

RESEARCH ON OBTAINING SOME TYPES OF BEER FROM UNCONVENTIONAL RAW MATERIALS

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The consumers' interest for beer has increased due to the unprecedented assortment diversification, the rebirth of craft beer, the increase demand for functional beer, for gluten-free beer and other type of beers. Beer is most commonly obtained from barley malt and wheat malt, but currently other cereals and pseudo-cereals are also used [1-3]. Among pseudo-cereals, buckwheat is the most widely used in the research for the manufacture of gluten-free beers, as it has shown over the years excellent results in terms of productivity, enzymatic activity and chemical composition [1, 3]. Sorghum is a genetically close to corn cereal, it is also called the camel plant due to its resistance in extreme drought conditions, being a vital staple food in many semi-arid areas of the developing world [2]. The paper presents the use of buckwheat, buckwheat malt, sorghum, and sorghum malt in the production of beer on a laboratory scale.

Barley malt was used as control in all experimental variants of obtaining beer in laboratory conditions. For the finished product beer, the following physicochemical analyzes were performed according to standard procedures: real extract (% m/m), apparent extract (% m/m), alcohol content (% v/v, % m/m), density (g/cm³), turbidity, pH, colour, bitter value, CO₂ content (g/L), O₂ content (mg/L). Determinations were performed in triplicate, and mean values were used in this study.

The obtained results show that raw materials investigated can be used successfully in the production of beer in malted form, but also unmalted, for the last option it is recommended to use enzymatic preparations to facilitate the mashing and filtration of beer wort. In the current conditions, in which climate changes are increasingly felt in our country, the production of beer from this raw material represents a viable alternative, but at the same time a novelty on the profile market in Romania.

References:

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