HIGH-QUALITY BARLEY VARIETIES FROM COLLECTION NURSERY

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Breeding science must be constantly improved, developing in accordance with the current needs of the present. The creation of a variety is a very long process (the cycle from hybridization to the transfer of a variety to the state variety testing can be 10–15 years). The varieties of the collection nursery are of great importance in the breeding process. They are sources of increased values of grain quality and productivity, while the varieties of local breeding – of adaptability to difficult soil and climatic conditions. The purpose of the study is to identify promising samples with increased grain quality in the collection nursery of barley (*Hordeum vulgare* L.). The data on the content of protein, starch and crude fat in the grain for the period from 2019 to 2021 are presented. Varieties that are characterized by a complex of increased grain quality indicators were identified according to the results of the research. Pospekh, Tercel, Issota are characterized by an increased content of protein in grain (+0.7–1.9% to st.), starch (+1.5–5.9% to st.) and crude fat (+0.6–1.3% to st.); Sloop SA – protein (+0.6% to st.) and crude fat (+0.5% to st.); Sobornyy – protein (+1.6% to st.) and starch (+3.3% to st.); Evergran – starch (+2.7% to st.) and crude fat (+0.7% to st.). These varieties will be included in the breeding process to obtain hybrid material.

Key words: collection, barley, variety, grain quality, protein, starch, crude fat.