

AQUATIC VEGETATION OF THE RIVER YAGORLYK

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In the past decade a significant pollution of rivers by industrial and domestic effluents, which contain large amounts of organic matter, nutrients and some toxic compounds (phenols, petroleum products, heavy metals, pesticides, etc.) has been



observed. In this regard, ecological status of waters of the Dniester and its tributaries deteriorated. The object of our study is the river Yagorlyk - a left tributary of the Dniester. The river flows in the Odessa region of Ukraine and Dubossary region of Pridnestrovie. Its length is 73 km, the basin area is 1,590 km² (Igoshin, 2009). The main tributaries are Trostyanets (right), Dry Yagorlyk (left). The bases for this work were the materials collected in 2010 - 2011 in the river Yagorlyk. During the period of our investigations we found in this river: 9 species of aquatic plants and 43 species of algae, from which there were 10 species of macrophytes and 33 species of microscopic algae. Among them, 8 species refer to Cyanophyta, 19 - Bacillariophyta, 2 - Euglenophyta, 1 - Xanthophyta, 9 - Chlorophyta, 3 - Streptophyta and 1 - Chrysophyta. In the compound of cyanobacteria, *Spirulina major* Kutz. and *Oscillatoria tenuis* C. Agardh. dominated. Among the diatoms *Achnanthes brevipes* C. Agardh., *Diatoma elongatum* (Lyngb.) C. Agardh., *Gomphoneis olivaceum* (Horn.) Dawson ex Ross et Sims, *Gomphonema truncatum* Ehrenb., *Cocconeisplacentalula* Ehrenb., *Cymbella neocistula* Kram., *Rhopalodia gibba* (Ehrenb.) O. Mull. dominated, among the euglenophyta *Euglena deses* Ehrenb. dominated, among the green *Cosmarium lagerheimii* Gutw., *Cladophora fracta* (O. Mull. ex Vahl.) Kutz., *Enteromorpha intestinalis* (L.) Nees dominated, among the streptophyta *Spirogyra decimina* (O. Mull.) Kutz. dominated. Flora of macrophytes from the investigated area has the typical features of freshwater riverine ecosystems with predominance of mostly green and streptophyta algae, and also submerged and semi-submerged aquatic higher plants (Tkachenko, 2007). Algae of the river Yagorlyk according to the level of organization are divided into 25 species of unicellular, multicellular - 17 and colonial - 1. Referring to salinity 39 species of freshwater algae dominated, 33 of them belong to indifferent and 6 - to halophiles. We discovered 4 species of brackish-water algae. Among the identified algae 31 taxon refer to indicator species, 17 of them belong to P - mezosaprobic group, 3 - to polysaprobic and 5 a - mezosaprobic. P - a and P - a - mezosaprobic contain 2 species and oligosaprobic - 2. Consequently, according to the composition of indicator algae species the water in this river may be referred to the P - mezosaprobic zone.