

THE USE OF HOP FOR MAKING BREAD WITH HEALTH IMPROVING PROPERTIES

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The acute problem of baking in Ukraine is the production of bread and bakery products with health-improving properties, of high competitive quality and long shelf life. That's why the use of functional ingredients such as hop cones in baking is indispensable. New scientific data on hop functional properties drew attention of bread makers. Hop cones are rich in resin, polyphenols, volatile oils which are natural antioxidants and biologically active compounds with health-improving properties.

The authors researched biochemical indices of delicate aromatic and aromatic hop sorts Klon 18, Zlato Polissya, Slovyanka, Zagrava, Gaidamatsky and found that Zlato Polissya and Gaidamatsky are the most promising for bakery as they contain more polyphenols. Taking into account lower content of α -acids and general resin, better ratio of β and α -acids (in Zlato Polissya and Gaidamatsky) present-day hop doses in bread can be doubled.

Natural hop preparation with reduced content of bitter compounds, containing 2.5-3 times less α -acids and having slightly reduced by 8-9% content of polyphenols has been elaborated. It gives possibility to increase hop dose and enrich bread with polyphenols and other valuable hop compounds with out increasing the excessive bitterness.

Baking bread with hop leaven helps escape the use of compressed yeast without quality deterioration. New hop doses let bake bread of high quality with excellent consumer properties, long shelf life and high content of biologically active compounds and may be included to diet products with health-improving properties.

KEY WORDS: hop, hop preparation, biologically active compounds, bread, quality