

12th Euro Biotechnology Congress

November 07-09, 2016 Alicante, Spain

Role of Algae in reclamation of soil in cyanide dumps of KGF, Kolar district, Karnataka state

A Karthikeyan² and Venugopal N¹

¹Sri Jagadguru Renukacharya College of Science, Arts and Commerce, India

²KGF First Grade College, India

India has great biodiversity of blue green algae in general which has contributed to fertility of the soils and in relatively well documented. Efforts have been made to study the algal flora in the tailings or cyanide dumps of the Kolar gold fields and an attempt has been made to draw the knowledge about heterocyst and non-heterocyst nitrogen fixing organisms like blue green algae, which are ubiquitous in distribution and contribute to the world wide nitrogen status. It has been widely studied in the paddy field soils addition of Cyanobacteria to enhance the crop yield. Algalisation is best where nearby species are utilized to get ready inoculums. It is therefore important to have detailed information of indigenous algal population particularly the nitrogen fixating species. Several investigative reports on the abundance of soil algae in different geographical areas of India are available. Many areas of region still remain unexplored. In this context the present investigation was taken up in the tailings or cyanide dumps and recorded 60 algal species in which, 37 species of Cyanophyceae, 12 species of Chlorophyceae, 09 species of Bacillariophyceae and 2 species of Euglenophyceae. The most abundance genera of algae present in the area are as follows *Microcystis elongata*, *Anabaena circinalis*, *Aphanocapsa koordaei*, *Calothrix castelli*, *Chroococcus giganteus*, *Gloeocapsa gelatinosa*, *Crinalium magnum*, *Nostoc commune*, *Oscillatoria obscura*, *Phormidium parpureuscens*, *Synechococcus pevalikii*, *Chlorella vulgaris*, *Chlorococcum croccum*, *Cymbella ventucosa*, *Navicula rhomboids*, *Euglena elongata* etc.

Biography

A Karthikeyan is a Professor and Head of Department of Botany/Microbiology and he is working in KGF First Grade College, Kolar, India. He has published 8 research papers in various national and international journals and completed 10 student research projects. He was conferred with an international award at Dubai- "Indo Dubai Pacific Achievers Award on 20/11/2015.

kgfcatgreen@gmail.com

Notes: