

PARTIAL PHYSICOCHEMICAL CHARACTERIZATION OF WET BREWERY RESIDUE

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Resumo (Texto Científico) - Máximo 300 palavras | Abstract (Scientific Text) - (Maximum 300 words):

The beer industry generates a high amount of waste, also known as wet brewery residue (RUC), composed of malted barley and brewing adjuncts such as corn. The RUC has a high percentage of dietary fiber, minerals and proteins, and it is widely used for animal feed. This study aimed to partially characterize the RUC through physicochemical analysis. The RUC was obtained from a local industry and dried at 60°C until constant weight. It was then macerated in a ball mill to obtain flour texture. The physicochemical analysis were performed in triplicate in accordance with methodologies of Adolfo Lutz Institute, namely: determination of pH; humidity; protein content by Kjeldahl, titratable acidity, lipid content and crude fiber content. According to the results it was observed that the residue has functional potential due to its high fiber (11.93%) and protein (29.44%) contents, besides having 5.24%

of fat. These characteristics are relevant to include this residue in food for human consumption, specially as baked goods. The dry residue obtained presented low moisture content (8.73%), which favors its stability during storage. Another limiting factor for microbial growth is pH, whose value was 4.66. The analysis corroborate with those found in literature. It is concluded that the analyzed RUC has great potential for inclusion in food for human consumption.

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