

**VALUE ADDITION TO OFF GRADE TEA BY  
INCORPORATING TEA AROMA**

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## ABSTRACT

In each step of tea manufacturing process various chemical compounds are developed owing to enzymatic and non-enzymatic reactions. Considerable amount of volatile compounds which formed up to fermentation process are lost during drying. An experiment was conducted to study how to make use of, amount of volatiles formed during fermentation process of tea to enhance the organoleptic attributes of off grade tea. Experiment was conducted during June to July at Rozella tea factory, Watawala. After extracting aromatic volatiles from fermented tea dhools, aromatic volatile concentration of the extract was enhanced. The developed concentrated aromatic liquid sample was then used to add value to off grade tea. Developed tea samples were then subjected to the sensory evaluation consisting of a panel of seven professional tea tasters. After the sensory evaluation moisture content of the developed teas were recorded. Finally considering both moisture content and sensory results, best treatment was selected. Off grade tea incorporated with 1% of non-concentrated volatile sample and, 2% of concentrated volatile sample were identified as the best treatments. Samples developed using the concentrated volatile sample manifested a significant improvement of the organoleptic traits of the tea over the non-concentrated treatment. Treatments had a significant impact on the development of aroma, flavor and quality traits. Hence, the study proves that resupplying of volatile compounds to off grade tea is found to be a good approach to add value to off grade tea.

Key words- Tea Aroma, Tea off grades, Volatile compounds, Value addition