TiO2 Doped Natural Dye of Caesalpinnia Sappan L on Cotton Fabrics

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ABSTRACT

Abstract

Sappana (Caesalpina sappan, L) has been known as one of the natural dyes in textiles and food. Textile products with reddish sappana dyes showed orange, pink and purple products depend on the fabric processes. This research aimed to develop sappana-based natural dyes for fabric dyeing by TiO2 doping.. The sapanna dye and it's color was measured by colorimetric methods on Uv-Vis spectrophotometry. The testing of the material includes a standard color detection test on the solution and washing resistance on cotton fabrics. The target is the prototype of a stable natural dye product of TiO_2 doped sappana (Caesalpina sappan, L) which will adrobed consistently on cotton fabrics. The result showed that TiO_2 dopped sappana dye had a higher absorbance in Uv-Vis Spectrometer. The perform of coloring product was also better than the standard sappana dye. Variation of coloring products affected by the mordant agents.

Kata Kunci: *Caesalpina sappan, L, colorimetry, natural dye, TiO2, Uv-Vis spectrometry.*