

## THE INFLUENCE OF GROWTH AGENTS ON THE QUALITY OF BAKERY PRODUCTS

Otilia Cristina MURARIU<sup>1</sup>, Carmen Daniela Petcu<sup>2</sup>, Oana Mărgărita GHIMPETEANU<sup>2</sup>,  
Adnana SANDU<sup>1</sup>

e-mail: carmen28petcu@gmail.com

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### Abstract

*Saccharomyces cerevisiae* or bakery yeast is the main leavening agent used in bakery products obtaining, being the responsible for the CO<sub>2</sub> generation thus ensuring the distinctive aerated structure of the dough. However, the role of yeast in dough is not limited to the gas production. Yeast cells are also partly responsible for the flavor of bread and can influence the rheological characteristics of the dough. The aim of this study is to evaluate the influence of fresh or dry yeast and of the different type of flour used (000/ 650/ 650+1350 variants). The same manufacturing recipe was used for all experimental variants. The bakery products investigated were coded according to the type of yeast used adding a numerical code specific to the type of flour used as follows: 000, 650 or 1350. The experimental variants were obtained with 100% superior flour (type 000), 100% white flour (650 type) or 50% white flour (650 type) + 50% wholemeal-flour (type 1350). The main objectives were the evaluation of the sensorial characteristics and the physical-chemical parameters of the bread samples obtained as well as the analysis of the quality of the yeast used. The results obtained showed that the experimental variant DYPk, even if it involved a longer fermentation period, gave the most appreciable quality results of the bakery products, namely: the shape of the products well contoured, not flattened and the appropriate volume. The pores were uniformly developed, the crumb was elastic, mellow, well bound to the shell. The experimental variant obtained with superior flour 000 for which the growth agent used was in dry form coded with DYPk showed the best quality characteristics with less changed even after 10 days of samples storage under refrigerated conditions.

**Key words:** yeast, baking products, quality parameters