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HARVEST AND QUALITY OF WINTER WHEAT GRAIN FORMING DEPENDING ON SOWING DATES AND FEED LEVEL

The analysis of the research results on elements of cultivation technology (sowing date, level of feed) of winter wheat Zymoiarka for sowing in the western part Forest-Steppe zone of Ukraine on the gray forest surface gley soil type and in contrasting conditions of wintering and vegetation is given. Its influence on grain yield and quality indicators have been established and conditions for obtaining stable yield with defined quality indices are outlined. In particular, for the second sowing date (30.09) and intensive feeding technology using (application of $N_{120}P_{90}K_{90}$ with the distribution of nitrogen nutrition at the appropriate stages of organogenesis ($N_{30}P_{90}K_{90}$ under cultivation + N_{60} in III stage + N_{30} in the VIII stage of organogenesis) yields was 7,14 t/ha. The quality of grain corresponded to the 2nd class according to State Standard (DSTU ISO 3768: 2010). For the sowing on 20.09 and 10.10, the grain yield of winter wheat was slightly lower – the increase to control amounted to 1,66–2,54 and 1,88–2,72 t/ha respectively.

Spring sowing dates under the same conditions of feeding provided a slightly lower grain yield (5,07–5,43 t/ha), but led to increase an grain quality (content of protein increased by 0,5–0,7 %, raw gluten – by 6,0–6,8 %, glassiness grain increased by 12,6–15,1 %, gluten elasticity – on 60–61 conditional units of the device VDK (measurement of gluten deformation).

It has been determined that influence of the investigated factors (sowing date and intensity of mineral nutrition) was almost equivalent to the effect on the indicators of productivity and quality of winter wheat grain.