

EFFECT OF TEA BAG MATERIALS ON PHYSICAL AND CHEMICAL QUALITY PARAMETERS OF BLACK TEA DURING STORAGE

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ABSTRACT

In recent years, there was quality claims regarding quality of tea in tea bags. The aim of this study was to evaluate effect of tea bag materials on physical and chemical quality changes of black tea during storage. The quality of black tea in different tea bag materials was accessed by physicochemical analysis. Significant variations in physicochemical parameters were observed. Three packaging materials which are used to pack black tea were selected for the study and they are paper, soilon and nylon. Black tea samples in selected tea bags were tested for moisture content, dry matter, brightness, total colour, theaflavin, thearubigin, caffeine and total polyphenols chemical and physical quality parameters at the beginning of the research. Then they were stored under normal conditions for three months. Quality parameters were checked for three times in one month interval. Data was analysed using descriptive and two sample t-test. The results show that, the significant effects for changes of most of quality parameters such as moisture, dry matter, thearubigins, total polyphenols and caffeine. From the selected tea bag materials, "Soilon" type exhibited least variations in quality parameters while paper bags exhibited highest variation.

Key words: Black Tea, Quality, Tea Bag Material, Storage, Theaflavins, Thearubigins, Caffeine, Polyphenols