

**OPTIMIZATION OF MORDANTING PROCESS WITH BIO MORDANT
(BANANA PSEUDOSTEM SAP) AND DYEING WITH ACACIA
CATECHUON MERINO WOOL AND SOYA PROTEIN FABRIC**

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DOI:10.5958/2278-4853.2024.00012.X

ABSTRACT

Textile materials are dyed with the aim of enhancing their qualities and making them attractive. Nature is full of various attractive colours, and these colours have been used by humans since ancient times. Colours derived from nature possess various properties, such as being renewable, biodegradable, non-polluting, non-carcinogenic, eco-friendly, and having medicinal benefits. The aim of the study is to develop different colours using natural dye (Acacia catechu) and bio mordant (banana pseudostem sap) and to optimise the change in shades by changing the method of mordanting. In this, it was found that the pre-mordanting method was providing a deeper shade than the other two methods (simultaneous and post mordanting). It was noticed that in the pre-mordanting process, the colour absorption capacity of the wool fabric was higher than that of the soya protein fabric, and the colour shades obtained were also darker. In this way, natural dyes and biomordants are great choices from an environmental protection point of view, and a soothing, soft, and attractive colour palette can be developed using different methods of mordanting.

KEYWORDS: *Acacia Catechu, Bio Mordant, Eco-Friendly, Methods of Mordanting.*

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