

**DETERMINATION OF OPTIMUM BREWING
PARAMETERS TO IMPROVE THE LIQUOR
CHARACTERS OF HERBAL TEA**

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ABSTRACT

Development of different types of herbal tea are categorized in to different ways as a marketing strategy. Chamomile, Lavender and Rose are types of the different herbal tea. The fixed brewing and temperature time in tea tasting for all types of herbal tea were not effective for the extraction of full body liquor characters to the brew. To determine the optimum brewing time and temperature conditions, Chamomile, Lavender and Rose were brewed altering these parameters. The research was conducted according to Factorial Design with three factors at three levels. Twenty seven different treatments were prepared according to temperature level (75°C, 85°C, 95°C), different brewing time (2 min, 3 min and 5 min) and Herbal Tea Types were used for brewing chamomile, lavender and rose. The treatments were evaluated using seven experienced tea tasters based on a five point hedonic scale. The sensory evaluation was conducted by ranking method, where company tea tasters evaluate color, strength, and flavour in the experiments. MINITAB 16 was used to analyze the data. The data were analyzed through Kruskal-Wallis non-parametric ANOVA method. Conover-Inman method equation was used to selection of best treatments. Sensory evaluation showed that there were significant differences between treatments with respects to color, strength, flavor and overall acceptability.

The H value and the P value were used for made decisions. The average ranks of the treatment combinations and calculated critical value from Conover-Inman method was used for the selection of best treatments. The temperature near boiling point (95°C) was very effective for chamomile, lavender and rose to extract colour, flavor and strength to the brew. The extended brewing time (5min) was preferable for the chamomile, lavender and rose while shorter brewing time (3 min) was preferable for the rose. Brewing temperature was the most significant factor for the brewing tea. The temperature below 85°C is not efficiently extracted colour, flavor and strength to the tea cup.

Key words: Brewing time, Brewing temperature, Colour, Flavor, Strength.