DYEING OF SURFACE TREATED COTTON AND SILK USING NATURAL DYES EXTRACTED FROM HENNA POWDER

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ABSTRACT

This study aimed to identify the effect of tetramethyl ammonium hydroxide when it is surface treated on cotton and silk. Then the dyeability of treated cotton and silk is compared with the untreated ones when they are dyed using natural dyes extracted from henna powder. Therefore, the surface treatment using tetramethyl ammonium hydroxide was done on cotton on silk first before these fabrics were dyed using natural dyes extracted from henna powder. Alum and rice husk are two mordants that were used using simultaneous mordanting method. There were several testings conducted in this study to achieve the objectives such as surface appearance, colour strength using K/S value and colourfastness properties. The results shows that surface treatment using tetramethyl ammonium hydroxide does not really improve the shades of colour produced. Generally, the colourfastness to washing for all fabric samples in terms of colour change is poor to moderate, while colourfastness to washing in terms of staining is good to excellent. Colourfastness to crocking generally shows the results of good to excellent for all fabric samples and colourfastness to light shows the results of moderate to good.