

DEPENDENCE OF GRAIN QUALITY OF WINTER WHEAT VARIETIES ON SOWING DATES

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Recently, the timeliness of a particular technological reception began significantly affect to its effectiveness. This is connected to trends in meteorological indicators during the growing season of plants. A significant deviation of climatic parameters from optimum directly affects the temperature and soil moisture, the conditions of its technological maturation, the depth of seed embedding and seeding standards, the sowing dates, the soil condition after sowing, the length of the interfacial and vegetation period, and in general, the productivity crops.

To increase both the yield and quality of winter wheat grain while simultaneously reducing the level of technologic and anthropogenic pressures on the environment, as well as improving the efficiency of grain production in the context of climate change and saving energy resources, it is necessary to search the ways to improve the varietal technology and the tactic of its use. One of the main and sufficiently effective conditions for obtaining high yields of winter wheat is sowing at the optimum dates. It should be noted that the sowing dates are an element of technology that does not require additional material costs, but significantly affects the realization of the productivity potential and quality of wheat grain.

The purpose of our research was to identify the reaction of winter wheat varieties to a change in the sowing dates in order to make the most complete use of their genetic potential, which would increase the annual gross yield of high-quality grain. These researches are also associated with finding ways for energy saving and maximize cost recoupment in current economic conditions.

The objects of our research were varieties of winter wheat Ukrainian selection Dalnytska, Podolyanka and Stolychna. The scheme of experience envisaged the study of three sowing dates: September 10, September 20 and October 1.

Over the years of our research, an improvement in the quality of wheat grain was observed from early to late sowing dates. To a greater extent, the quality indicators of grain were a varietal characteristic and a special ability of each variety to respond to a change in the dates of sowing. According to the gluten content among the studied varieties, the Podolyanka variety highlighted by all sowing dates. The maximum content of gluten in the grain of this variety was when sown on September 20 and amounted to 36.3%, which is 4.4 and 2.3% higher than the early and late sowing dates, respectively. It should be noted that the absolute figures were slightly higher when sown at a late date compared with early..

The Dalnytska and Stolychna varieties had gluten content higher in late sowing dates (October 1) - 31.5% and 32.6%, respectively, which is 0.6 ... 4.3% higher in comparing to other sowing dates.

Along with the amount of gluten, its quality has been important in recent years. Our research has established a clear dependence of the increasing in GSM units when postponing of sowing dates to a later time for all the studied varieties.

Thus, to gain grain with high quality indicators (quality group A, grade 1-3), the optimal sowing dates for winter wheat Dalnytska variety should be from September 20 to October 1, the Podolyanka variety - from September 10 to September 20 and the Stolychna variety - from September 20 to October 1.