

ABSTRACT

We explored district Rajanpur for freshwater phytoplankton and collected 40 samples from different localities during April to August 2012. The microscopic analysis of these samples revealed altogether 66 species of algae belonging to three kingdoms; Monera, Protista and Phycota.

Monera included single Phylum Cyanophycota containing 2 classes, 2 orders, 2 families, 5 genera and 11 species *i.e.* *Chroococcus disperses*, *C. dispersus* var. *minor*, *C. minor*, *C. schizodermaticus*, *C. turgidus*, *Gleotheca rupestris*, *Anabaena affinis*, *Oscillatoria brevis*, *O. splendida*, *Phormidium limosum*, *P. tenue*

Kingdom Protista consisted of 3 Phyla; Bacillariophycota, Dinophycota and Volvophycota, Phylum Bacillariophycota included 1 class, 3 orders, 9 families, 16 genera and 37 species *i.e.* *Achanthes exilis*, *Cymbella affinis*, *C. aspera*, *C. gracilis*, *C. janischii*, *C. minuta*, *C. tumida*, *Denticula tenuis*, *Fragilaria capucina*, *F. rumpens*, *Synedra acus*, *S. ulna*, *Ghomphonema ghosea*, *G. lanceolatum*, *G. specula*, *G. olivaceum*, *G. constrictum*, *Navicula ammophila*, *N. cari*, *N. cryptocephala*, *N. cuspidate*, *N. halophila*, *N. parva*, *Trachyneis aspera*, *Nitzschia gandersheimiensis*, *N. linearis*, *N. sigma*, *N. vitrea*, *Amphora ovalis*, *Gyrosigma acuminatum*, *G. scalproides*, *Mastogloia smithii*, *Neidium affine*, *Pinnularia gracilens*, *P. interrupta*, *P. parva*, *Stauroneis dubia*, *Cyclotella meneghiniana*. Phylum Dinophycota included 1 class, 1 order, 1 family, 1 genera and 1 species *i.e.* *Glenodinium quadridens*. Phylum Volvophycota included 1 class, 1 order, 1 family, 1 genera and 7 species *i.e.* *Cosmarium cataractarum*, *C. crenatum*, *C. granatum*, *C. hostensiense*, *C. leave*, *C. nitidulum*, *C. pseudoprotuberans*.

Kingdom Phycota included Phylum Chlorophycota with 1 class, 1 order, 2 families, 2 genera and 7 species *i.e.* *Pediastrum duplex*, *P. napoleonis*, *P. simplex*, *P. simplex* var. *duodenarium*, *Scenedesmus acutus*, *S. armatus*, *S. dimorphus*, *Cymatopleura elliptica*, *C. solea*.