

Extraction, Characterization and Application of Natural Dyes from the Fresh Rind of Index Colour 5 Mangosteen (*Garcinia mangostana* L.)

Authors : Basitah Taif

Abstract : This study was to explore and utilize the fresh rind of mangosteen Index Colour 5 as an upcoming raw material for the production of natural dyes. Rind from the fresh mangosteen Index Colour 5 was utilized to extract the dyes. The established extracts were experimented on silk fabrics via three types of mordanting and dyeing procedures; pre-mordanting, simultaneous mordanting and post-mordanting. As a result, the applications of the freeze-drying methodology and mechanizable equipment have helped to produce excellent range of natural colours. Silk fabric treated simultaneously with mordanting and dyeing with extract dye Index Colour 5 produced a brilliant shade of the red colour and the colour from this index is also discovered sensitive to light and washing during the fastness tests. The preliminary evaluation and instrumentation analysis allowed us to examine whether the application of different mordanting and dyeing procedures with the same extract samples and concentrations affected the colours and shades of the fabric samples.

Keywords : natural dye, freeze-drying, *Garcinia mangostana* Linn, mordanting

Conference Title : ICTF 2015 : International Conference on Textiles and Fashion

Conference Location : Paris, France

Conference Dates : July 20-21, 2015