

**ANALYSIS OF CHEMICAL AND PHYSICAL QUALITY STANDARD
OF REWORK BLACK TEA**

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by
JEYARATHNAM JEYANDRAN

**Department of Export Agriculture
Faculty of Animal Science and Export Agriculture
Uva Wellassa University of Sri Lanka**

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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 quality of rework black tea on chemical and physical quality changes during tea bag production. The quality of rework black tea bags at Heladiv Exports (Pvt) Ltd. was accessed by physical and chemical analysis. The objective of the study was to reveal the quality defects of rework black tea and their effects on quality of black tea to those who are engage in tea exporting and marketing sector in Sri Lanka. Significant variations in physical and chemical parameters were observed. The Sri Lankan Tea industry maintains the highest quality in the world market and ISO 3720 is the minimum standard applied for the products. The Processing/Manufacturing facilities owned by the export companies comply with local standards (SLSI) and with International Quality Standards. There were already national regulations on tea was given tolerances of foreign elements found in tea. The normal tea manufacturing process was removed most of the separate pieces which were not tea. From the consumer's point of view, therefore, it was the impurities within, or firmly attached to the individual leaves which were important. In the case of a temporary over supply of tea, low quality will be ignored by buyers anyway. The rework process facility must have a written program showing how a recall of unsuitable product could be executed. Traceability was important, and the program needs to address handling of rework and returns. Thirty tea bag samples which were produced from rework black tea at Heladiv Exports (Pvt) Ltd. were selected for the study. Rework black tea samples were collected from the exporting company of Heladiv Lanka Exports (Pvt) Ltd. at the beginning of the research. Quality parameters were checked to these samples. They were tested for selected chemical quality parameters such as moisture content, total ash content, water soluble ash content, alkalinity of water soluble percentage, acid insoluble ash content, water extract percentage and physical quality parameters such as total dust content in rework tea and different sizes of tea particles. Data was analysed using descriptive and one sample t-test. The results show that, the significant effects for changes of quality parameters of moisture content and foreign impurities in rework black tea.

Key words: Quality claims, Rework black tea, Physical and chemical analysis, Health and safety regulations