

RESULTS OF QUALITY TRAITS TESTING FOR MAIZE IN CONTROLLED ENVIRONMENT

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Abstract

Maize is one of the most often cultivated species around the world, due to its high yield and also due to its use in different food, animal husbandry and industry production. Yield maximization needs considering the hybrid characteristics related to pedo-climatic conditions, pathogen and insects, maturity group, soil moisture and temperature at sowing. In the late years, early sowing for maize has become more frequent in Romanian farms and choosing the right hybrid has great importance. One of the main objectives is choosing the hybrid with seeds that produces strong plants after sowing, in wet and cooler soil conditions. Ten maize genotypes were tested regarding seed germination using four methods: standard germination test at 25 degrees C, cold test, Pioneer stress test and accelerating aging test. The results highlighted one genotype with great performance in all four tests. Eight genotypes had good overall results and only one of them recorded low values.

Key words: maize, genotype testing, seed germination