CREATION OF POTATO EARLY RIPE GROUPS VARIETIES IN THE CONDITIONS OF THE SOUTH OF RUSSIA

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As a result of the assessment of more than 4 thousand hybrid seedlings, joint selection of the Federal State Budgetary Scientific Institution "Federal Research Center of Potatoes" n.a. A.G. Lorkh and the Institute of Agriculture KBSCof RAS, which passed the full scheme of selection tests, 16 hybrid populations with economically significant traits were identified: resistance to a complex of viral, bacterial and fungal diseases. The selected hybrid populations belong to early and mid-early maturity groups with a growing season of 55-70 days and a yield of 26.3-49.7 t / ha.

The genotypes obtained are involved in the implementation of the federal scientific and technical program for the development of potato agriculture for 2017-2025. The main goal of the program is to create new varieties of early and medium early group of potato ripeness. A number of research institutes of the Russian Federation are co-executors of this program.

The creation of early ripening varieties of a new generation is one of the most important areas of breeding, especially for the southern regions of Russia. Currently, according to a number of well-known scientists, resistance to the most harmful pathogens is the most important breeding characteristic. For example, late blight remains one of the most harmful and widespread diseases, which cannot be prevented even with ultramodern new drugs (fungicides and insecticides). Previous varieties do not withstand competition, because new strains and races appear, which leads to a significant shortage of harvest [1].

When creating varieties of early and mid-early ripeness groups, as a result of studying samples of hybrid potato populations available in the collection of the Institute of Agriculture KBSC of RAS, separate genotypes were identified that combine early maturation with other signs of resistance to fungal, viral and bacterial diseases, as well as high productivity and good quality indicators potatoes.

Keywords: potatoes, selection, hybrids, populations, genotype, variety, tubers, trait, resistance, early maturity, yield, productivity.

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