

# DYNAMICS OF HORIZONTAL STRUCTURE FLOODPLAIN VEGETATION IN PROTECTED AREAS OF CRIMEA

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The long-term monitoring of structure of floodplain meadows and forests on the territory of the Crimean Natural Reserve and in the water protection zone of the Zagorski reservoir for drinking purpose. Research methods and statistical processing of the material are briefly listed. For the first time for the flood meadows of the rivers Alma and Kacha we carried out a detailed study on the reduction of the dynamics of floodplain phytocenoses the complete removal of moderate anthropogenic pressure. We studied the composition, horizontal and vertical structure, spatial placement of plants meadow and forest vegetation, as well as soil addition features.

The reaction of the soil solution is close to neutral in the meadows, in the woods is slightly acid, which is caused by acidification of decaying litter stand. In general, gross reserves of essential nutrients are satisfactory. They vary according to accounting areas along the river from the upper stream, with slight variations of nitrogen. These parameters are higher in forest plantations. As the load gains, the content of phosphorus increases and that of potassium decreases. In forest areas, this relation is not found. Phosphorus and potassium content are similar along the river from the headwaters to the borders of the reserve. The alluvial-meadow and black earth meadow soils are formed in the upper stream of protected areas, whereas meadow black earth soils are formed in the middle course.

Complete cessation of grazing and hay-making over the past 25 years have led to a change of floristic diversity of floodplain meadows. During demutation model of inhibition is implemented, because in the presence of a dense layer of long-term settlement of the litter and the germination of seeds of other plant species becomes impossible.

Habitat-forming ability of meadow cenose edificators is weak in comparison with the influence of ecotope. Creating and defining phyto environment, these edificators themselves in their dynamics depend on parameters of exodynamic factors and age structure of their populations.

Demutation processes in floodplain meadows with increasing soil moisture contribute to the activation of bush encroachment processes, gradual replacement of the meadows to the transitional forms of scrub with fragments of meadow complexes and active implementation of indigenous woody vegetation. For their preservation a periodic haymaking should take place, for the sale of feeds and receiving additional financial resources to the reserve, and also for their stabilization.

Floodplain indigenous forests along the Kacha river remained only on the territory of the Crimean Natural Reserve. They have a great variety of types and transient groups, high activity of successional processes, significant fluctuations in the age composition and structure. They are in good sanitary condition but the very low level of renewal of the main forest-forming species. Therefore, they are very vulnerable to changing conditions of the floodplain (periodic flooding) river, so their conservation issues and protection are relevant even in a protected area.

**Keywords:** meadow plant communities, riverine forests, protected areas, floristic diversity, renewal, demutation processes.

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