

# DEVELOPMENT OF NATURAL BATIK DYE BASED ON COCONUT COIR WASTE AND AVOCADO LEAF THROUGH EXTRATION METHODS IN SUPPORTING THE GREEN ECONOMY

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## ABSTRACT

The issue of synthetic dye practices has led to a decrease in demand for selling batik cloth in several destination countries. This is because the use of man-made variants of synthetic dyes has the potential to cause serious problems for human health. Currently, natural dyes are highly recommended but many obstacles are still found, especially in terms of processing and supply. One of the main problems is still utilizing plants that are still productive. Therefore, it is necessary to look for substitution materials from natural dyes originating from other sources, namely the utilization of plant wastes; coconut husk waste and avocado leaves. Coconut coir waste can produce light brown, gray, light brown, black and dark brown colors and avocado leaf waste can produce brown color directions.

However, so far, research with natural batik dyes has only focused on one material, only a little attention has been paid to the combination of several materials as natural batik dyes. Furthermore, the most effective separation method and efficiency in the coloring process is the extraction method. Thus, the aim of this study was to develop a natural batik dye based on a combination of coconut coir waste and avocado leaves using the extraction method. This is also based on supporting the green economy and reducing chemical waste in Indonesia by turning it into value-added products. Furthermore, this research stage will also conduct market testing regarding the level of customer satisfaction regarding the product prototype of batik cloth with dyes extracted from coconut coir waste and avocado leaves through questionnaire surveys and interviews.

Kata Kunci: *Batik, Green Economy, Waste, Natural Dyes*