UDC 633.111:[632.1:631.559:631.53.01](477.8)

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FEATURES OF YIELD LOSSES WINTER WHEAT DEPENDING ON THE ENZYME-MYCOTIC EXHAUSTION OF SEEDS FOR DIFFERENT RIPENING GROUPS

The climate of Western Forest-Steppe often contribute to the development of this complex disease, which is caused by the simultaneous action of abiotic and biotic factors. The studies were conducted in the laboratory of seed-knowing of the Institute of Agriculture of Carpathian Region of NAAS during 2004–2007. The goal of these studies was the assessment of crop losses in winter wheat varieties from enzyme-mycotic exhaustion of grain in the Western Forest-Steppe depending on maturity.

High and stable yields across years had varieties of middle-ripening group: Perlyna lisostepu (6,83 t/ha), Kryzhynka (6,74 t/ha), Myronivska 65 (5,71 t/ha). The middle-early-ripening variety Kolumbia has provided the yield (5,39 t/ha) on level with middle-late-ripening variety of Tsyganka (5,31 t/ha). The varieties of the steppe ecotype provided a little below yield – 3,56–4,84 t/ha.

The phenotypical variability of varieties of different ecological types and maturity classes was in the range of 3,92–5,66 t/ha (LSD_{05} - 0,2–0,3). In three years of researches the highest yield of seeds was provided by middle-ripening groups (5,23 t/ha) which is only 0.85 t/ha more compared to middle-late-ripening and on 1,19–1,30 t/ha, compared with early-ripening and middle-early-ripening groups.

In three years on the average mathematical indicator of biological losses ranged from 0,09 to 0,50 t/ha. The highest it was in 2006 and was 0,13–0,61 t/ha, the lowest in 2007 – 0,05–0,33 t/ha, due to the response of varieties to weather conditions. Yield losses in varieties recommended for zone Forest-Steppe, Steppe were larger by 43 %, for the Steppe zone - by 48 %, compared with varieties recommended for the area of Polissia and Forest-Steppe.

The analysis of the data shows that the lowest coefficient of variation of yield losses of seeds (0,02) was characterized by middle-ripening varieties Myronivska 65, Perlyna lisostepu, Kryzhynka and middle-late-ripening Tsyganka (0,01).

Thus, the middle-ripening and middle-late-ripening varieties of the Forest-Steppe ecotype (Perlyna lisostepu, Kryzhynka, Myronivska 65,

Tsyganka) capable of providing a stable seed yield in climatic conditions of Western Forest-Steppe.