Formation of yield and grain quality of winter wheat varieties depending on predecessors and growing conditions

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Annotation. An important agrotechnical means of increasing the yield and quality of grain is the placement of wheat crops after the best predecessors that provide the soil with the necessary water, air and food regime. In the conditions of the South of Russia, winter wheat is cultivated in various agroecological conditions, while the optimization of water and food regimes, depending on the predecessors, is of particular relevance.

On the basis of domestic scientific literature, the state of knowledge of the issue is shown, data on the role of predecessors in solving the problem of grain production and improving its quality are presented. The results of the study of the literature showed that the issues of crop formation and grain quality according to predecessors in various soil and climatic conditions are well studied and covered quite fully in the Russian Federation. The best predecessors of winter wheat by cultivation zones are identified, a comparative analysis of the literature on the changes in the quality indicators of grain depending on the predecessors and cultivation conditions is given. On the example of specific varieties (Yuzhanka, Yuka, Moskvich, Nakhdoka, Badulinka, Volgogradskaya 44, Moskovskaya 39, Zernogradka 8, etc.), recommendations are given for placement for various predecessors. Separately, the issue of placement after fusarium-hazardous predecessors is discussed.

It was noted that the use of new highly productive varieties, their placement after the best predecessors, in relation to specific cultivation conditions, taking into account their biological characteristics, will increase productivity, gross yields of high quality grain in all regions of cultivation of this strategic crop.

Key words: winter wheat, variety, predecessor, yield, grain quality, cultivation technology

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