RESEARCH ON THE FACTORS WITH IMPLICATIONS ON RHEOLOGICAL PROPERTIES OF DOUGHS
— short presentation PHD thesis —

MIHAI OGNEAN¹, IOAN DANCIU

Faculty of Agricultural Sciences, Food Industry and Environmental Protection, ”Lucian Blaga” University of Sibiu, Sibiu, Romania

Abstract: The aim of this work is to contribute to the knowledge and the understanding the mechanisms of action of xylans and xylanases which is not fully understood yet. The xylanases are used extensively with positive results in breadmaking, along amylase and ascorbic acid. The use of xylanases is based on transforming insoluble xylans with negative effects on baking in soluble xylans with positive effects. The soluble xylans could be hydrolyzed too which lower the viscosity of medium. This study aims to determine how different xylanases modify the viscosity of xylans solution, how much insoluble pentosans could be solubilized and mostly how the dough’s rheological properties of are modified.

Keywords: soluble xylans, insoluble xylans, xylanases, dough rheology

¹ Corresponding author. Mailing address: University “Lucian Blaga” of Sibiu, Faculty of Agricultural Sciences, Food Industry and Environmental Protection, I. Rațiu 7-9, 550012 Sibiu, Romania. Phone: 0040/269/211338. Fax: 0040269212558. E-mail address: mihai.ognean@ulbsibiu.ro