



**ABSTRACT**

Total fifty eight species of open drain algae from some areas of Lahore are being identified in the present study. Belonging to thirty one genera, seventeen families and twelve orders of total four phyla, Cyanophycota, Volvocophycota, Bacillariophycota and Chlorophycota were collected during January 2012 to May 2012. They were taxonomically identified upto species level using Shameel classification (2001, 2008). Following fifty eight species have been presented in present study:

Kingdom Monera identified with one phylum; Cyanophycota which includes two classes, two orders, three families, eight genera and eighteen species i.e. *Chroococcus minor*, *C. minutus*, *C. micrococcus*, *Synechocystis pevalekii*, *Nostoc carneum*, *Anabena affinis*, *Oscillatoria anguina*, *O. rubescens*, *O. curviceps*, *O. schultzei*, *O. tenuis*, *Spirulina gigantea*, *S. laxissima*, *S. subsalsa*, *Arthrospira platensis*, *A. platensis* var *f. granuulata*, *A. Khannae*, and *Phormidium autumnale*.

Kingdom Protista consists of two phyla Volvocophycota and Bacillariophycota which includes three classes, three orders, seven families, eleven genera and twenty two species i.e. *Chlorella ellipsoidea*, *Scenedesmus abundans*, *S. bijuga*, *S. quadricauda* var. *maximus*, *S. quadricauda* var. *westii*, *Tetradismus wisconsinense*, *Cosmerium granatum*, *C. margaritatum*, *C. microsphinctum*, *C. pulcharum*, *C. portianum*, *C. subcostatum*, *Achnanthes hungarica*, *Fragillaria construens*, *F. arcus*, *Fragillariiforma virescens*, *Synedra radians*, *S. tabulate*, *Colletonema subcohaerens*, *Navicula cryptocephala*, *N. lanceolata*, *Caloneis silicula*.

Kingdom Protoctista includes one phylum Chlorophycota which have three classes, seven orders, seven families, twelve genera and eighteen species i.e. *Ulothrix subconstricta*, *U. aequalis*, *U. tenuissima*, *U. tenerima*, *Microspora floccose*, *Stigeoclonium nanum*, *Oedogonium bohemicum*, *Zygnema pectinatum*, *Spirogyra aequinocitialis*, *S. condensate*, *S. daedaleoides*, *S. dubia*, *Cheatomorpha implexa*, *Cladophora glomerata*, *Rhizoclonium crassipellitum*, *Pithophora kewensis*, *Hydrodictyon reticulum* and *Pediastrum simplex*,

Wastewater of open drains from some areas of Lahore have also tested through different water quality tests ( $\text{HCO}_3^{-1}$ ,  $\text{CO}_3^{-2}$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Cl}^{-1}$ ) for their nutrient compositions.