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Production of Ethyl Alcohol using Sorghum Bicolor grains and Assessment of the Product

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The present study was conducted to investigate the production of ethanol from sorghum grains (*Feterita*) and evaluation of its quality. Proximate chemical composition in terms of protein, crude fiber, moisture, ash, oil and carbohydrate contents were determined in sorghum grains and malted grains flours. The results indicated that sorghum grains flour contained 12.7% protein, 1.6% crude fiber, 5.3% moisture, 1.8% ash, 2.7% oil and 76.1% carbohydrate. On the other hand, malted grains flour contained 13.1% protein, 1.7% crude fiber, 5.5% moisture, 2% ash, 2.8% oil and 74.9% carbohydrate. Malt and pure enzymes (α-amylase and amyloglucosidase) were used to convert the starch to fermentable sugars. The yield of ethanol in fermented mash was 13% in the malt and 16% as a result of using pure enzymes. The ethanol volume produced from sorghum grains by malt and pure enzymes was 33 and 35ml, respectively. The purity, density and viscosity of resulted ethanol were 95%, 0.83 gm / ml and 0.99cip, respectively.

Biography:

Prof. Abdel Moneim has been awarded his PhD in 2001 and pursued a postdoctoral fellowship at the University of Kobe, Japan. He is an expert in Food Science and Technology, his main concern is food microbiology. Prof. Abdel Moneim has authored a large number of articles in reputed journals and has been invited to different international conferences. He published many books in the area of food science and technology. He is a member of many national and international academic associations.