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# Teak Trees as Source of Inspiration for Developing Batik Motifs

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#### Abstract

Many batik motifs have been developed in various regions, inspired by various local resources such as plants, animals, regional icons, cultural arts, etc. The objective of this study is to look for ideas in the form of teak leaves and flowers that can be developed into batik and textile motif designs. The descriptive qualitative, literature review, participatory follow-up study, focus group discussion method, and the development of craftsman creativity were all used to achieve these goals. The study took place at the Jalidin batik craft shop in Sragen. Teak plant objects, motif designers, batik craftsmen, and libraries were among the data sources. The findings of the study were the motifs in the form of teak leaves and flowers, which could be used as master designs for both batik and textiles. Then the shape of the teak leaves and flowers are arranged in various compositions to produce several designs, and the batik motif designs are applied to jarit-patterned batik, long-sleeved shirt-patterned batik, and textile/printed batik. The resulting motifs were then produced into batik according to the economic class projections of the consumers, namely the consumer's economic class projections, using prima and primissima cloths, combination and writing techniques, synthetic and natural dyes, and synthetic and natural dyes. In addition, the motifs were produced into printed textiles/batik. Batik cloths and textiles that have been produced are then made into shirts.

**Keywords:** teak leaves, teak flowers, motifs, batik, textiles

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### **INTRODUCTION**

Many studies on the development of batik motifs have been conducted, with ideas drawn from various superior potentials in the local area. In Lamongan Regency, for example, batik motifs were developed based on ideas from local potentials such as "milkfish, catfish, and crabs." (Rohmaya, 2016). From cocoa plantations in Jember arose the coffee *uwoh* batik motif, the coffee *godong* motif, the *ceplok* cocoa motif, the cocoa king motif, the blue cocoa motif, and the *wiji mukti* motif (Salma, 2015). In Sleman, the superior salak (salacca) product is used as a source of inspiration for Sleman batik motif designs (Salma, 2012). In Ponorogo, the art of *reog* was explored as a source of inspiration for developing regionally specific batik motifs such as *reog*, *kendang-kempul*, and *kuda lumping* (Hartono, 2020). Archaeological sites in Sragen were probed as a source of inspiration for developing batik motifs such as elephants, bones, etc. (Mulyanto, 2018).

The *pelung* chicken, an endemic ani-

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mal and society pride in Cianjur, West Java Province, was chosen as a source of inspiration for the gentur lamp design (Gumulya, 2018). In Garut, the theme of Indonesia trend forecasting 2016-2017 can be a source of ideas for developing motif designs and color compositions of ikat cloths that are adapted to local wisdom, namely local culture in the form of *ukel* inspired by the jaipong dance movement and *wayang golek* puppet accessories. In addition, it contains virology themes with the direction of biopop and refugium-themed color composition (Makki, at. al., 2017).

The Girilayu batik motif, named after a village in Karanganyar, Central Java, is influenced by its people's socio-cultural environment and the culture of the Mangkunegaran Palace. Trees, plants, mountains, hills, forests, surrounding objects, and daily activities are all ideas that can be seen in the visualization of batik motif designs. Social interaction that is still maintained based on societal values and norms is a phenomenon that craftsmen have captured as a new design motif (Nurcahyani, 2021). The Girilayu Batik motif design's development work is visualized in various clothing designs by designers Tuty Adib and Djongko Raharjo (Sachari, 200). Not only the development of batik motifs, the development of batik clothing products in Yogya is also carried out with the concepts of Indonesian folklore, legends and myths (Setiawan, 2015).

Syamwil emphasized the importance of developing motifs reflecting the fauna and flora of the surrounding environment to preserve batik (Syamwil, 2018). Therefore, conservation batik motifs can be derived from what is contained in nature, such as trees, plants, flowers, fruits, or animals (Syamwil, 2019).

Tamarind fruit, a typical plant closely related to the toponym of the city of Semarang, is a source of ideas for creating locality-based batik motifs. The visualization of the shape of the Tamarind batik motif produced shows the diversity and uniqueness of the form as an aesthetic expression of the batik craftsmen in responding to the beauty of the natural and socio-cultural environment in the city of Semarang. (Syakir, at.al., 2022).

Likewise, the uniqueness of the physical buildings of regional icons has also become a trend for creating Indonesian batik today (Ismia, at. al, 2021; Sugiarto, at. al, 2020).

Batik craftsmen in coastal areas, where most of the population earn from the fisheries sector and live in coastal environments, tend to develop marine-themed motifs and bright color patterns symmetrical to the character of open communities (Septiana, 2013).

Batik is a human-made product that involves a lengthy process that begins with sketching the motif pattern and ends with the *mbabar* or coloring process (Honggopuro, 2002). Batik is a piece of *wastra* or cloth made traditionally and specially used in traditional matra; various decorative patterns of certain batik are made using a barrier dyeing technique with *malam* "batik wax" as a color barrier material (Riyanto, 2002). Thus, a *wastra* can be categorized as batik if it contains two main elements: the barrier dyeing technique, which uses wax as a color barrier, and various batik-specific decorative patterns (Doellah, 2002).

Thus, the batik motif is a picture frame on batik that combines lines, fields, and *isen-isen* into a single unit that embodies batik as a whole. Batik motifs are classified into four types based on their arrangement and shape: (1) geometric motifs, which include banji, ceplok, ganggong, woven, machete, and slope motifs. (2) Cement motifs, such as plant motifs, plant and animal combinations, and plant, animal, and winged beast motifs. (3) Buketan motifs, and (4) modern motifs (Susanto, 1980 and Patria, 2016). Batik motifs can also be characterized as machete, geometric, or banji motifs, and creeping plants, aquatic plants, flowers, or animals in their natural environment (Hamzuri, 1981). Based on their shape, Batik motifs can be divided into geometric, ceplok, machete, slope, nongeometric, lung-lungan, buketan, and fringe patterns (Doellah, 2002). One example that includes the fried rice motif is the *kawung* motif (Sarwono, 2005).

#### Pattern Design Development

Design development, in general, and efforts to develop a motif based on the idea of teak leaves and flowers must pay attention to the elements and principles of fine art. Points, lines, planes, shapes, and colors are the elements of art. The smallest basic element of art is the point. Dots are the source of all forms. If the dots are organized or of different colors, they can also be the center of attention. Dots are used as an accentuation in the form of stuffing or isenisen motifs, whose function is to beautify the motif in the development of the design of the teak leaf and flower motifs. Dots, the smallest visual element in batik, become an element that can beautify the whole motif.

Lines are strokes or borders that define an object, space, field, color, texture, etc. Lines have elongated dimensions and point in a specific direction. Lines can be short, long, straight, thin, vertical, horizontal, curved, wavy, smooth, thick, slanted, broken, and so forth. Another impression of the line is that it can convey motion, ideas, symbols, and specific codes. The use of lines in the design of batik motifs is used to achieve a specific impression, such as the impression of being sturdy, strong, simple, majestic. The lines used in the application of batik motif designs are in the form of *klowongan* motifs as well as small lines for filling the motifs. Some examples of line expression symbols and the impression they create, as well as how they are used and how they are adjusted to the colors.

A field is one of the art elements formed by the interaction of several lines. A plane is two-dimensional, has a size, and is confined by a contour. Triangles, quadrilaterals, trapezoids, circles, ovals, and other polygons are the basic fields in fine arts. Rhombus fields or fields between lines filled with motifs can be used in the application of batik motif designs..

Shape can refer to either a physical or a plastic shape. Shape refers to the appearance of an object, such as round, square, ornamental, irregular, and so on. The plastic form, on the other hand, is the shape of an object that can be seen and felt due to the object's value. By deforming the overall shapes of the leaves as well as the fibers of leaves, flowers, twigs, and so on, the shape in the design of batik motifs with elements of teak leaves and flowers can be realized.

Color is the visual impression created by light refraction in the eye. Colors derived from synthetic substances and/or natural dyes are used to embody typical ornaments of batik motifs. Natural batik dyes produce soft colors, while synthetic batik dyes produce bright colors.

Furthermore, as with any product design plan, there are seven aspects to consider when developing a batik motif design. (1) Functional aspects, i.e., analyzing and projecting every solution to an industrial product's problem as feasible/appropriate so that it can be useful to the user. (2) In every planning activity, technical aspects include analyzing and considering strength, precision, appropriate technology, material selection, technical specifications, component standards, and other planning assumptions. (3) Ergonomics aspects include analyzing and adjusting for anthropometric standards, safety, comfort, and human physiology. (4) Economic aspects, such as analyzing and considering every plan in terms of efficiency, effectiveness, and other economic principles so that each product can adapt to changing conditions. (5) Environmental considerations, such as assessing each product's resource usage responsibly and taking into account a wide range of environmental impact factors. (6) Socio-cultural aspects involve taking into account and adapting each product plan to the existing socio-cultural conditions, as well as being able to adapt to the dynamics of the cultural environment life. (7) Visual/ aesthetic aspects, namely considering and attempting to improve a product's visual quality based on its usability and function (Prasetyowibowo, 1998).

According to Clipson (Rizali, 2006), four activities must be considered in the textile design process: problem identification, production planning analysis, creative process, and production process. The first step is to identify the problem, which entails formulating a design problem that will be developed to meet consumer requirements.

Second, production planning analysis must consider potential factors such as market share, target share, competition with other producers, potential consumer attitudes and behavior, consumer purchasing power, and symptoms of fashion trends. Meanwhile, it must consider the environment, which encompasses the social, cultural, economic, and technological environments. Third, there is the creative process, which entails coming up with an initial concept for a design and then incorporating several creative aspects, such as product function, aesthetics, raw materials, process technology, and fashion, into the design. Fourth is the production process, which includes product testing on a small scale before moving on to mass production if the test results are satisfactory.

The process of creating a work of art begins with the formulation of the background of creation, which is based on empirical experience and field observations, and then the data is processed to produce a creative idea based on the reasons, objectives, and benefits of creation that are formulated in the background of creation. After achieving the background of creation, the formulation of the creative problem, namely how to turn ideas into works and results. Following that, deciding on the theoretical approach to take. The formulation of the problem of creation and the theoretical approach chosen can be used to formulate the concept of creation. The developed concept of creation incorporates the concepts of content and form, i.e., the visual aspect of the work to be created. When developing the concept of the type of work, consider the research of reference data. Following that, a sketch of the work is produced (Gustami, 2008).

Following the concepts of content and form, the final stage in the creation of a work of art is the process of embodiment, which involves implementing the concepts that have been poured into the work's visual aspects. The basic principles of art, such as rhythm, unity, dominance, balance, proportion, simplicity, and clarity, are used to arrange visual works based on aesthetic theory.

The main objective of this paper is to use teak leaves and flowers as a source of inspiration for developing motif *sanggit* designs for batik and textile products, as described above.

#### METHOD

This study was conducted at the Jalidin batik craft business in Pilang Village, Masaran District, Sragen Regency, Central Java Province, in 2021. Jalidin batik craft business produces batik using a variety of techniques, including writing techniques, color printing, and writing techniques, and a combination of wax printing and writing techniques. This business also receives services for producing batik motif designs, coloring batik, making batik color dough, and making printed wax dough.

Informants, events, and documents are examples of research data sources. Informants include batik entrepreneurs, motif designers, batik artisans, printers, and color artisans. The events cover the process of designing motifs and producing batik in the batik business, as well as all of the facilities used for these activities. Additionally, the data source used is in the form of documents about teak trees.

This study used descriptive qualitative methods, literature reviews, and participatory action research. Descriptive qualitative and literature studies were used to determine the source of teak tree ideas, specifically the relevant teak leaves and flowers as outlined in batik/textile motifs. Participatory action study produces motif designs, makes motifs into batik, and turns batik into *sanggit* clothes.

This batik/textile motif design was created using both a participatory and an independent learning approach (Mudjiman, 2012). The development of motif designs is carried out by actively involving craftsmen such as batik entrepreneurs, motif designers, batik artisans, printers, and colorists, beginning with the process of selecting the source of ideas, creation, and embodiment. There is an active discussion between researchers and craftsmen in each process, so it is hoped that they will be able to understand the problems encountered in the development of new motif designs at each stage and find the best solution to the problem.

In addition, a creativity development approach is used for the craftsmen in the development of motif designs and batik making, in which the craftsmen are given both psychological freedom and psychological security (Kaufman, 2007). The written technique batik with natural dyes, batik with a combination of wax printing techniques, and writing techniques with synthetic dyes were all developed from this teak leaf and flower motif design. In this study, the development of motif designs refers to four activities in the textile design process: problem identification, production planning analysis, creative processes, and production processes (Rizali, 2006).

#### **RESULTS AND DISCUSSION**

# Teak Leaves and Flowers as Inspiration for Motif Design

The teak tree (Tectona grandis) has several parts, including roots, stems, twigs, leaves, and flowers (Figure 1). The cambium and year rings are visible when the teak tree trunk is cut transversely (Figure 1). The elements of the teak tree are extremely beneficial to people's lives. Among the elements of the teak tree used in the creation of batik motifs, the elements of leaves and flowers were chosen as the source of ideas in the creation of batik motifs. This is motivated by the fact that the two elements are contained in batik craft elements (dots, lines, dimensions) and are flexible, beautiful, and light. Leaves and flowers are used as teak tree representations because they have a strong visual character in shaping the beholder's perception, allowing them to be easily identified as teak trees.

Teak leaves are oval in shape, with leaf fibers running from the base to the tip of the leaf and leaf fibers on the right and left sides of the middle fiber. The shape of the teak leaves varies from the bottom of the large twig to the top, which becomes smaller as it grows smaller. Similarly, the color of the leaves varies from dark green to light green and finally to slightly brownish green. The shape of the teak leaves appears less artistic when viewed through the lens of art, but the shape of the teak tree's flowers and fruit is quite interesting. It is a fascinating challenge to the process, stylize, and compose the shape of teak leaves and flowers into appealing batik motifs while preserving the character of the teak tree (Sukanadi, 2020). Batik motifs of teak leaves and flowers as clothing are expected to affect the mood of the wearer to balance nature (Ju-Young, 2013).



Figure 1. Teak tree elements: roots, stems, twigs, leaves, flowers, and cambium

The resulting master motif appears to be made of a single teak leaf composed of five large and small leaves, leaf fibers arranged on the leaf, and teak flowers arranged around the leaf, all of which are combined in an oblique composition. The dimensions of the teak leaf are probed, as are the lines of the leaf's fiber, and the points, lines, and dimensions of the teak flower. Then, around the main motif, several teak leaves of smaller sizes are placed in "a twenty-five square repeat pattern," giving the impression that the motif is spread freely, but it actually shifts on 25 per 4 of the main motifs (Bates, 1960). As a result, the shape of the leaf motif appears to be scattered irregularly. (Figur 2).

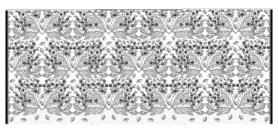


Figure 2. Master motif design

The produced master motif of teak leaves and flowers is then developed into a pattern pattern, which is developed in a long cloth or *jarit* pattern (Figure 3) and a shirt motif (Figure 4). The pattern of the long cloth motif indicates that the batik cloth produced is intended for use by women as clothing, dresses, robes, or clothing, whereas the batik cloth produced by men is intended for use as shirts. Because of the shirt motif, the batik cloth produced is only intended for men's shirts.

The stage of developing the master motif into a pattern ready for batik production is very flexible. In textile designs, you can use the following methods of repeating motifs: (1) half-drop, where the motif shifts by half; (2) quarter-drop, in which the motif shifts by a quarter of the section; (3) diamond repeat, in which the motif shifts according to the diamond structure; (4) parallel repeat, where the motif shifts in a constant position both horizontally and vertically; (5) opposite repeat, where the motif shifts in reverse; (6) alternate repeat, where the motif shifts by forming positive and negative (Bates, 1960).

Master motifs can be created by repeating and arranging them in dense motifs and adding *isen* motifs to balance the composition. Development can also be accomplished through repetition, with the main motif kept relatively small.



**Figure 3**. The design is arranged on a long/ *jarit* cloth motif pattern

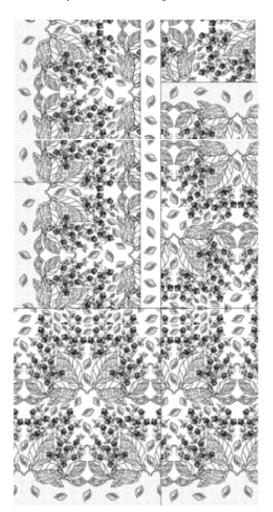


Figure 4. The design is arranged on a shirt motif pattern

#### **Batik Product with Long Cloth Pattern**

The stages of making batik cloth vary depending on the coloring design plan that will be used. In general, the stages of batik production begin with (1) processing white cotton cloth with *diloyor* to remove starch and iron (Fe) so that the cloth becomes flexible, porous, and easily absorbs color. (2) White cloth is sketched or depicted with a planned master motif and/or the development of other filling motifs. (3) The written batik process, in which hot wax is incised on the cloth with a canting tool along the sketch lines. (4) Applying the first dye to the cloth. (5) The first color remains in the batik process on the planned area. (6) Cloth dyeing with a second dye, and so on. (7) The wax is *dilorod* or removed from the cloth by boiling it, then the cloth is washed until it is clean, and finally it becomes a batik cloth (Mulyanto & Hartono, 2021).

Two hand-painted jarit batik products were created in this study using natural dyes. The first product is entitled "Batik tulis jarit daun dan bunga jati warna alam mahoni-sogan-indigo 250" [Hand-drawn jarit batik, teak leaves and flowers, natural color, mahogany-sogan-indigo 250]. The stages of production are as follows: (1) White cotton cloth is *diloyor*, boiled with alum, and washed so that it becomes flexible, allowing for easy batik and color absorption. (2) White cloth with master motifs repeated with 28 stalks of teak leaves and flowers. The motif's background is then composed of teak leaves that have been randomly scattered. (3) Klowong batik cloth, on which hot wax is incised with a canting tool on the lines and/or areas of the sketch that are to be white. (4) The cloth is first colored with natural mahogany dye and then locked with lime and alum to produce a light brown color. (5) Planned spaces are still light brown in color and are made in batik or with batik blocks. (6) The second cloth is dyed with natural dye sogan and locked with lime before being colored with indigofera, resulting in a dark brownblack color. (7) The cloth is boiled to remove the wax, then washed until clean, and finally the batik cloth is white, light brown, and dark brown (Figure 5).



Figure 5. Hand-drawn *jarit* batik from teak flower leaves, mahogany-sogan-indigo 250

The second product, entitled "Batik tulis jarit daun dan bunga jati bawahan warna alam jalawe-indigo-sogan 250". The stages of production are as follows: (1) white cotton cloth is diloyor, boiled with alum, and washed, allowing the cloth to become flexible, making it easy to make batik and absorb color. (2) For 27 stalks of teak leaves and flowers, the white cloth with master motifs is repeated. The motif's background is then arranged with teak flowers that are randomly scattered. Bottom motifs, namely motifs of leaves arranged in a row along the cloth, are created in the lower part of the cloth. (3) Klowong batik cloth, on which hot wax is incised with a canting tool on the sketch lines and floral motifs. (4) The cloth is first colored with the natural dye jalawe and then locked with alum to produce a yellow color. (5) Planned areas are still vellow; they have been created again or made into blocks. (6) The second cloth is dyed with the natural dye indigofera (blue), resulting in a green color (a mixture of yellow and blue). (7) Planned areas are still yellow and green, and batik is already being made again. (8) The cloth is colored a third time with the natural dye sogan (brown) and then locked with lime and alum, resulting in a dark green-blackish color. (9) The cloth is boiled to remove the wax, then washed until clean, and the batik cloth is finally white, yellow, green, and blackish-dark green (Figure 6).



Figure 6. Hand-drawn jarit batik with teak petals, natural color, jolawe-indigo-sogan 250

This batik product of" *Batik tulis jarit daun bunga jati bawahan warna alam jalawe-indigo-sogan 250*" has been copyrighted on November 17 2021 with application number EC00202165679 and has obtained registration number 00029671.

The hand-drawn batik of *jarit* teak flower leaves is buttom to the natural color of jalawe-indigo-sogan 250, indicating that this piece of batik art was created using a written technique. There are 27 teak leaf, and flower clumps arranged randomly among the randomly scattered white teak flowers in this batik work with a teak leaf pattern combined with teak flowers. At the bottom side, in the sense that this batik motif has a motif on the bottom of the cloth that is indicated by green and yellow teak leaves crisscrossing each other. The batik dyes used are three natural dyes: jalawe, indigo, and sogan. Jalawe produces yellow, indigofera produces blue, and sogan produces brown. This batik's dominant color combinations are white, yellow, light green, dark green, and black. The white color is produced by batik wax nicks. The vellow colors are produced by the jalawe's substance. A combination of jalawe and indigo substances produces the light green color. A combination of jalawe, indigo, and sogan substances produces the dark green black color.

This batik piece has a *jarit* pattern that measures 115cm wide by 250cm long. Thus, this batik cloth can be used as a *jarit* as well as made into long-sleeved shirts in various sizes (M, L, XL, XL) with *sanggit* motifs on the front. Sanggit refers to the front motif, which meets the left and right motifs at one seam connection.

#### Long Patterned Cloth Textile Products

The textiles mentioned are batiks, which are made using a cold wax printing technique and then dyed. Typically, the wax printed batik production process does not end here, but continues with printing techniques combined with writing techniques. Thus, this product is known as combination batik, which is batik made using two or more batik techniques.

The combination batik product created in this study is a combination of wax printing and writing techniques. The stages of this combination batik production process are as follows. (1) The motif design is created using the actual size of the cloth to be produced (115cm x 250cm) (Figures 4 and 5). (2) The motif design was shown on (150cm x 280cm). (3) A screen is used to print cold wax on the cloth, resulting in wax-printed cloth. (4) The wax printed cloth is then colored in various desired colors using the colet, dusel, and/or brush techniques according to the plan and size of the colored area. (5) Finally, the printed wax is removed from the cloth by boiling it, likely to result in a wax-printed textile or batik. If the cold wax printed batik product is then written on, the parts of the motif that are expected to remain colored are covered with wax. The cloth is then colored again according to the plan, and the candle is finally dilorod.

The third product, textile products or wax printed batik entitled "Batik pm jarit daun bunga jati coklat bawahan merah 250". The manufacturing stages are as follows. (1) The motif is made of cloth (115cm x 250cm) with a long/*jarit* cloth pattern (Picture 4). (2) The motif design was shown on (150cm x 280cm). (3) A screen is used to print cold wax on the cloth, producing printed batik cloth. (4) Using the dab and brush technique, the printed batik cloth on each part of the motif is colored yellow, green, and brown for the background and black for the bottom. (5) Finally, the wax is removed from the cloth by boiling the cloth, so that it becomes a wax-printed textile or batik (Figure 7). This batik artwork entitled "Batik pm yellow teak leaf flower

with button red 250" was copyrighted on September 7, 2021, with the application number: EC00202144973 and registration number: 000281551.

Batik pm flower teak brown 250, which means that this piece of batik art was created using the pm or cold wax print (rint malam dingin) technique in combination with the writing technique. This batik work is patterned with teak leaves and teak flowers that are arranged repeatedly, and there is a walang motif on the right and left edges of the cloth. The dye used is a synthetic substance with dominant brown and yellow colors. This batik work has a jarit-shirt pattern measuring 115cm wide and 250cm long, so it can be used as a *jarit* as well as made into longsleeved shirts with sanggit motifs in sizes M, L, XL, and XL. Sanggit refers to the fact that the motifs that meet at all seam joints (front, left side, right side, and pocket) can meet, connect, unite, whole, or sanggit.



Figure 7. Batik pm brown teak flower leaves 250

Wax-printed batik products with long cloth patterns and other shirts were produced: (1) PM Batik of brown teak flower leaves with red bottom 250; (2) PM Batik of green teak flower leaves with red bottom 250.



Figure 7a. Batik pm teak flower leaves brown red bottom 250



Figure 7b. Batik pm teak flower leaves green red bottom 250

# Long Sleeve Shirt Pattern Textile Product 210

Textile products with a pattern of 210 long-sleeved shirts, meaning that textile products are made using cold wax printing techniques and then combined with writing techniques. The motif design has a long-sleeved shirt pattern of 210, meaning that the batik cloth is 210cm long but can be made into long-sleeved shirts of various sizes whose motifs remain *sanggit*.

The fourth product, textile products or wax printed batik entitled "Batik pm baju daun bunga jati coklat 210". The stages of production are as follows. (1) The motif design is made of cloth (115cm x 210cm) and features 210 long-sleeved shirts in a pattern (Figure 4). (2) The motif design was shown on the screen (150cm x 250cm). (3) A screen is used to print cold wax on the cloth, resulting in printed batik cloth. (4) Using the dapple and brush technique, the printed batik cloth on each part of the motif is colored yellow, light brown for the bottom, and dark brown for the background. Finally, the cloth is boiled to remove the wax, transforming it into a wax-printed textile or batik (Figure 8). Furthermore, the same batik motif is produced in a variety of color combinations (Figures 8a, 8b, 8c).

Batik pm shirt with brown teak petals 210 symbolizes a batik art piece created using the cold *malam* print technique in conjunction with the writing technique. A long-sleeve pattern can be found in batik work. Batik motifs with teak leaves and teak flowers are repeated, and a leaf arrangement motif is given at the bottom of the cloth. The dye used is a synthetic substance with dominant brown and yellow colors. This batik work features a long-sleeved shirt pattern measuring 115cm wide and 210cm long, allowing the cloth to be made into long-sleeved shirts in sizes M, L, XL, and XL with *sanggit* motifs. The motifs that meet at all seam joints (front, left side, right side, and pocket) can meet, connect, unite, whole, or *sanggit*.



**Figure 8.** Batik pm shirt with brown teak leaves 210. **Figures 8a, 8b, 8c.** Batik pm shirt teak flower leaves 210 various colors

#### **Clothing Making**

Making clothes begins with measuring the wearer's body, measuring the pattern on the cloth, cutting the cloth, and sewing the cloth. It is very simple to make clothes out of plain color materials or small symmetrical patterned materials. Cloths can be cut in a variety of directions depending on the pattern-breaking area's needs. Besides, the use of cloth materials can be reduced.

However, when making clothes out of batik-patterned materials, the area of the motifs must be carefully considered. If the material is batik with a long cloth pattern, the motif that must be promoted or *sanggitated* is usually only the motif of the front chest. If the cloth is a shirt-patterned batik, the motifs on the front chest, left side, right side, and pocket have been designed to be sanggit. Besides, certain motifs were used to design the collar and cuff motifs.

In the case of creating a teak leaf and flower motif, there are two types of batik products to consider: (1) batik and textiles with long cloth patterns, and (2) textiles with long sleeves.

Batik and textiles with long cloth patterns measuring 250 cm long can be made into long-sleeved shirts or *jarit*. The shirt made from this pattern has a simple motif of *sanggit* front chest (See Figures 9a and Figure 9b). However, the motifs on the left and right sides are not *sanggit* because they were not designed to be *sanggit*. This 250 cm long textile patterned cloth (Figure 9c) is intended to be made into a long-sleeved shirt with *sanggit* motifs. Thus, that this pattern can be transformed into a *sanggit*patterned shirt.



**Figure 9a.** The teak flower leaf motif batik has a long cloth pattern, and the clothes it produces have side motifs that are not *sanggit*.



**Figure 9b.**The teak flower leaf motif batik has a long cloth pattern, and the clothes it produces are not *sanggit* motifs.



**Figure 9c.** Teak flower leaf motif textile with a long cloth pattern, deriving in sanggit side motifs.

This 210 long sleeve shirt patterned textile measures 115cm wide x 210cm long. This batik cloth with 210 motifs (Figure 10b) can be made into long-sleeved or short-sleeved shirts in sizes S, M, L, and XL, with the motifs remaining sanggit (Figure 10c), whereas if made into a shirt in size XXL, the motif remains sanggit but can only be made short sleeved. This 210-motif pattern can be used to create batik motifs with a high level of sanggit, such as a-symmetrical motifs, oblique motifs, and abstract motifs. Besides, the shirt motif on the collar and cuffs can be made differently than the main motif. (Mulyanto, at.al. 2021).

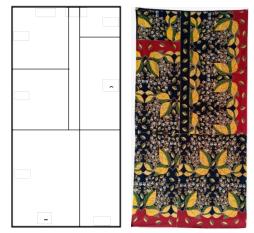


Figure 10a, 10b. Pattern 210 and Pattern 210 textile products



Figure 10c. Teak flower leaf patterned long sleeve shirt with pattern 210

## CONCLUSION

Based on the results and discussion, it is possible to conclude that there are numerous potential regional natural resources, such as teak leaves and flowers, that can be used as a source of ideas for batik and textile motifs. Teak leaves and flowers have the visual aspect of dots, lines, and flexible and adaptable areas, making them ideal for innovation into batik and textile motifs. As the master motif, the results of batik motif are comprised of several teak leaves of varying sizes that are then composed and combined with several teak flowers that are composed around them. The master motif is then transformed into various designs of *jarit*-patterned batik and shirt-patterned batik. The *jarit*-patterned batik motif is intended for women's clothing, whereas the shirt-patterned batik motif is intended for men's shirts.

Furthermore, the batik and textile production techniques are customized to the product's intended use. The design of the teak leaf and flower motifs is made more subtle, the cloth is primissima cotton, the batik process uses writing techniques, and the dye is used with natural dyes, resulting in soft products. Batik products are designed for middle and lower-income consumers; the teak leaf and flower motifs are more realistically designed; the batik process employs a combination of printing and writing techniques; and synthetic dyes are used for brighter results.

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