PRELIMINARY OBSERVATIONS ON SOIL ALGA IN SANA’A GOVERNORATE (YEMEN)

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Soil alga in ten ecological different sites belong to different habitats in Sana’a governorate during April, 2005 were studied. In all, 41 species 11 Cyanophyta, 22 Chlorophyta, 8 Bacillariophyta were recorded. Blue-green algae were recorded as 26.829% of the total algal population of all samples. In Cyanophyta the forms most common species Anabaena constricta, Anabaena cylindrica Anabaena oscillarioids, Anabaena spiroides, Oscillatoria formosa, Oscillatoria limosa Oscillatoria minima, Oscillatoria nigra and, Phormedium ambiguum. Chlorophyta were recorded as 53.658% of the total algal population of all samples. Chlamydomonas polyphyrenoidum, Chlorococcum humincola Cosmarium sp. Closterium sp. and Scenedesmus bifuga Scenedesmus hystioix Scenedesmus quadricauda Scenedesmus incrassatus, Cladophora fracta, Oedogonium bohemicum and Spirogyra condensate were of common occurrence. Bacillariophyta constituted 19.512% of the total algal population of all samples. Navicula bacillum, Fragilaria capucina, Pinnularia molaris, Nitzschia graulis and Syedra ulna were of common occurrence.

INTRODUCTION

Algae are the major primary organic procedure in aquatic habitats and contribute to soil fertility. They are useful as indicators of environmental conditions. Therefore information concerning algal flora is essential for understanding their ecology. The clear cut ecological differentiation of algae into halophilic or non halophytic and stenohaline or euryhaline forms was reflected in their geographical distribution (Den hartog, 1967).

The physico-chemical characteristics of water or soils may indicator to a large extent, the changed in their characters lead to concomitant quantitative and qualitative changes in the algal flora. The periodicity in phytoplankton species may be attributed to the changes of physical and chemical characters of water (Samaan, 1974 and El-Naggar, 1977). In response to the impact of some environment stresses were intensively studied (El-shimi, 1975. Hassan, 1980, and Nassar, 1980).

Kobbia et al (1991) recorded that the slight elevation in pH valus in the Nile water is one of factors participated in flourishing of phytoplankton at different sites of Nile River. The soil and water habitats