

FORMATION OF YIELD AND QUALITY OF GRAIN IN WINTER WHEAT VARIETIES DEPENDING ON CULTIVATION METHODS

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Abstract. The results of the reaction of new varieties of winter bread wheat to the application of various doses of fertilizers and predecessors in the conditions of the foothills of Kabardino-Balkaria are presented. The experiments were carried out on the wheat varieties Yuzhanka, Moskvich, Adel and Yuka of the selection of the Federal State Budgetary Scientific Institution "Scientific Center of Plant growing named after P.P. Lukyanenko" in 2012-2014. The influence of predecessors (peas, corn on silage and grain, sunflower) and doses of mineral fertilizers (N₆₀P₆₀K₃₀, N₆₀P₉₀K₄₀, N₉₀P₁₂₀K₆₀) on the yield and grain quality indicators of winter soft wheat varieties were studied. The best predecessors and optimal doses of mineral fertilizers and their influence on the formation of the yield and grain quality have been determined. In studies on predecessors, the optimal indicators were obtained for the legume predecessor (peas), the least for sunflower. The optimal dose of mineral fertilizers for all varieties in the foothill zone is N₉₀P₁₂₀K₆₀, which ensures a high yield and good grain quality. Of the studied varieties in terms of a set of indicators, the best varieties are Yuka and Yuzhanka, which, subject to technology, under production conditions, will provide a high yield of high-quality grain.

Keywords: wheat, predecessor, batteries, grain quality, seed weight, nature.

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