrestrial and aquatic habitats. Terrestrial species grow on bare soil or intermingled with leafy plants many species are known to grow in the paddy fields and in alkaline user soil. Lazaroff (1973) summarized his own and other investigation of the life history of Nostoc are related to nutrition and light. Enormous information is available on occurrence and distribution of nostocales from various part of India. Nostoc species has been used most frequently in fundamental research to improve soil qualities and crop production. These algal specimens which are more frequently found in the soil of rice field were collected during 2008-2009. *Nostoc commune*, *N. linekia*, *N. piscinale*, *N. pongiaeforme*, *Anabaenopsis circularis*, *A. lyengarii*, *A. aphanizomenoid*, *A. azollae* were dominant in the soil of rice fields. *Nostoc commune*, *N. linekia* were recorded throughout the year. *A. azollae* is found symbiotically with Azolla plant during summer season. As there is no report of any kind of algal investigation in rice field at Ranchi district. Survey was made for the collection and identification of order Nostocales algal specimen during the period of Nov. 2008 to 2010. Present paper deals with the total 8 species of Nostoc belonging to order Nostocales.

Key Words : Nostoc, Algal taxa, Rice field

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