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ECOLOGICAL TESTING OF WINTER WHEAT VARIETIES IN THE CONDITIONS OF THE WESTERN FOREST-STEPPE

The results of scientific research for 2014-2015, by studying the seed production of varieties of different ecological types of farming in the area of the Western Forest-Steppe are given.

Selection and effective utilisation of different types, with essentially new features of varieties which are characterised by various degree of genetic potential and reaction to conditions of cultivation, is primary goal of branch seed growing. These issues are an important factor in the intensification of seed production as an increase in the number of man-made resources (fertilisers, pesticides, and et al.) the role of the resistance of varieties in the realisation of their potential productivity increases.

This problem is particularly relevant for areas of Western Forest-Steppe, where the breeding is not conducted on the majority of winter crops and manufacturers are used varieties and before-basic seeds created and imported from other zones.

The studies were conducted in the laboratory of seed-knowing of the Institute of Agriculture Carpathian Region of seed NAAS on the gray forest surface gleyed soils.

Our aim was to establish scientific the change of indicators of seed production of varieties of different ecological origin of institution originator, in particular: Poliska-90, Artemida, Krayevyd, Benefis (NSC "Institute of Agriculture of NAAS"), Charodiyka Bilotserkivska, Vidrada, Shchedra nyva, Lisova pisnia (Bilotserkivska Research Station of the Institute of Bioenergy Crops and Sugar Beet of NAAS), Myrlena, Kolos Myronivshchyny, Economka, Yuviliar Myronivskiy (Myronivka Institute of Wheat nd. a. V. M. Remeslo), Statna, Hordovyta, Doridna, Doskonala (Plant Production Institute nd. a. V. Ya. Yuriev), Blaho, Kokhana, Ovidiy, Khersonska 99 (Institute of Irrigated Agriculture of NAAS), Pylypivka, Uzhynok, Lastivka, Sluzhnytsia (Breeding and Genetics Institute – National Center of Seed and Cultivar Investigation of NAAS).

According to the experimental data it was established that in weather conditions 2014–2015 the highest seed production secured varieties of forest-steppe ecological type: Benefis and Kolos Myronivshchyny – 5,04 t ha⁻¹, Lisova pisnia – 5,0 t ha⁻¹, the lower – the steppe ecotype Khersonska

99 – 3,56 t ha⁻¹, Pylypivka – 3,69, Doridna – 3,73 t ha⁻¹. It is dependent on features of variety a difference for multiplication coefficient changed from 0,5 up to 3,2 units, an output of conditioned seeds – 0,3–3,9 %.