

Increase the keeping quality **PERMANENT REFERENCE**

of brewed tea

by adding anti-oxidants

A project report submitted

By

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Abstract

There are several ready made soft drinks in the market, like Fanta, Coca-cola, Lemonade, etc. But most demanded beverage in hotels is Tea. Unfortunately, tea is not in a readymade pack in our country. The anti oxidant potency in a cup of tea is 400% greater than a cup of orange juice while providing a smaller intake of sugar & calories.

The quantitative chemical composition of tea liquor, made up predominantly of polyphenolic compounds, is known to be responsible for the quality and taste of tea. The oxidised polyphenols in tea are known as theaflavins and thearubigins. Theaflavins are the direct product of enzymatic oxidation and have been known to be closely correlated to quality.

The liquors, which have "gone-off", are characterised by a very low theaflavin content. High temperature decrease theaflavin content leading to a stale taste while antioxidants such as ascorbic acid prevents oxidation and helps to improve keeping quality. Lipid hydrolysis and auto oxidative reactions cause loss of theaflavins, amino acids, sugars, photosynthetic pigments and increase non-dialysible pigments and some volatile phenolic components. The hydrolysis of lipids during storage liberates free fatty acids and these could under go oxidation during the brewing process and in turn may lead to a type of rancidity.

The objective of the study to investigate the ability to increase keeping quality of tea liquors with adding various anti oxidants and/or anti microbials. Antioxidants such as ascorbic acid and antimicrobial agents such as sodium benzoate are used to investigate changes undergone by tea liquor during storage. These chemicals also may help in development of very ready-made tea liquor industries such as tea wines.

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