



Using Synthetic Leather As A Medium For Making Ecoprint Bags Using Teak Leaves And Frangipani Flowers

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ARTICLE INFO

Article history:

Received August 18, 2024

Revised November 29, 2024

Accepted December 06, 2024

Available online January 17, 2025

Kata Kunci:

Kulit Sintetis, Tas Ecoprint, Daun Jati, Bunga Kamboja

Keywords:

Synthetic Leather, Ecoprint Bags, Teak Leaves, Frangipani Flowers



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ABSTRAK

Produk ecoprint umumnya menggunakan media kain dalam pembuatannya, namun masih sedikit produk ecoprint yang dibuat menggunakan media kulit sintetis. Oleh karena itu pembuatan tas ecoprint yang memanfaatkan kulit sintetis sebagai media perlu dibuat. Daun jati dan bunga kamboja berfungsi sebagai corak dan zat warna produknya. Tujuan penulisan ini adalah membuat tas ecoprint dengan memanfaatkan media dari kulit sintetis dan daun jati serta bunga kamboja. Metode yang digunakan meliputi kegiatan mordanting, proses ecoprint dan pembuatan produk. Produk yang dihasilkan berupa tas ecoprint berbahan dasar kulit sintetis yang berwarna ungu berasal dari zat warna daun jati dan yang berwarna kuning merupakan zat warna dan corak dari bunga kamboja. Tas ecoprint kulit berukuran panjang x lebar x tinggi yaitu 20x5x15 cm, dengan menggunakan 7 lembar daun jati dan 5 bunga kamboja. Daun jati dan bunga kamboja dapat digunakan sebagai pewarna dan juga dapat menghasilkan corak estetis pada tas ecoprint yang terbuat dari kulit sintesis.

ABSTRACT

Ecoprint products generally use fabric media in their manufacture, but there are still a few ecoprint products that are made using synthetic leather media. Therefore, it is necessary to make ecoprint bags that use synthetic leather as a medium. Teak leaves and frangipani flowers function as patterns and coloring agents for the products. The purpose of this writing is to make ecoprint bags using synthetic leather as a medium, teak leaves and frangipani flowers. The methods used include mordanting activities, ecoprint processes and product manufacturing. The product produced is an ecoprint bag made from synthetic leather, the purple color comes from teak leaf dye and the yellow comes from the color and pattern of frangipani flowers. The ecoprint leather bag measures length x width x height, namely 20x5x15 cm, using 7 teak leaves and 5 frangipani flowers. Teak leaves and frangipani flowers can be used as dyes and can also produce aesthetic patterns on ecoprint bags made from synthetic leather

1. INTRODUCTION

Ecoprint technique has experience sufficient development significant in the industry textiles in Indonesia. According to Pancapalaga et al. (2022) technique ecoprint is one of form from *ecofashion* which has potential big for the more developing in Indonesia because produce friendly product environment. Ecoprint technique with use dye experience from plant for printing motifs on fabric, which makes technique This the more popular Because friendly environment and produce unique and authentic motifs (Faridatun, 2022) .

According to The Story of Nuraini & Hendrawan (2021) technique ecoprint is techniques used in print colors and patterns with use dye natural on the surface cloth, while according to Khasanah & Widowati (2022) ecoprint is a transfer process color and shape to cloth through contact directly. Economic factors and convenience in the process of making, making technique ecoprint experience improvement rapidly in society at the moment This. In addition, the factors that make technique ecoprint experience improvement enthusiast Because results displayed from technique

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ecoprint own attractive appearance so that own mark high selling. Uniqueness from technique ecoprint that provides impression exclusive from technique This lies in the inequality of the resulting motifs.

Product ecoprint is products that have mark art and value high sell so that potential for made into opportunity business especially in the fashion world. Products ecoprint is products that have mark art and value high sell so that potential For made into opportunity business especially in the world of fashion (Hikmah & Retnasari , 2021) ; (Sriwijayanti et al ., 2021) . Various product ecoprint which has made previously most own material main or the main media used is cloth (Ayu et al ., 2022) . Based on results study previously a number of result's study previously, only A little products produced from the ecoprint process using skin media. One of them for example is making handbag woman results ecoprint conducted by Lestari et al . (2022) with use flower Cambodia and skin wet blue sheep as the main media . Other research with similar media was also conducted by Pancapalaga et al . (2022) with method immersion skin goat tan use alum before ecoprint process is carried out. Both references presented in Table 1. state of the art so that writer find ideas for make product bag ecoprint made from skin media synthetic.

Generally making bag use skin original origin from skin animals , but Because availability less , then skin synthetic become alternative in make bag skin (Chandra & Haq, 2020) . More carry on according to Shautrina (2020) skin synthetic is material artificial visible human exactly like skin original . Leather synthetic own various matching characteristics for become an ecoprint medium. Leather synthetic known Because Power its high resistance, its ability copies texture and appearance skin original, and its greater availability more area and price affordable compared to with skin original. Leather quality synthetic will strong and durable climate. According to Sholeh & Rochani (2018) skin synthetic which has smooth , porous surface small , shiny , and flexible will give same characteristics with skin original . The product produced from skin synthetic the more varies, including like bags, shoes, jackets, belts, wallets and products fashion other.

Plant teak is easy plants grow and be able to found in various place, while flower Cambodia is plants that originate from from Central America which is also very abundant growing in Indonesia. Both plant it's very easy found in countries that have climate tropical like Indonesia. Teak leaves can produce substance color nature and can used for create work ecoprint. Uses leaf teak as material main in ecoprint is as substance dye natural and also a giver pattern or motifs on ecoprint media That Alone (Ayu et al ., 2022) . Teak leaves own large size and distinctive texture so that can produce clear pattern on the skin media synthetic. While that, flower Cambodia which has color bright and distinctive shape, will enrich pattern and give touch unique to the product end.

Although thus, the use of skin synthetic for ecoprint No without challenge. One of the problem main is How ensure coloring and motifs can stick with good and durable on the surface skin synthetic. For overcome problem this, research This will use method mordanting on the skin synthetic and leaf teak before the ecoprint process conducted. Research This aiming for developing ecoprint media use leaf teak and flowers Cambodia on skin media synthetic. Through study this, it is expected can give contribution real in development product friendly fashion environment and have mark aesthetics tall.

Table 1. State of The Art

No	Techniques, Plants and Media Used	Product	Author,Year
1	Ecoprint technique use flower Cambodia with skin media <i>wet blue</i> sheep	Women's handbag	(Lestari et al ., 2022)
2	Immersion skin goat tan use alum for make skin results <i>ecoprint</i> with leaf teak	Skin results <i>ecoprint</i>	(Pancapalaga et al ., 2022)
3	Making bag with technique <i>ecoprint</i> (boiling technique) using leaf teak and flowers Cambodia on skin media synthetic	Side bag Ecoprint	Research conducted

2. METHOD

Making bag ecoprint conducted in the Laboratory Politeknik Negeri Media Kreatif PSDKU Makassar. The main media used in making bag ecoprint is leather synthetic. Leather synthetic used can see in Figure 1. In addition to using skin synthetic as media in making bag ecoprint. the author also uses leaf teak (*Tectona grandis* Lf) as seen in Figure 2, and flowers frangipani (*Plumeria rubra*) which can see in Figure 3. Apart from the three-material main Earlier, the author also used a number of tool Supporter in the ecoprint process namely plastic clear, cloth towel, rope raffia, stove and pan.

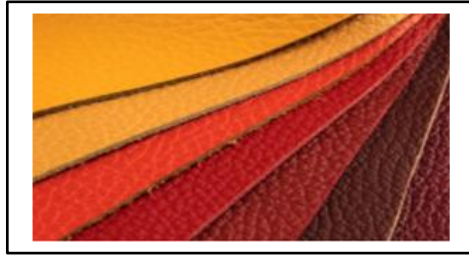


Figure 1. Skin synthetic (Doti et al ., 2020)



Figure 2. Teak leaves (*Tectona grandis Lf*) (Masyitoh & Ernawati, 2019)



Figure 3. Frangipani flower (*Plumeria rubra*) (Doti et al ., 2020)



Figure 4. Mordanting process skin synthetic



Figure 5. Soaking process leaf teak

There are three stages carried out in making product ecoprint, namely mordant skin synthetic and leaf teak, ecoprint process with method steam, and manufacturing product bag ecoprint. Third stages the explained as following.

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Mordanting skin synthetic and leaf teak

Mordanting process is the process of soaking ecoprint media to in solution mordant for open pores in the media used. Mordanting process skin synthetic in research This follow method from Pancapalaga et al . (2022) . Mordanting process on leather synthetic done with use mordan Alum. Alum is used in the mordanting process. is alum powder as much as 70 grams which is then entered to in 420 mL of water with ratio alum and water 1:6. Skin synthetic which has prepared Then entered to in solution alum Then left alone for 48 hours which can see in Figure 4. After go through the mordanting process skin synthetic must dried moreover formerly for 15 minutes before through stage next. Figure 5 shows the mordanting process leaf teak. Soaking leaf teak This using 7 sheets leaf teak in 280 mL water and added 50 mL vinegar. Soaking process This done for at least 30 minutes before the laying process leaves on the skin that has through the mordanting process. The mordanting process skin synthesis aiming for open pores on the skin functional synthesis as a medium, while stage next namely the mordanting process leaf teak is steps taken for soak leaf teak agar color pigment red can go out optimally.

Ecoprint process with method steam

Layout leaf teak and flowers Cambodia arranged in a way random follow shape and area from skin synthetic as the media so that creates an abstract motif. In Figure 6, the leaves teak placed in the section middle and become center between flower Cambodia. After the laying process finished, skin synthetic which has given leaf teak and flowers Cambodia then coated with plastic Then rolled up simultaneously. Coating with plastic done follow method (Saptutyningsih & Wardani, 2019) . Skin synthetic which has rolled up Then coated cloth Then tied up so as not to untidy moment steamed (steam metode). After pass a series of laying processes leaves, skin synthetic steamed for 2 hours. In Figure 7, the steaming process done in a pan that is the size of in progress. The final step in the ecoprint process is drying skin synthetic which has steamed before enter stages making product results ecoprint.



Figure 6. Laying process leaf

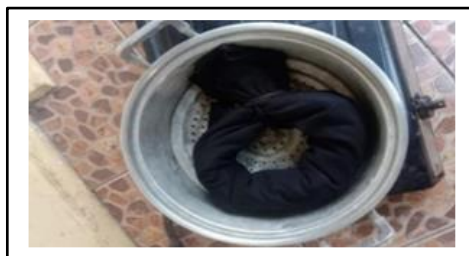


Figure 7. Steaming process

Making product bag ecoprint

After through the ecoprint process, the leather synthetic which has dry, next cut in accordance the pattern that has been designed, such as seen in Figure 8. Patterns the cut with Be careful For ensure size and shape in accordance with design end bag. Next, the sewing process started with unite fifth pattern skin synthetic. Stages sewing started with sew part base bag for give structure solid foundation. Then, the part side bag sewn in a way sequentially for ensure every connection neat and strong. After that, part on bag sewn for to form closing or aperture in accordance design *sling bag*.

final step in making bag is addition accessories in the form of chain gold that works as rope bag. Chain gold used made from material painted metal with color gold for give appearance elegant, with long 100 cm chain. Installation process chain done with connect chain to part bag use strong hook. After all stages finished, bag ecoprint shaped *sling bag* Ready used with aesthetic and functional appearance.



Figure 8. Shape pattern bag

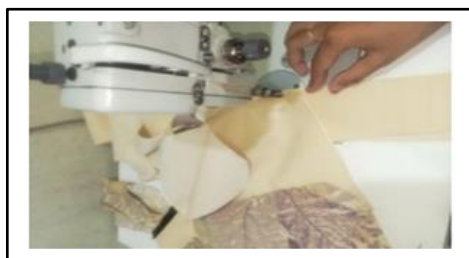


Figure 9. Sewing process bag results *ecoprint* skin synthetic

3. RESULT AND DISCUSSION

Results

Research result in the form of results *mordant* skin synthetic, result *ecoprint* on skin media use leaf teak and flowers cambodia, design end product *slingbag*, photo product end *slingbag* and its packaging can see in Figures 10 to 14.



Figure 10. Results of mordanting leather synthetic



Figure 11. *Ecoprint* results on leather media synthetic use dye leaf teak and flowers Cambodia

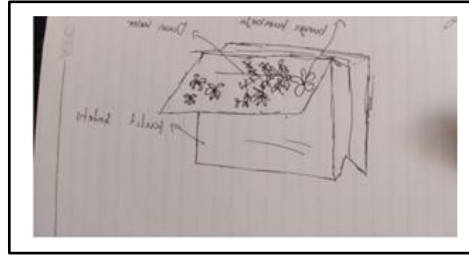


Figure 12. Final design *sling bag* results *ecoprint*



Figure 13. Product photo end *sling bag* results *ecoprint*



Figure 14. *Slingbag* and packaging product

Discussion

Mordanting results

Mordanting process skin synthetic use alum aims to create motifs and color pigments from dye natural used can easier attached to the media used. Function alum in the mordanting process is for make it easier dye attached to the print media. Water that has been mixed with alum will produce aluminum hydroxide precipitate ($Al(OH)_3$) which will assist the color transfer process The mordanting process use alum the follow method mordant skin goat tan use alum in journal (Pancapalaga et al ., 2022) . Figure 10 shows results from the mordanting process skin synthetic soaked for 48 hours. The purpose of soaking is to close the pores in the skin synthetic open and ready for accept color from dye natural used.

Besides on the skin synthetic, the author also uses method mordanting on leaves teak with the purpose of the substance color and pattern on the leaf's teak more thick and easy stick to skin media synthetic. Mordanting process leaf teak This done with method enter leaf teak used to in container containing solution vinegar. Function vinegar in the mordanting process leaf teak is for strengthen attachment color. This is happened Because vinegar interesting go out substance color from leaf teak so that color red produced by the leaf's teak more concentrated. Selection mordan vinegar follow study (Faridatun , 2022) who also uses it vinegar in the *mordanting* process leaf teak .

Ecoprint process technique steam

After go through the mordanting process skin synthetic must dried moreover formerly for 15 minutes before entering the ecoprint process. Drying aims to increase the water content in the skin synthetic reduced. Ecoprint process covering three stages namely, placement leaves, coating plastic and steaming process. At this stage placement leaf, leaf teak and flowers Cambodia arranged on leather media synthetic. Author choose design abstract as design used in stage placement leaf teak and flowers Cambodia on skin media synthetic Because own mark unique and valuable aesthetic sell height. Layout leaf teak and flowers Cambodia done in a way random follow shape and area

from skin synthetic as media. Position leaf teak placed in the section middle and position flower Cambodia placed between leaf teak.

Ecoprint technique used by the author is technique steam (steam). Steam technique need time quite a long steaming time, namely 2 hours because skin synthetic own texture slippery so that for absorb color from leaf teak and flowers Cambodia required a long time. According to Faridatun (2022) steaming process should done during not enough more than 2 hours for color can stick with perfect on print media . Before the steaming process leaves that have placed on the skin Then coated with plastic Then wrapped up fabric. Coating process plastic done so that the skin is rolled up No each other touch so that the resulting motifs and colors after the steaming process No mixed One each other and messy. While the coating process cloth done so that the skin synthetic No touch direct with iron separator between water and skin synthetic which can result in skin synthetic melted during the steaming process. Steaming process use pan steamer size currently with objective for adapt size from skin synthetic used.

Figure 11 shows results from ecoprint leather media synthetic use dye experience leaf teak and flowers Cambodia. Teak leaves are used as the main motif give color purplish red on the skin synthetic. Red-purple color can add impression feminism from product bags that are generally used by women. Whereas the resulting color from flower Cambodia on skin media synthetic is produce color yellow almost pale united with color base from skin synthetic that is color cream.

Product bag ecoprint skin synthetic

Bag motif design ecoprint using two types of motifs, namely leaf motifs teak and flowers Cambodia. Author using leaf motifs teak Because according to Miranti et al . (2021) leaf teak own philosophy courage, strength, and meaningful usefulness man must endure life with courage and strength as well as always give benefit for fellow. While selection of floral motifs Cambodia inspired from journal Lestari et al . (2022) who raised theme bloom on the resulting product. Bloom design flower Cambodia describe flower Cambodia is currently blossom perfect fit is at between leaf teak.

Figure 12 shows sketch product a bag shaped like a cube. Cube has six side so that can function For become container and for protect goods default from danger external. Skin media synthetic which has through stage ecoprint the result Then sewn until to form product bag with dimensions length x width x height namely 20x5x15 cm which can see form the product in Figure 13. Product bag e coprint generated including to in category sling bag or bag side. Selection draft sling bag inspired by the results design satchel bag designed by Chandra & Haq (2020). The design used in the product designed only use strap in the form of chain so that only allow for used sideways because no own part handle. Chain gold used as sash on both side bag will give impression luxury in slingbag Thi. Figure 14 shows Photo product bag ecoprint and its packaging. Background design behind packaging using floral motifs Cambodia made A little transparent for highlight design leaf teak.

4. CONCLUSION

Conclusion from writing article this is synthetic leather has proven as a suitable medium for technique ecoprint that utilizes leaf teak and flowers Cambodia as substance color effective natural for produce unique patterns and colors, so can produce bag sling bag ecoprint with color purplish red from leaf teak and color yellow from flower Cambodia in sight clear and interesting.

5. ACKNOWLEDGE

Writer to pronounce accept love to the Head of Management Unit State Politeknik Negeri Media Kreatif PSDKU Makassar above permission borrowing laboratory for making *ecoprint* leather media synthetic. The support and cooperation provided is very valuable for smoothness study this.

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