

## Studying physicochemical properties of barley beverage home produced

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The aim of this study is to obtain a drink of barley water with nutritional value and economic feasibility from one of the barley varieties produced locally in Libya: Acasad 176 (K) a hexagonal spike, and Irawan (A) a binary spike. They were prepared with two concentrations (8, 14 brix) of each type and each concentration on two degrees of acidity pH<sub>4</sub> and pH<sub>6</sub>. Eight types of drinks were resulted (K<sub>8</sub>pH<sub>4</sub>, K<sub>8</sub>pH<sub>6</sub>, K<sub>14</sub>pH<sub>4</sub>, K<sub>14</sub>pH<sub>6</sub>, A<sub>8</sub>pH<sub>4</sub>, A<sub>8</sub>pH<sub>6</sub>, A<sub>14</sub>pH<sub>4</sub> and A<sub>14</sub>pH<sub>6</sub>). The results of the sensory evaluation by the statistical analysis of the questionnaire on the three scale (unacceptable, acceptable, very acceptable) and the rate of degrees (low, medium, high) show that the rate of color acceptance was high and the smell was medium in all types of drinks, while the grading scores of acceptance of taste were varied, they were low at 8 brix concentration for all drinks, they were high at 14 brix concentration in A<sub>14</sub>pH<sub>4</sub>, A<sub>14</sub>pH<sub>6</sub> and medium in K<sub>14</sub>pH<sub>4</sub> and K<sub>14</sub>pH<sub>6</sub>. The results of the statistical analysis of the physicochemical properties showed that there were no significant differences between the mean of the protein content for all types of barley water drinks at the level of significance  $\alpha=0.05$  = while there were significant differences between the averages in turbidity, viscosity, acidity, moisture, fat, ash, fiber and carbohydrate for all types of barley water drinks at the level of significance  $\alpha=0.05$  = . The study concluded that the barley drink A<sub>14</sub> pH<sub>4</sub> is the best, where first includes the taste and smell, its color as the secondary according to the results of sensory evaluation. Based on the physicochemical properties, it has been found that the values of turbidity, viscosity, acidity, moisture, protein and fat includes as the first and the amount of ash, fiber and carbohydrates as secondary.

### Biography

Al-Amari Ali Almbuk Albackoosh has completed his PhD at 2009 Heriot Watt University -Edinburgh UK. He is the director of Training Department, Food and Drug Control Center, Libya. He is the supervisor of more than 29 Master theses in the Academy of Graduate Studies Tripoli. Has held some positions, As a Food engineer at the Center for Food and Drug Control as Quality Engineer of Al Mamoura Company Food Industries. He worked as Food engineer at the Food and Drug Control Center. He is the Head of the Scientific Committee Office of the Food and Drug Control Center.