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## **FRACTIONAL COMPOSITION OF WINTER WHEAT VARIETIES DEPENDING ON THE FORMED MASS OF 1000 SEEDS**

The introduction of new high-yielding varieties and high-quality seed material of soft winter wheat into agricultural production is the main factor in the functioning of the grain complex, which plays an important role in the economic and social development of Ukraine.

The expansion of varietal resources, accelerated by their variety replacement, the production of the sufficient number of high-quality seeds, for increasing of sown area are the primary tasks of the seed industry. Only for its efficient organization, a variety can retain its hereditary properties for years of reproduction, especially today, when such demands are made in the production process – high and guaranteed quality of seed that produced by all subjects, with respecting the genetic purity of crops and typical varieties and hybrids.

The development of the theoretical foundations for the formation of sowing qualities of seeds in the zone of risky seed production, which will help to understand better and identify new possibilities for predicting their increase is especially topical. At present, seed studies have accumulated a sufficient amount of material on seed heterogeneity, but the weather effect has not been fully clarified.

During the years of research (2012-2016), the mass index of 1000 seeds of the winter soft wheat varieties was genetically changed under the influence of weather factors, which consisted in a period of seed formation. Higher temperature conditions and less precipitation in the phases from milky to full ripeness contributed to the obtaining of high this proof. In varieties of the Forest-Steppe ecological type, it varied from 42,6 (Artemida) to 47,0 g (Kolos Myronivshchyny), the varieties of the Steppe ecotype varied less from 38,0 (Hordovyta) to 42,6 g (Ovidiy). The influence of weather factors on the mass of 1000 seeds was 60 %, variety – 31 %, their interaction – 8 %, other factors – 1 %.

The formed mass of 1000 seeds influenced on the uniformity of seeds and determined its fractional composition, the potential of the variety to be realized in the specific conditions of cultivation of the Western Forest-

Steppe. The distribution of the winter soft wheat grain mass through a set of sieves with holes of different sizes (2,8 x 20 mm, 2,5 x 20 mm; 2,2 x 20 mm, 2,0 x 20 mm) confirmed that the varieties differed significantly beyond the output coarse fraction, ranged from 58,5 % - in the variety Hordovyta to 72,3 % in Kolos Myronivshchyny, the average – 24,7–30,5 %, small – 3,0–11,2 %. The difference between the Forest-Steppe and Steppe ecotypes for the output of a coarse fraction of seeds was 6,4 %, the average – 1,5 %, and the small – 4,9 %.