

Wheat breeding for yield and grain quality in Western Siberia

**Shamanin V.P., Shepelev S.S., Chursin A.S., Pototskaya I.V.,
Gordeeva E.I. *, Morgunov A.I., Koksel H.****

Omsk State Agrarian University Named After P.A. Stolypin, Omsk, Russia,

*Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia,

**Department of Nutrition and Dietetics, Istinye University, Istanbul, Turkey

E-mail: vp.shamanin@omgau.org

In the nurseries of the breeding process of the Omsk State Agrarian University, a genetic collection with identified genes has been formed that has a significant effect on increasing the traits of plant productivity, adaptability and quality of wheat grain. Marker-controlled selection has created a valuable source material for wheat breeding for yield and grain quality. The state register includes spring soft wheat varieties with a yield potential of 6.5-7.0 t/ha -Stolypinskaya 2, Silantiy, Niva 55, etc., valuable and strong in terms of grain quality. By marker-controlled selection together with the geneticists of the Institute of Cytology and Genetics high-yielding variety EF 22 with purple grain color was created in six years, which successfully passes the state variety testing.

Keywords: wheat; productivity; grain quality; marker - controlled selection

Field studies were carried out with the support of the Ministry of Agriculture of the Russian Federation; determination of grain quality - with the support of the Ministry of Science and Higher Education of the Russian Federation (agreement No. 075-15-2021-534 dated May 28, 2021).

The main publications of authors on the subject of the abstract:

V. Shamanin, Z.H. Tekin-Cakmak E.I. Gordeeva, S. Karasu, I.Pototskaya, A. Chursin, V. Pozherukova, G. Ozulku, A. Morgounov, O. Sagdic, H. Koksel, Antioxidant Capacity and Profiles of Phenolic Acids in Various Genotypes of Purple Wheat // Foods, 2022, 11(16), 2515