

MICROPHYTOBENTHOS OF RIVER KODYMA

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Microphytobenthos of river Kodyma plays an important role in the creation of organic matter, oxygen and recycling of organic and inorganic pollution. The aim of this work was to study the biodiversity of microscopic algae benthos of river Kodyma. River Kodyma is a right tributary river of Southern Bug. Length the river is 149 km.



The samples were collected from March 2005 to November 2008 at three stations of the river Kodyma. Microscopic algae studied for substrates: macrophytes (*Ceratophyllum demersum* L., *Enteromorpha compressa* (L.) Grev., *Myriophyllum spicatum* L., *Phragmites australis* (Cav.) Trin ex Steud., *Potamogeton pectinatus* L., *Rhizoclonium* sp., *Spirogyra* sp.), rocks and silts. In total were collected and examined 18 samples.

As a result, studies were found and identified 79 species of algae, which are 4 divisions: *Bacillariophyta* (57 species), *Cyanophyta* (10), *Chlorophyta* (10) and *Euglenophyta* (2). Trobats species belong to 40 genera, 29 families, 16 orders, 8 classes and 4 divisions. The greatest contribution to the biological diversity of microphytobenthos river Kodyma made leading families *Nitzschiaceae* (10 species), *Cymbellaceae* (8), *Naviculaceae* (8) and *Oscillatoriaceae* (7). The highest species diversity of different genera *Navicula* Bory (8 species), *Cymbella* Ag. (7), *Oscillatoria* Vauch. (6), *Nitzschia* Hass (5), *Gomphonema* (Ag.) Ehr. (4) and *Amphora* Ehr. (3). Among them are dominated by species *Bacillaria paradoxa* Gmel., *Navicula cryptocephala* Kütz., *N. salinarum* Grun., *Nitzschia sigma* (Kütz.) W. Sm. As subdominant were *Oscillatoria tenuis* Ag., *Euglena viridis* Ehr., *Cyclotella meneghiniana* Kütz., *Tabularia tabulata* (Ag.) Snoeijis, *Cymbella cistula* (Hemp.) Kirch., *Epithemia sorex* Kütz. and *Nitzschia amphibia* Grun.

As there are growing plankton (14 species), benthic (41) and forms part of the composition of fouling (24). Algae of river Kodyma are divided into single (39), colonial (31) and multicellular (9). They provide mobile (47 species) and fixed (32) form.

With respect to the substrate microscopic algae as follows: macrophytes- 46, elah- 31 and 11 species of rocks. In the fouling of macroscopic algae were observed *Diatoma vulgare* Bory, *Fragilariforma virescens* (Ralfs) Will. et Round, *Synedra acus* Kütz., *S. ulna* (Nitz.) Ehr., *Cymbella tumida* (Breb.) V. H., *Gomphonema truncatum* Ehr., *Cocconeis placentula* Ehr. The surface is covered with stones *Oscillatoria margaritifera* (Kütz.) Gom., *Tabularia tabulata*, *Rhoicosphenia abbreviata* (Ag.) L.-B. In the surface film of silts been found *Anomoeoneis sphaerophora* (Ehr.) Pflit., *Fallacia pygmaea* (Kütz.) Stick. et Mann, *Navicula cryptocephala*, *N. salinarum*, *Hantzschia amphioxys* (Ehr.) Grun. and other species.