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PHYTOPLANKTON OF AYAKAGIMTA LAKE

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ANNOTATION

This article presents the composition of phytoplankton species of the Ayakagimta lake, the development, quantity and biomass variation of phytoplankton in the lake, phytoplankton of the Ayakagimta lake has been widely used as a nutrient and provides information on the increase in fish productivity.

Key words: Phytoplankton, hydrobiont, heterotroph, autotroph, biomass, formalin, plankton, hygrophyte, hydrophyte, hydrophyte, planktophagus.

SUMMARY

Like land plants, phytoplankton have chlorophyll to capture sunlight, and they use photosynthesis to turn it into chemical energy. They consume carbon dioxide, and release oxygen. All phytoplankton photosynthesize, but some get additional energy by consuming other organisms.

Phytoplankton growth depends on the availability of carbon dioxide, sunlight, and nutrients. Phytoplankton, like land plants, require nutrients such as nitrate, phosphate, silicate, and calcium at various levels depending on the species. Some phytoplankton can fix nitrogen and can grow in areas where nitrate concentrations are low. They also require trace amounts of iron which limits phytoplankton growth in large areas of the ocean because iron concentrations are very low. Other factors influence phytoplankton growth rates, including water temperature and salinity, water depth, wind, and what kinds of predators are grazing on them.

Lake ayakagimta is located on the border of the northwestern Gijduvan and Shofirkon districts of Bukhara region. This lake was formed from the account of collector waters in 1985-86 years. The area of the lake is 14 thousand hectares, the maximum depth is 45 m, the average is 15-20 m, the minimum is 5-8 meters. Lake water enters the with chloride-sulphate and calcium. Water clarity is up to 10 meters in the northern part of the lake. In the Shofirkon collie, which flows into the lake, it vibrates up to 0,5-0,8 m. The lake is located in the steppe zone of the meadow. The leguminous Lake has an average nutrient base, like the lower Zarafshan lakes, that is, it is a mesotrophic Lake [1].

Biological productivity of the lake is spent on the formation of new organisms. In this regard, the importance of hydrobions is determined by its hunting importance. Depending on the practical importance of hydrobiotics in the water basin, their biological productivity is divided into primary and secondary productivity.

Primary productivity is the result of biosynthesis of organic substances from inorganic substances, that is, the result of the activity of autotrophic hydrobions. Secondary productivity is carried out in the process of transformation of existing organic substances - through heterotrophic hydrobions.

The objects that we use as hunting constitute biological resources. More precisely, biotic resources or bioresources. All this belongs to the SUVs. Bioresources are different - a sociological concept, a person's attitude to a particular plant and animal is used as a raw material. Man seeks to acquire as many biological products as possible from them by mastering natural waterfalls. As biological resources, the yield of Fish and fish is considered.

The study of tubular algae of the foot lake began in 1989 year. Seasonal (spring, summer, autumn) research work was carried out to investigate the existing nutritional base of the lake.

Phytoplankton samples were collected through a special No. 76 digital plankton net. Samples were taken from the marked points of the lake in different seasons. The collected samples were fixed with 4% formalin, stored in a dark place for 14-15 days and detected in laboratory conditions.

Collect phytoplankton and work. It was carried out by the method proposed by Kiselev (1969). In addition to A.Andrievskaya (1982), A.Ergashev (1960, 1986), R.Sh. The methods recommended by SHoyokubov (2006) were also used.

Professor of Buxoro State University in the determination of phytoplankton species. The S.Buriev and Associate Professor N.Rashidov helped closely.

What Rashidov (1998) identified microscopic algae: cyanophyta - 16, chlorophyta - 24, euglenophyta – 10, bacillariophyta - 10.

The composition of the species phytoplankton of the foot lake is diverse.

Data on the composition of the phytoplankton species of legume Lake are published for the first time.

The species composition of phytoplankton of the foot lake: cyanophyta-37, bacillariophyta-23, pyrophyta-5, euglenophyta-8, chlorophyta-50 species.

Cyanophyta 37 Species-*Gloeocapha. tenax (Kirchn.) Ho11eɔb, G. turgida (Kutz.) Ho11eɔb, Gomphosphaeria aponina Kutz, G. lacustris Chod, G. f. compacta (Lemm.) Elenk, Anabaena bergii Ostenf, A. bergii f. minor (Kissel.) Kossin, A. variabilis Kutz, A. variabilis f. crassa Woronich, Nodularia spumigena Mert, Oscillatoria tenuis Ag, O. amoena (Kutz.) Gom, O. amphibia Ag, O. amphibia f. tenuis (Anissim.) Elenk, O. annae van Goor, O. angusta Koppe, O. boryana (Ag.) Bory, O. brevis (Kutz.) Gom, O. chalybea (Mert.) Gom, O. geminata (Menegh.) Gom, O. granulata Gardner, O. formosa Bory, O. irrigua (Kutz.) Goin, O. limnetica Lemm, O. limosa Ag, O. major Vauch, O. neglecta Lemm, O. princeps Vauch, O. rupicola Hansg, Spirulina. major Kutz, S. meneghiniana Zanard, S. tenuissima Kutz, Phormidium ambigum Gom, Ph. purpurascens (Kutz.) Gom, Lyngbya limnetica Lemm, Lyngbya aestuarii (Mert.) Leibm, L. kossinskajae Elenk.*

Bacillariophyta 23 species -*Diatoma vulgare Bory, Diatoma elongatum (Lyngb), D. elongatum var. tenue (Ag.) V.H, Synedra acus kutz, S. ulna (Nitszch.) Ehr, S. berolinensis Lemm, S. capitata Ehr, S. rumpens Kutz, Navicula cryptocephala kutz, N. cari Ehr, N. cincta (Ehr.) Kutz, Amphiprora paludoza W. Sm, Amphiprora alata Kutz, Amphiprora alata var. japonica C.I, Amphora ovalis kutz, Nitzschia closterium (Ehr), Nitzschia longissima Ralfs, N. apiculata (Greg.) Grun, N. fonticole Grun, N. frustulum (Kutz.) Grun, N. microcephala Grun, N. obtusa W.Sm, Melosira ambigua (Grun.).*

Pyrrophyta 5 species-*Peridinium inconspicum Lemm, Peridinium latum Pauls, P. lomnickii Wo1osz, P. pusillum (Penard), Ceratium cornutum (Ehr.).*

Euglenophyta 8 species-*Euglena acus Ehr, Euglena bucharica Kissel, Euglena oxyuris Schmarda, E, deses Ehr, E. hemichromata Skuja, E. proxima Dang, E. variabilis K1ebs, E. spathirhyncha Skuja.*

Chlorophyta 50 species-*Chlorella vulgaris Beyer, Chlorelia ellipsoidea Gezneck, Chlamydomonas sphagnicola Fritsch. et Tak, Oocystis submarina Lagezh, Oocystes gigas Archer, Oocystes lakustris Chod, Oocystes parva Limm, Oocystes pusilla Hansd, Oocystes salitaria Usittr, Scenedesmus acuminatus (Lagerh.) Chod, S. obliquus var. alternans Christ, S. obliquus (Turp.) Kutz, S. quadricauda (Turp.) Breb, S. quadricauda var. setosus Kizchn, S. acuminatus var. biseriatus Reinh, S. acutiformis Schroed, S. apiculatus (W. et W.) Chod, S. bijugatus (Turp.) Kutz, S. denticulatus var. austalis Playfair, Ankistrodesmus angustus Bern, A. arcuatus Korschik, A. pseudomirabilis var. spiralis Korschik, Enteromorpha intestinalis (L.) Grev, Ulothrix limnetica Lemm, U. tenerrima Kutz, Hormidium rivulare Kutz, Microspora sp, M. willeana Lagerh, M. stagnorum (Kutz.) Lagerh, Oedoganium sp, Oedogonium inconspicum kutz, Cladophara glomerata (Kutz), Closterium aciculare Fuffen, Closterium sp, Closterium dianae Ehr, C. dianae var. arcuatum (Breb.) Rabenh, Vaucheria sp, Cosmarium angulosum Breb, C. granatum Breb, C. laeve Rabenh, C. laeve var. septentrionale Wille, C. sexnotatum var. tristriatum (Lutk.) Schmid, C. vexatum West, Cosmarium sp, Mougeotia sp, Spirogyra borystheniea Kasanow et Smir, S. crassa (Kutz). Czurda, S. longata (Vauch) Czurda, Bulbochaete sp, Bulbochaete repanda Kessel*.

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