

EFFECT OF SOME CONTROLLABLE PARAMETERS

ON

CHARACTERS OF CTC TYPE TEAS

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THESIS

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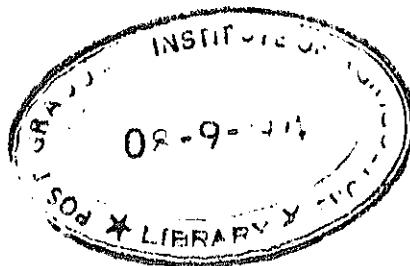
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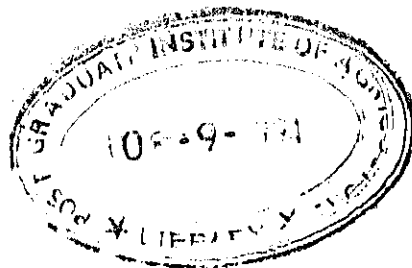
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**ABSTRACT**

Tea is the most popular beverage in the world. Different types of made tea are available in the market such as black tea, green tea and Oolong tea. Black tea can mainly be grouped into CTC (Crush, Tear and Curl) and conventional orthodox tea. FAO has predicted that there would be a very good demand for CTC teas compared to conventional black teas in the world market in the near future. However to compete with other CTC producing countries, cup characters of Sri Lankan CTC teas should be optimized. Methods of optimization of these characters in CTC teas, have not been investigated so far. Investigation of this problem has become an urgent requirement for the tea industry in Sri Lanka.

The main objective of this research is to investigate the methods of optimization of CTC cup characters such as colour of infused leaf, colour, strength and brightness of liquor. In this study, fermentation periods of macerated dhool in miniature CTC machine, were optimized at different levels of temperatures for two leaf standards, obtained from TRI 2025 clone. Results obtained from sensory evaluation given by tea tasters, were analyzed using non-parametric techniques.

Analyses show that elevated fermenting temperature for macerated dhool from fine plucking standard, resulted in brighter infused leaf as well as liquor. Colour and strength of CTC liquors could be optimized by low fermenting temperature irrespective of leaf standard.

Industrial applications of these research findings are also discussed here. Economic analysis prior to the selection of appropriate method is emphasized.