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**PRESERVATION OF THE GROWING POWER OF ELITE CORN**

**LINES SEEDS DURING STORAGE**

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*The data on monitoring laboratory germination of seeds of 8 elite corn lines during storage in the conditions of a seed warehouse from 2017-2020, determined at +20°C and the method of cold germination (cold test) are presented. Also studied are the field germination of the same seeds in the early and optimal periods of sowing in 2018-2019. A decrease was noted already in 2019 in laboratory germination of line seeds at +20°C. By 2020, three out of eight lines were conditional with germination rate above 90%. When studying laboratory germination by the method of cold germination in 2018 four lines turned out to be conditional, in 2019 – two, in 2020 – only one. The coefficient of variation of laboratory germination by the cold test method increased from 5.2% in 2018 to 33.6% in 2020. Genotypes of lines were identified that were able to maintain the sowing quality of seeds for three years under normal storage conditions in the seed warehouse. A very wide range of variation of the field germination of line seeds by genotypes and sowing dates were determined. Under conditions of low temperature stress in 2019 field germination of seeds of some lines in the early period of sowing varied within 2-9%. The coefficient of variation of field germination between line genotypes was 76.8%. To preserve the sowing qualities of seeds, elite lines – parental forms should be stored in cold conditions (–18°С), sowed only at the optimum time. To determine the seeding rate, taking into account insurance premiums, the biological characteristics of the lines to preserve the sowing qualities of seeds should be taken into account.*

**Keywords:** corn, elite line, seeds, laboratory germination, cold germination, field germination, sowing dates, grain yield.

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