Evaluation of new promising corn hybrids in breeding nurseries under irrigation in the steppe zone of Kabardino-Balkaria

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Annotation. The article presents the results of testing of new promising hybrids of corn of our own selection in the steppe zone of the KBR in conditions of moisture deficiency and elevated temperature regime. As a result of testing new hybrid combinations in a number of consecutive nurseries, three promising corn hybrids KB 382 (FAO 300), KB 440 (FAO 400) and KB 471 (FAO 450) were selected, significantly exceeding the corresponding standard by 13.7–33.1%. These hybrids are being prepared for transfer to the state export testing. Hybrids KB 191, KB 192, KB 420 and KB 441, which have shown high yields in some years, should be subjected to extensive ecological variety testing in various zones of the Russian Federation. When laying and growing breeding nurseries, it is necessary to take into account the soil and climatic features of the research area: in the steppe zone of the KBR (zone of insufficient moisture), watering is necessary during the critical phases of growth and development of the corn plant. The use of biological and chemical methods of combating cotton scoops allowed to reduce crop losses and to obtain objective test data for new experimental hybrids.

Key words: corn, hybrid, hybrid combination, breeding nursery, control nursery, nursery of preliminary (small) variety testing, competitive variety testing, yield, harvesting grain moisture, breeding index

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