

## EVALUATION OF NEW WAXY CORN HYBRIDS BY ECONOMICALLY VALUABLE CHARACTERISTICS

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*In world agriculture, corn is cultivated primarily as a grain crop. In terms of gross harvest and sown area, it ranks third, second only to wheat and rice. Along with the fodder value, corn grain plays a huge role as a food product. For these purposes, grain of various subspecies of high-yielding corn hybrids with a high starch content is usually used, which consists of 75% amylopectin and 25% amylose, has a straight polymer chain structure, whereas waxy caryopses contain 100% amylopectin starch with a branched starch polymer chain ...*

*In this regard, in the Kabardino-Balkarian Research Institute of Agriculture, on the basis of the developments made by scientists of the Vavilov All-Russian Research Institute of Plant Genetic Resources (VIR), new self-pollinated lines of waxy maize have been created and studied, which are evaluated according to the main selection-valuable traits. The main goal of our research was the creation and evaluation of self-pollinated lines of waxy maize, their subsequent study to create new varieties and hybrids. Hybrid combinations were obtained that showed high yields of waxy corn. The best hybrid 90-7 exceeded the standard by 4.5 t / ha at the standard planting density and 100% amylopectin starch content in the grain. Other hybrid combinations had values of excess over the standard in the range from 1.0 to 4.0 t / ha (hybrids; 90-13, 90-7, 90-9, 91-24 91-28, 91-30, 92-41 , 93-65, 94-74, 94-77 up to 1.0 t / ha, hybrids; 90-5, 90-14, 90-16, 91-21, 91-23, 94-76 up to 2.0 t / ha, hybrids; 91-29 up to 3.0 t / ha, hybrids; 90-14, 91-22 up to 4.0 t / ha).*

**Keywords:** corn, hybrid, amylopectin, amylose, grain yield, starch collection.

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