Original article

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Problems of Preserving the Gene Pool of Petiole Oak in the Forests of the Central Chernozem region

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Abstract. The problems of preserving the gene pool of petiole oak in the oak forests of the Central Chernozem Region are explained by the absence of reliable young growth in mature and ripening plantations. Dedicated objects of genetic resources conservation, first of all genetic reserves, are not renewed by oaks naturally. There is a change to associated hardwoods. The aim of the research is to study the present state of oak genetic reserves and recommend technological methods of its seed regeneration, which would provide formation of new forest generation with preservation of natural diversity. This task can only be solved by an active forestry impact on the process of forest reproduction. The article considers options for the use of combined regeneration and the creation of specialized cultures of oak to maintain diversity within the species. These crops can subsequently be used to form permanent forest seed plots, which will produce seeds with natural genetic diversity. The preservation of the gene pool richness by this technology can be defined as one of the methods of continuous dynamic maintenance of the diversity of genetic resources in the process of human economic activity.

Key words: petiolate oak, genetic reserve, natural renewal, gene pool, forest crops, genetic diversity.

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