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## **WATER REGIME OF THE PLANTS OF THE PARK COMMUNITY IN PHYTOGENIC INTERACTION**

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The article is devoted to the study of the water regime of decorative plants that are part of the park communities of the Southern coast of Crimea, with their phytogenic interaction. The water regime is one of the factors determining the features of the functioning and vital state of plants. The greatest impact on this indicator is provided by environmental factors. The high level of lability of the water regime allows it to be used as a test-sign of the change in the general physiological state of the plant under various types of external influence. The urgency of the study is determined by the fact that, a rational combination of plants from the position of their attitude to environmental factors provides an increase in the effectiveness of measures to maintain green spaces. Less obvious, however, quite significant is the problem of synecological interaction of plants of different species in conditions of artificially created communities. The study was carried out with the purpose of studying the features of the water regime of ornamental tree and shrub plants under joint growth in the conditions of park communities. Studies were carried out in the steam communities of the Arboretum Nikitsky Botanical Garden. On the separate courtesans 20 model sites were laid, on which 20 pairs of plants of various types were

identified. As a result of research, in the zone of intersection of phytogenic fields of a number of decorative plants, a certain level of mutual influence of plants of individual species on the water regime of the tissues of the leaf blade was revealed. Thus, in plants that showed an increase in the intensity of growth of leaf blades, an increase in the level of drought resistance was revealed. The obtained data can testify to the effect of synecological mechanisms of stimulation of adaptive functions of decorative plants in the zone of influence of their phytogenic fields, which ultimately ensures an increase in the group's stability under the negative influence of environmental factors.

**Keywords:** water regime, park communities, phytogenic interaction, decorative plants, adaptation, synecological groups.

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