

## MONITORING OF FLOODPLAIN VEGETATION ON THE R. WESTERN DVINA

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The paper describes the importance of flood meadows, their species composition and productivity in selected areas near the Western Dvina River in Polotsk in 2017.

*Keywords:* floodplain meadows, floodplain phytocenosis, net productivity.

Floodplain meadows are an important source of cheap and biologically complete feed. Usually it located in the river valleys and along the coasts of lakes. A distinctive feature of this type of meadow is that in the spring period they are flooded with flood waters, after the recession of which there is silt enriching the soil with nutrients that create favorable conditions for the growth of meadow vegetation, often possessing medicinal properties or including species listed in the Red Book.

The aim of the work is studying the species composition and productivity of microgroups of plant communities as elements of the horizontal structure of the flood plain of the Polotsk District.

To carry out the research in 2017 at two selected sites the species composition was monitored, the productivity of floodplain phytocenosis was analyzed, and the net production of photosynthesis was calculated.

As a result of the study it became known that 34 species of higher vascular plants were registered in the two studied areas, which belong to 13 families. The most numerous in number of species were the families Cereals (Poaceae) – 20,5 %.

It was established that, in relation to soil trophicity, the dominant group was mesotrophic plants throughout the study period (56,4 %). With respect to the soil moisture in the phytocenosis, mesophytes predominated (54 %). Proceeding from the definitions of eutrophic and mesotrophic, it can be concluded that the soil of the studied area is quite fertile.

An analysis of the economic-botanical composition of the floodplain phytocenosis showed that forage value was dominated by plants with a medium and low fodder value (33 %).

The maximum productivity of phytocenoses at the first and second test sites of 2017 was registered in July (2,9 and 2,4 kg / m<sup>2</sup>, respectively).

Net productivity of photosynthesis in the growing season of cereals in 2017 was maximal in May-June and amounted to 2,01 grams per day / m<sup>2</sup> (on the first test site) and 2,21 g / day / m<sup>2</sup> (at the second site).

## THE METHODS OF LABORATORY DIAGNOSTICS AND EPIZOOTIC SITUATION ON TRICHINOSIS IN THE CITY OF GOMEL

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Material about the value of a trichinosis, the methods of laboratory diagnostics and its distribution in the territory of the city of Gomel is presented.

*Keywords:* Trichinosis, laboratory diagnostic, compressor trichinoscopy, biochemical study, Express- test.

Trichinosis is a biogelmintosis caused by *Trichinella spiralis* from the family Trichinellidae. Despite the fact that trichinosis has been known since 1860, and the causative agent of *Trichinella spiralis* was discovered more than 160 years ago, this helminthiasis is still an actual problem; therefore, the main method of the research is laboratory diagnostics, which includes three main methods: compressor trichinoscopy, biochemical, and serological studies. A special method is the an express test..

We conducted the research on the territory of the “Gomel Municipal Veterinary Station”, where two main methods of diagnosing trichinosis were used: compressor trichinelloscopy and biochemical research.