

# QUALITY TRAITS TESTS OF SUNFLOWER SEEDS IN FITOTRON GROWTH CHAMBERS

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## **Abstract**

It is well known that global climate change is one of the greatest threats to the environment and the social and economic sector. Therefore, it is necessary to develop strategies and actions to adapt to the impact of climate change, and to find ways and methods of preventing, limiting and combating the often disastrous effects, while at the same time respecting the principle to preserve the environment and ensure the food needs of a growing population. As a result of this problem, changing weather patterns, by shifting the sowing seasons of agricultural crops to avoid periods of water stress, increases the responsibility of seed producers for the adaptability of the hybrids they produce. In the same way, the institutions responsible for certifying the material used for sowing have a key role to play in improving methods and techniques for testing new hybrids for quality and resistance. Thus, in the Fitotron of the Research Institute for Agriculture and Environment (R.I.A.E), belonging to Iasi University of Life Sciences (I.U.L.S), respectively in the Weiss Gallenkamp climate-controlled growth chambers, a number of 10 sunflower hybrids, supplied by the Association of Romanian Maize Producers (A.R.M.P), were tested to determine the germination capacity under stress factors. The results obtained from the tests indicate a variation in the germination capacity of the hybrids, both under optimum growth conditions and under temperature and humidity stress.

**Key words:** germination, sunflower, growth chambers, climate change