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# PRODUCTIVITY OF CORN HYBRIDS FOR GRAIN UNDER IRRIGATION CONDITIONS OF DAGESTAN ON THE BACKGROUND OF APPLICATION OF BIOPLANT FLORA GROWTH PREPARATION

Z.N. MAGOMEDOVA<sup>1</sup>, N.L. ADAEV<sup>2</sup>, A.G. AMAEVA<sup>2</sup>

<sup>1</sup>Dagestan State Agrarian University named after M.M. Dzhambulatov  
367032, Russia, Makhachkala, 180 M. Gadzhiev street

<sup>2</sup>Chechen State University named after A.A. Kadyrov  
364034, Russia, Grozny, 32 A. Sheripov street

**Annotation.** The area of grain corn cultivation in the irrigated conditions of the Republic of Dagestan is decreasing from year to year, mainly due to insufficient knowledge of the technology of its cultivation. In recent years, scientists have been paying attention to the problem of developing new directions in the cultivation of agricultural crops using microbiological fertilizers, biological preparations, growth stimulants and immunity inducers. Therefore, taking into account the above, in 2018–2019 the authors carried out studies aimed at studying the adaptive potential of maize hybrids POCC 299 MB (standard) and Mashuk 355 MB. Experimental data showed that the yield of hybrids when applying mineral fertilizers with doses of N120 P90 K60 increased in comparison with the control by 24.2–28.2%, respectively. With a combination of mineral fertilizers and pre-sowing treatment with the growth regulator Bioplant Flora, the excess compared to the control was 51.5–63.4%, respectively. Of the studied hybrids, the hybrid Mashuk 355 MB turned out to be the most productive.

**Keywords:** grain corn, hybrids, ROSS 299 MB, Mashuk 355 MB, weediness, herbicides, growth regulator, photosynthetic potential, yield

## Information about the authors

**Magomedova Zulaypat Nurmagomedovna**, Applicant for the Department of Land Management and Cadastres, Dagestan State Agrarian University named after M.M. Dzhambulatov;  
367032, Russia, Makhachkala, 180 M. Gadzhiev street;  
[zulaipat@mail.ru](mailto:zulaipat@mail.ru)

**Adaev Nurbek Lomalievich**, Doctor of Agricultural Sciences, Associate Professor, Head of the Department of Agrotechnology of the Agrotechnological Institute of the Chechen State University named after A. A. Kadyrov;  
364034, Russia, Grozny, 32 A. Sheripov street;  
[mr.adaev61@mail.ru](mailto:mr.adaev61@mail.ru), ORCID: <https://orcid.org/0000-0002-6664-2407>

**Amaeva Aset Ganievna**, Candidate of Sciences in Biology, Associate Professor of the Department of Agrotechnology of the Agrotechnological Institute of the Chechen State University named after A.A. Kadyrov;  
364034, Russia, Grozny, 32 A. Sheripov street;  
[aset-6666@mail.ru](mailto:aset-6666@mail.ru)