

Physico-chemical characterization of commercial Local Alcohol beverages available in South Nations, Nationalities and People's Regional State, Ethiopia

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Abstract: In this present paper the physico-chemical properties of local beverages (Tej, Tella, Areki, Checka and St. George beer) available in South Nation, Nationalities and People's Regional State of Ethiopia was evaluated. Samples for the research were collected from the market of Arba Minch town, properties such as pH, total dissolved solids, total suspended solids, total acidity and alcohol content of the local alcohol beverages were analyzed from samples. Tej and Tella with more acidic values of 2.85 and 3.28 than the other local drinks evaluated. The pH of Checka was lower than Araki with values of 3.66 and 3.9, whereas low acidic content was observed in St George with pH of 4.02. Checka had the highest value (0.015) in titratable acidity and the lowest value (0.009) was in Tej. Checka showed significant difference ($p < 0.05$) from other drinks while there were no significant difference ($p > 0.05$) in the values for Areki, Tella and St. George. Higher value in titratable acidity of Checka may be attributed to the traditional methods of production which are not standardized in terms of raw materials, equipment and finished products quality and handling. Tella had highest value of 10.39% in total dissolved solid followed by Checka and St. George and also Tella had the highest total suspended solids when compared with the other drinks. Among the local drinks examined, Areki had the highest alcoholic content (24.54%). The high alcoholic content of araki signifies that the product can cause health problems such as liver damage and other organs like kidney in the body.

Key words: Areki, Tej, Tella, Checka, Physico-chemical Properties.

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