PENGARUH JENIS DAUN DAN BAHAN FIKSASI
PADA HASIL *ECOPRINT*

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INTISARI

Ecoprint merupakan teknik pewarnaan alami dengan cara mentransfer warna dan bentuk dari bahan alami ke dalam kain. Adanya jenis tumbuhan yang beragam di KHDTK Wanagama berpotensi diteliti untuk mengetahui jenis-jenis daun yang baik untuk *ecoprint*. Hasil *ecoprint* memiliki kelemahan pada daya tahan lunturnya yang kurang stabil sehingga menyebabkan kualitas hasil pewarnaan dapat berkurang. Oleh karena itu, perlu dilakukan proses fiksasi zat warna untuk memperoleh ketahanan luntur yang tinggi. Penelitian ini bertujuan untuk mengetahui karakteristik secara fisik dan kandungan kimia warna beberapa jenis daun sebagai bahan *ecoprint* serta mengetahui pengaruh jenis bahan fiksasi terhadap hasil *ecoprint* beberapa jenis daun.

Penelitian ini menggunakan dua faktor, yaitu jenis daun (akasia (*Acacia mangium*), jati (*Tectona grandis*), paku (*Nephrolepis exaltata*), kayu putih (*Melaleuca leucadendron*), dan Eboni (*Diospyros celebica*)) dan bahan fiksasi (tawas dan tunjung) sehingga diperoleh 10 perlakuan dengan 3 kali pengulangan. Penelitian ini dilakukan dengan mengamati karakteristik daun secara fisik dan kandungan pigmen warna daun menggunakan skrining fitokimia KLT. Setelah itu, dilakukan *ecoprint* dengan teknik *steam* pada kain untuk diuji arah warna, nilai ketahanan luntur terhadap pencucian 40°C, keringat asam, dan gosokan. Hasil dari uji karakteristik daun secara fisik dan kandungan pigmen warna serta arah warna dianalisis dengan metode deskriptif, sedangkan uji ketahanan luntur kain dengan analisis Uji T Independen dan Uji Mann Whitney.

Hasil penelitian menunjukkan bahwa kelima jenis daun segar untuk *ecoprint* memiliki karakteristik daun yang berbeda-beda yang berpengaruh terhadap hasil warna dan motif yang timbul. Kandungan warna kelima daun yaitu senyawa flavonoid, tanin, dan klorofil. Hasil pengujian arah warna menggunakan NADIN 2021 menghasilkan tujuh kelompok warna yaitu yaitu *roebuck, dark navy, cherry mahogony, vintage violet, deep dive, sheepskin,* dan *deep well*. Hasil pengujian ketahanan luntur warna kain *ecoprint*, secara umum tidak dipengaruhi oleh jenis daun dan bahan fiksasi yang digunakan. Meskipun demikian, hasil yang diperoleh cenderung baik dengan rata-rata nilai *grey scale* pada masing-masing pengujian sebesar 4 (Baik) dan nilai *staining scale* sebesar 4-5 (Baik).

Kata Kunci: *Ecoprint*; pewarna alami; jenis daun; bahan fiksasi

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EFFECT OF THE TYPE LEAVES AND FIXATION MATERIAL ON THE ECOPRINT RESULTS

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ABSTRACT

Ecoprint is natural dyeing technique by transferring colors and shape from natural materials into fabrics. The existence of various types in forest for specific purpose "Wanagama", has the potential to be researched determine the types of leaves that are good for ecoprint. Ecoprint results have weaknesses in their fastness which is less stable therefore causing the quality of coloring results to be reduced. Therefore, it is necessary to do dye fixation process to obtain high fastness. This study was conducted to determine physical characteristics and chemical content of the color of several types of leaves as material ecoprint and to determine the effect of the type of fixation material on the ecoprint results of several types of leaves.

This study used two factors, which are leaves (acacia (*Acacia mangium*), teak (*Tectona grandis*), fern (*Nephrolepis exaltata*), eucalyptus (*Melaleuca leucadendron*), and ebony (*Diospyros celebica*)) and fixation materials (alum and ferro sulfate) so that obtained 10 treatments with 3 replicants. This study was conducted by observing the physical characteristics of the leaves and the content of leaf color pigment using TLC phytochemical screening. Ecoprint was carried out with the steam technique on the fabric to be tested for color direction, the value of 40°C washing fastness, acid sweating fastness, and rubbing fastness. The results of physical leaf characteristic test and the content of color pigment and color direction were analyzed using descriptive methods, while the fabric fastness test were analyzed using independent t test and mann whitney test.

The results of this study indicate that the five types of fresh leaves were collected for ecoprints have different leaf characteristics that affect the results of color and motifs that arise. The color content of the five leaves is flavonoids, tanin, and chlorophyl. The color direction testing results using NADIN 2021 resulting seven color groups, namely roebuck, dark navy, cherry mahagony, vintage violet, deep dive, sheepskin, and deep well. The fabric color fastness testing result, in general was not affected by the types of leaves and fixation material used. Nevertheless, the results obtained tend to be good with an average gey scale value in each tests of 4 (Good) and staining scale value of 4-5 (Good).

Key word: Ecoprint; natural dye; type of leaves; fixation material

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