



The improvement of the quality of wheat flour with a lower content of α - amylase through the addition of different enzymatic products

Georgiana Gabriela CODINĂ, Ana LEAHU - "Ștefan cel Mare" University, Suceava

This paper aims to outline the opportunities of use and the tendencies of improving the rheological properties of the dough obtained from flours with a low content of α -amylase induced by the addition of some enzymatic products provided by S.C. Enzymes & Derivates, Romania. The low level of α -amylase in the wheat especially supposes a supplementation of flour with this enzyme, which has two functions in the process of bread making: on the one hand, it continually provides fermentable sugars for yeast and at the same time it produces carbon dioxide, and on the other hand, it contributes to the improvement of dough properties and leads to a higher bread quality. Therefore, this paper has used four different enzymatic products, which contain α -amylase from different sources, such as malt flour and moulds such as *Aspergillus oryzae*. The effect of the addition induced through adding various improvers was analyzed through the value of the falling number index of the sample flour but also through the evolution of the dough rheological properties measured with the lab device Promylograph T3. As a result of the experiments carried on, it was noticed that the falling number decreases up to the optimum value of 250 seconds starting with doses of about 100g/100kg added enzymatic product. A stronger effect of optimizing the falling number was seen in the case of improvers which contain enzymes from malt flour (cereals)