

EVALUATION OF THE MORDENT PROPERTY OF COCONUT HUSK RETTED WATER AT DIFFERENT AGES

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ABSTRACT

Sri Lanka is the fourth largest coir exporter in the world and Sri Lanka coir has a great market demand in the coir market. The Coconut husk which is a fibrous material that covers the fruit of *Cocosnucifera* is the raw material for extracting coir fiber. The main step of Coconut brown coir fiber production industry is retting coconut husk process for the extraction of coir fiber in coir industry. This coconut husk retted water is one of environmental pollution factor. This study was done to utilize this water as a natural mordent and identified to which stage is most suitable.

The experiment procedure was done in sample was taken from different retting stage such as One, Two, Three and four month. After this retted water use as natural mordent continue the dye procedure. As positive control FeSO_4 and negative control without any mordent was practiced. Each treatment nine replicates were practiced. After dyeing this sample wash three methods this washouts was analysis by using UV spectrometer.

According to this study four month old retted water has best mordent ability because of the increment of tanning concentration of the retted water. According to mean value HCl and detergent are not significantly different, but they are significantly different from NaOH. In addition to that NaOH has shown the highest mean absorption and the lowest was recorded from the detergent washout. So, it can be concluded that basic conditions such as NaOH solution cause greatly towards the loss of color from fabrics and powerful mordents should be used to prevent that loss

Key words: Coir retting, Mordent, Extracting coir fiber