

## THE MICROFLORA INFLUENCE OF WHEAT SEEDS ON THEIR QUALITY INDICATORS

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### Abstract

There were analyzed the fifteen varieties of wheat seeds from lots of crops from South East of Romania, in conditions of 2014. Measurements were aimed at determining the associated fungal load of wheat seeds and establishing their influence on quality indicators. Classical method was used (PDA medium plate inoculation). It was established micromycetes proportion identified as follows: fungus *Fusarium* spp had minimum values of 30% at Solehio variety and maximum values at Alex variety of 80%. *Alternaria* spp colonized Flamura 85 variety seeds at a rate of 14%, with a maximum value of 60% at Solehio variety. *Stemphylium* spp micromycetes was present in 6% at Flamura 85 variety and recorded maximum value of 20% at Boema and Glosa varieties. *Oedocephalum* spp and *Rhizopus* spp colonized seeds of Glosa and Ilinca varieties, in proportion of 45%. *Penicillium* spp micromycetes recorded a maximum incidence of 25% at Elemenco variety. *Epicoccum purpurascens* was present on the seeds of wheat in a maximum proportion of 10% at Solehio variety. Germination of seeds recorded the lowest value of 87% at Solehio and a maximum value of 99% at Ilinca variety. Quality index determinations reveal a seeds moisture of minimum 12,3% of Apache variety and a maximum value of 16,6% for Flamura 85 variety. Minimum amount of protein was determined for Exotic variety (11,2%) and maximum content for Boema 1 variety (15,4%). Zeleny sedimentation index showed a satisfactory quality and good for all varieties, except Exotic variety which showed an index of 8, for a poor quality. Hardness seeds ranged between 22% at Exotic variety and 34% at Flamura 85. The amount of starch of varieties had a maximum difference of 2,7% and hectoliter mass ranged from 67,8% at Exotic variety and 78,2% at Dropia variety.

**Key words:** wheat, fungi, seeds, physico-chemical parameters

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