

Annotation

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Confectionery properties of spelt grain depending on the variety origin and line

The results of the study of confectionery properties of spelt grain depending on the variety origin and lines were given. It was found that cooking estimation of biscuits from spelt varies considerably depending on the variety. Confectionery properties are significantly changed depending on the variety origin and spelt lines. Thus, content of gluten varied from 29.2% in LPP 1197, LPP 3117 and NAK 34/12-2 lines to 44.9% in grain of Zoria Ukrainy variety (st). The highest content of gluten was in spelt grain of Zoria Ukrainy variety - 44.9% and a LPP 1221 line - 43.6%. Grain of the rest of studied varieties and lines of spelt contained significantly less gluten compared with the standard.

Among 16 varieties and lines of spelt only four of them had satisfactory weak gluten and the rest of them had unsatisfactory weak gluten. It should be noted gluten of spelt grain of a NAK 34/12-2 line which content was 29.2% by index of gluten deformation of 86 units of device, which is not typical for spelt. The result of it is recombigenesis in the wheat genome because of its hybridization with amphiploid (Tr. durum / Ae. tauschii). Grain of Shvedska 1 variety (101 units of device) and a line LPP 3132 (101 units of device) was close to the index of satisfactory weak gluten.

Ratio of biscuits diameter to its thickness changed the most. Thus, the lowest ratio was obtained for biscuits from flour of a line NAK34/12-2 (10,7), and the highest ratio was 20,2-21,0 in Schwabenkorn varieties, NSS 6/01 and LPP 1197, LPP 1304 lines, that was significantly compared with the standard.

Estimation of diameter ratio of biscuits from spelt to its thickness varied from 3 to 9 points. Estimation of biscuits surface changed from 7 to 9 points, but the colour and appearance of braking did not change and was 9 points. Biscuits of Zoria Ukrainy (st), Schwabenkorn varieties, NSS 6/01 and LPP 1221, LPP 3373, LPP 1224, LPP 1197, LPP 1304, NAK 22/12, TV 1100 lines showed the highest cooking estimation (9 points) among studied varieties and lines of spelt. The lowest cooking estimation (7.0 points) has biscuits of LPP 3122/2 and NAK 34/12-2 lines, and biscuits of the rest studied material of spelt had cooking estimation at the level of 7.5-8.0 points.

Key words: *spelt, biscuits, confectionery properties, cooking estimation.*