

## ABSTRACT

Algal samples were collected from different fresh water bodies of district Lahore. Altogether 117 algal species were identified from 52 localities from March to December 2011 to 2013. The microscopic analysis of these samples revealed altogether 117 species of algae belonging to three kingdoms; Monera, Protista and Phycota.

Monera included single Phylum Cyanophycota containing 2 classes, 3 orders, 5 families, 18 genera and 38 species i.e. *Aphanocapsa roseana* De Bary, *Aphanothece gelatinos* Lammerman *Chroococcus minor* Nägeli *C. minutus* Nägeli *C. turgidus* Nägeli *Dactylococcopsis fascicularis* Lammerman *Gloeocapsa punctate* Kützing, *Gloeothece rupestris* Bornet *Gomphosphaeria aponina* Kützing, *Merismopedia punctate* Meyen, *Microcystis aeruginosa* Kützing, *M. robusta* (Calrak)Naygard, *Arthrospira platensis* Gomont, *A. massarti* Kuffareth *Lyngbya aestuarii* Leibman *L. birgei* G.M Smith, *L. hieronymusii* Lammerman *L. spirulinoides* Gomont, *Oscillatoria agardhi* Gomont, *O. Formosa* Bory ex Gomont, *O. granulate* Gardner *O. nigra* Vaucher *O. princes* Vaucher *O. tenuis* Agardth *Spirulina major* G.M Smith, *S. laxa* Kützing, *S. subsalsa* Oesterd, *Anabaena affinis* Lammerman, *A. bornetiana* Collins, *A.flos-aquae* Brebisson *A. limnetica* G.M Smith, *A. plactonica* Brunthaler *A. unispora* Gardner, *Cylindrospermum stagnale* Kützing, *C. mucicola* Kützing, *Calothrix weberi* Kützing, *Gloeotrichia intermedia* Geitler and *Haplosiphon webwitschii* West & West.

Kingdom Protista consisted of 3 phyla; Volvophycota, Euglenophycota and Bacillariophyta. Phylum Volvophycota included 2 classes, 3 orders, 3 families, 9 genera and 30 species i.e *Pandorina morum* Bory, *Oocystis borgei* Snow *O. elliptica* West, *Closterium acerosum* Ehrenberg, *C. archerianum* Cleve, *C. moniliferum* Ehrenberg, *C. nematodes* Joshu *C. rostratum* Ehrenberg, *C. venus* Kützing, *Cosmarium alatum* Kirchner *C. angulare* L.N Johnson *C. botrytis* Meneghini *C. broomeii* Thwaitis *C. circulare* Reinch *C. constrictum* Deplonte, *C. contractum* Kirchner, *C. depressum* Nägeli *C. margaritatum* Lundell *C. moniliforme* Ralf *C. rectangulare* Gurnow, *C. subcrenatum* Scott. *Desmidium cylindricum* Greville *Euastrum cuneatum* Jenner *E. denticulatum* Kirchner *Staurastrum hystrix* Ralf, *S. pendulum* Croasdale *S. proboscideum* Archver, *S. sebaldi*, *Spondylosium planum* G.S West and *Xanthidium antelopaeum* Kützing.

Phylum Euglenophycota comprised of only one class, one order, a family, 3 genera and 10 species i.e. *Euglena viridis* Ehrenberg *E.gracilus* Kelbs *Phacus acuminatus* Stokes, *P. caudatus* Drezepolski, *P.lemmermanicum*(Swir), *P. pseudoswirenkoi* Prescott *P. triquetes* Dujradin, *Trachelomonas dubia* Deflander, *T. cylindrical* Ehrenberg and *T. superba* Deflander.

Phylum Bacillariophyta consist of one class one order and 6 families and 7 genera and 13 species which are *Denticula tenuis* Kützing, *Fragillaria capucina* (Kützing)Carlson, *F.rumpens* Kützing *Gomphonem constrictum* Ehrenberg, *G.lanceolatum* Ehrenberg, *Amphipleura pellucida* Kützing, *Navicula ammophila* Grunow, *N.cryptocephala* Kützing, *N.gregaria*, *Nitzschia angustata* Grunow, *N.clausii* Hantzch, *N.closterium* Ehrenberg, *Pinnularia biceps* Gregory.

The Kingdom phycota included phylum Chlorophycota with 2 classes, 3 orders, 4 families, 7 genera and 26 species i.e. *Oedogonium angustissimum* West&West, *O. bahusiense* Nordstedt, *O. curtum* Lundal *O. implexum* Hiren *O. leave* Wittrock, *O. princeps* Hassal *O. tyrolicum* Wittrock, *Mougeotia abnormis* Wittrock,, *Spirogyra borgeana* Transeau, *S. crassa* Kützing, *S. ellipospora* Transeau, *Hydrodictyon reticulatum* Lagerheim, *Pediastrum boryanum*Meneghini, *P. duplex* Meyen, *P. obtusum* Lucks, *P. integrum* Nägeli *P. simplex* Meyen, *P. tetras* Ralfs *Sorastrum americanum* Schmidle, *Scenedesmus acuminatus* Chorda, *S. acutiformis* Schroeder *S. arcuatus* Lammerman, *S. bijuga* Lagerheim, *S. denticulatus* Lagerheim, *S. dimorphus* Kützing and *S. obliquus* Kützing.