

A. Buhryk

Research supervisor: Y.S. Seljuk, Candidate of Biological Sciences,

Associate Professor

Zhytomyr Ivan Franko State University

Language tutor: O.E. Kravets

PROSPECTS FOR THE STUDY OF AUTOTROPHIC LINK OF SMALL RIVERS IN THE POLESYE

Small river is one of the important components of the natural environment, they are of great importance in the life and economic activities of people. Their water resources are a constituent part of the shared water resources and are often the main and sometimes the only source of local water that determines the development and distribution of local water users. Streams and rivers form water resources and hydrochemical composition and quality of water medium and large rivers, are the components of natural landscapes, contribute to the economic activity of the population.

In recent years, due to the increase of pollution of rivers by wastewater from industrial plants, municipal and agricultural effluents, the water quality in small rivers has decreased markedly. In our time it is extremely important quality problem and finding new sources of drinking water. There are many newest methods that you can use to identify the level of pollution of water bodies and watercourses, however, recognized by the European Union approach is based on the use of aquatic organisms, in particular algae, as natural indicators in the environmental monitoring and otestovani [2]. Therefore, the research of the ecological state of small rivers is very important.

Phytoplankton is an important component of ecosystems that respond quickly to changes in the environment, it is convenient bioindicators.

The work purpose: determination of water quality of small rivers on the biodiversity of phytoplankton.

Algology the selection of samples was carried out on R Syniavka at fixed stations twice per month during the growing seasons 2014-2015, Samples were fixed, thickened and laboratory worked using well known methods [6]. In the work of the applied taxonomic system of algae proposed in the construction of the "Algae of Ukraine" [2]. Boundiali analysis carried out taking into account the indicator properties of algae, given in the monograph by S. S. Barinova et al [3]. The calculation of the class of water quality was carried out on the basis of the index saprobes (on Pantla-Buk) [7], which is derived from the taxonomic

composition (presence of indicator species) and the quantitative development of algae.

Sinyavka – a river in Ukraine, within the Korosten district of the Zhytomyr region, the right tributary of the Snake (pool of Pripyat). The length of the river is about 15 km originates South of S. Hotynski. Flows mainly North-West through the territory of the Polesie lowland. On the banks of the river are located the villages: Grozin, Sinha and Nemyrivka, where it flows into the Snake. Track slavoslovie wetland sites, the bottom is mostly muddy or sandy. Built several ponds. Has two tributaries: Fork, Chernozems [5].

In the result of conducted monitoring of the watercourse we have made environmental assessment of river ecosystems on display characteristics of algae, such as GALANT, spacing, pH, geographic location, relect the like; investigated the taxonomic composition of algae of the river for 2014–2015. within the Korosten district; examined the diversity of planktonic algae of the river by seasons; created a summary of the flora of algae [4].

Held boundiali analysis of diversity of phytoplankton of the river Sinyavka showed that the water column is dominated by planktonic-benthic and planktonic species of algae, as well as indicators of the average yield of water, moderate temperature, slightly alkaline waters and indifferent in relation to pH and salinity. River water for levels of organic pollution on Pantla-Beech belongs to the III class of water quality and system Watanabe – it is characterized by a moderate content of organic compounds.

LITERATURE

1. Algae of Ukraine: diversity, nomenclature, taxonomy, ecology and geography. Vol. 1. Cyanoprocaryota, Euglenophyta, Chrysophyta, Xanthophyta, Raphidophyta, Phaeophyta, Dinophyta, Cryptophyta, Glaucocystophyta, and Rhodophyta / Eds. P.M. Tsarenko, S.P. Wasser, E. Nevo. – Ruggell: Ganter Verlag, 2006. – 713 p.

2. Directive 2000/60 EC of the European Parliament and of the Council, of 23 October, establishing a framework for Community action in the field of water policy. Official Journal of the European Communities. EN, 22.12/2000 L. 327: 1–72.

3. Барінова С.С., Медведева Л.А., Анисимова О.В. Биоразнообразие водорослей-индикаторов окружающей среды. – Тель-Авив: PiliesStudio, 2006. – 498 с.

4. Бугрик А. О., Шелюк Ю.С. Оцінка якості води р.Синявка за видовим складом фітопланктону// П Р О Г Р А М А VII Всеукраїнської науково-

практичної конференції молодих учених,аспірантів і студентів ВОДА В ХАРЧОВІЙ ПРОМИСЛОВОСТІ 26 – 27 квітня 2016 р.- Одеса – 2016.

5. Лукашенко В.В. Коростенщина моя. Історико-географічний нарис (вид. друге) / Лукашенко В.В., Лукашенко Л.В. Коростень, 2008. – 204с.

6. Методи гідроекологічних досліджень поверхневих вод / За ред. В.Д. Романенка. – К.: ЛОГОС, 2006. – С. 8–24.

7. Методика встановлення і використання екологічних нормативів якості поверхневих вод суші та естуаріїв України / В.Д. Романенко, В.М. Жукинський, О.П. Оксіюк та ін. – К., 2001. – 48 с.