

**DEVELOPMENT OF POLYPHENOL INCORPORATED
HERBAL HAIR SHAMPOO BY USING TEA FLUFF**

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ABSTRACT

Shampoo is a hair care product used for the removal of oils, dirt, skin particles, environmental pollutants and other contaminant particles that gradually build up in hair. Currently growing demand in the world market for cosmetic products which are consists with natural and Ayurvedic ingredients due to its high safeness

Nowadays people are using polyphenolic extracts for cosmetics and pharmaceuticals due to their beneficial biological properties. Many researchers have found that tea catechins have natural property to promote the hair growth and catechin is the major and most abundant compound of the tea polyphenols. Tea is the one of the major plant which high amount of polyphenols are appearing in the plant kingdom. Tea fluff is a mixture of very finest powder form of both green and black tea which produced in secondary manufacturing and it consists with all the chemical components as same as green tea and black tea.

Preparation of polyphenol incorporated shampoo as a value added product is the main objective of the study. Several combinations of tea fluff and polyphenols were incorporated to the shampoo and all treatment were subjected to the sensory evaluation to select the best sample.

This study it was revealed that 2.1% of polyphenol extract and 97.9% shampoo base is the best combination for polyphenol extract incorporated shampoos and 0.025% of tea fluff and 99.975% shampoo base is the best combination for fluff incorporated shampoos. When comparing the polyphenol level of those two samples fluff incorporated shampoo has highest amount polyphenol content.

Keywords: Tea, Tea fluff, Polyphenol, Herbal Shampoo, Side effect, Cost effective, Sensory evaluation.