

ECOLOGICAL AWARENESS OF NUTMEG TREE (*MYRISTICA FRAGRANS HOUTT*) THROUGH THE CREATION OF CONTEMPORARY BATIK MOTIFS

*Kesadaran Ekologi Pohon Pala (*Myristica Fragrans Houtt*) Melalui Penciptaan Motif Batik Kontemporer*

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ABSTRACT

The existence of nutmeg trees that are currently starting to decrease, makes the potential of nutmeg trees starting to be ignored by the community. One of the visual potentials of nutmeg fruit that is developed into artwork is able to provide education to the community as an effort to preserve it. The creation of contemporary batik motifs can play a role in preserving nutmeg trees carried out by batik craftsmen at batik production houses in Sukabumi, West Java. This article will discuss the ecological awareness of nutmeg trees through the creation of contemporary batik motifs. A craftsman at the Batik Lokatmala production house uses the object of the nutmeg tree as the inspiration for the typical Sukabumi batik motif, namely "Palawan". The objectives of this study are (1) Documentation and narration of the creative process of creating the Palawan batik motif (2) Illustration and meaning of the Palawan batik motif and (3) Revealing the ecological awareness of nutmeg trees through the Palawan batik motif. The results of the study explain that the creative process experienced by craftsmen consists of several stages, Visualization of batik motifs using the concept of Sundanese aesthetic composition and there are indicators of ecological awareness of nutmeg trees in the community, including sensitivity, sense of responsibility and cooperation. The indicator aspect was successfully presented because of the cooperation between various parties who took part in campaigning for the preservation of nutmeg trees. This study used a qualitative case study method at the Lokatmala Batik house, Sukabumi, West Java, the process of observing batik production houses and nutmeg plantations, interviews and searching for documentation about nutmeg. To obtain data sources regarding the ecological awareness of nutmeg trees, researchers conducted participant observation, so that researchers directly saw the indicators of ecological awareness of the community present.

ABSTRAK

Keberadaan pohon pala yang mulai berkurang saat ini, membuat potensi dari pohon pala mulai terabaikan oleh masyarakat. Salah satu potensi visual buah pala yang dikembangkan ke dalam karya seni mampu memberikan edukasi kepada masyarakat sebagai upaya pelestarian. Penciptaan karya motif batik kontemporer dapat berperan dalam pelestarian pohon pala yang dilakukan oleh pengrajin batik di rumah produksi batik di Sukabumi, Jawa Barat. Tulisan ini akan membahas mengenai penyadaran ekologi pohon pala melalui penciptaan motif batik kontemporer. Seorang pengrajin di rumah produksi Batik Lokatmala

mengangkat objek pohon pala sebagai inspirasi motif batik khas Sukabumi yaitu "Palawan". Tujuan dari penelitian ini adalah (1) Dokumentasi dan narasi proses kreatif penciptaan motif batik Palawan (2) Ilustrasi dan pemaknaan motif batik Palawan dan (3) Mengungkap kesadaran ekologis pohon pala melalui motif batik Palawan. Hasil penelitian menjelaskan bahwa proses kreatif yang dialami pengrajin terdiri dari beberapa tahapan, Visualisasi motif batik menggunakan konsep komposisi estetika Sunda dan terdapat indikator penyadaran ekologi pohon pala di masyarakat, diantaranya kepekaan, rasa tanggung jawab dan kerjasama. Aspek indikator tersebut berhasil dihadirkan karena adanya kerjasama antara berbagai pihak yang ikut andil dalam mengkampanyekan pelestarian pohon pala. Penelitian ini menggunakan metode kualitatif studi kasus di rumah Batik Lokatmala, Sukabumi Jawa Barat, proses observasi rumah produksi batik dan perkebunan pala, wawancara hingga pencarian dokumentasi mengenai pala. Untuk mendapatkan sumber data mengenai penyadaran ekologi pohon pala, peneliti melakukan participant observation, sehingga secara langsung peneliti melihat indikator kesadaran ekologis masyarakat yang hadir.

INTRODUCTION

The art of motifs has the potential to serve as a medium for expressing the ideas and concepts of an artist while also becoming a method to address a problem. In this context, batik art plays a role in promoting awareness of the ecological significance of spice production in Indonesia, specifically nutmeg. Nutmeg tree (*Myristica fragrans* Houtt) originate from Kepulauan Maluku Utara, Banda Island (Hadad & Hamid, 1990) and are widely distributed in Indonesia. West Java including Sukabumi, Bogor, Kuningan, and Cianjur is among the regions known for nutmeg production (Supriadi & Handri, 2011: 298). Sukabumi stands out as the largest nutmeg-producing center in West Java (Disbun Jabar, 2013). Apart from its significant economic value, nutmeg holds ecological, philosophical, social, and aesthetic values. Nutmeg tree has a unique ability to bear fruit throughout the year. Another uniqueness lies in the naming of nutmeg, derived from the Sanskrit word *phala-wan*, meaning a person who produces

quality nutmeg for the nation, state, and religion. This definition is also related to the word 'pahlawan' interpreted as someone outstanding for courage and sacrifice in upholding the truth (KBBI). Nutmeg tree has become an icon of local wisdom regarding Indonesia's endemic plant vegetation, growing in Sukabumi, and the need for preservation. While nutmeg tree bring various benefits to the Sukabumi community, the decreasing number of nutmeg plantations in Sukabumi is causing the potential of nutmeg tree to be overlooked by society.

Previous studies on nutmeg tree mostly tended to focus on the biological aspects or dimensions of the tree (Supriadi & Handi, 2011). The aesthetic beauty of the nutmeg tree has been somewhat overlooked, primarily because nutmeg is often seen merely as a spice plant species contributing to increased economic income especially for farming communities (Rehattaa & Herman, 2016). However, beyond its economic contributions nutmeg tree hold aesthetic

value that can be explored in the realm of batik motif art as a conservation strategy for this species. There is literature discussing nutmeg tree as the fundamental idea for creating hand-drawn batik motifs for fashion products (Sowiyah, 2021). From now on, there has not been research specifically addressing batik motifs inspired by the husk or seed of nutmeg (fuli/nutmeg with its leaf) as a medium for ecological awareness. No literature sources have been found discussing the visual uniqueness of the veins present on nutmeg husks or seeds developed into distinctive batik motifs in a particular region. Furthermore, as part of ecological awareness efforts, the beauty of nutmeg tree becomes evident when they grow well and naturally that is providing various benefits to the surrounding community. The visually appealing form and color elements of the tree enhance its natural habitat.

This writing is created with the aim of expanding previous research to discuss the potential aesthetic aspects of nutmeg tree incorporated into batik motifs as a conservation effort. The diversity and utility value of the tree do not align with the decreasing conservation of nutmeg tree due to a lack of awareness about their potential. Specifically, to express ecological awareness through contemporary batik motifs, this article will be explained based on three problem formulations: (1) How to present documentation and narration of the creative process of creating contemporary batik motifs by Lokatmala Batik House craftsmen, (2) How to illustrate and interpret contemporary batik motifs by Lokatmala

Batik House craftsmen, and (3) How Ecological awareness of the nutmeg tree of the Sukabumi community through contemporary batik motifs. The goal is to uncover how the art of batik motifs can serve as a means of conservation and education, providing knowledge about the relationship between art and nature through local batik products in Sukabumi. By utilizing the local wisdom present in their own community, an artist can gain crucial sources of ideas in the creative process.

This research is based on the argument that creative ideas can originate from the potential of nature in the surrounding environment, for instance the distinctive plant vegetation of the region that needs preservation. In Sukabumi, there are nutmeg plantations scattered across various areas, including Cisaat, Gunung Puyuh, Cidahu, Parakansalak, and Cikidang. Previously, the utilization of nutmeg tree by the community was limited to being a spice, but some groups have begun developing it into culinary products such as candied nutmeg. The development of nutmeg tree in the realm of art can create environmentally-friendly aesthetics, analyze, narrate their existence, and highlight the benefits of nutmeg tree as a conservation effort for plant species. This process involves visualizing nutmeg tree into distinctive contemporary batik motifs typical of Sukabumi. It aims to address one of the conservation efforts for nutmeg tree in Sukabumi, especially for the younger generation to remain productive in developing and generating their creative ideas. In this context, the author seeks to

examine the creative process of craftsmen and how ecological awareness efforts for nutmeg tree manifest through motif creations within the community. Additionally, this writing will serve as theoretical groundwork for future research conducted by other researchers.

Ecological Awareness

Ecological awareness is the understanding of the importance of preserving the sustainability of the environment, a quality that every individual must possess for its enduring existence. It involves a profound comprehension of the relationship between living beings, such as humans, and their environment, as well as the responsibility to maintain ecosystem balance (Maria. H, 2023). Ecological awareness is synonymous with environmental awareness which is serving as an effort to cultivate public environmental consciousness to ensure its preservation (Salim, in Genta, 2011). One strategic function of environmental communication is campaigning to raise public awareness for environmental care or the conservation of flora and fauna species using various media (Susanti. S. 2018). This is achieved through various efforts including education, environmental outreach, the implementation of local wisdom values in the form of innovative and sustainable products, and collaboration with influential entities (Matroni, 2019). Furthermore, cross-sector collaboration strengthens efforts to shift societal behavior and mindset towards more sustainable practices in managing natural resources and preserving the environment

(Maria. H, 2023). Collaboration can occur among five parties in the penta helix cooperation model known as the ABCGM concept: Academia, Business, Community, Government, and Media (Kelvin, 2022). This collaboration can provide support in achieving goals related to the preservation of interacting natural resources synergistically (Kelvin, 2022).

The lack of awareness in society regarding the prudent treatment of the surrounding environment necessitates the development of ecological awareness in every individual. According to Neolaka cited in Genta (2011) to avoid ignorance, ecological awareness must be grounded in sufficient knowledge about the environment and the interactive relationships with living beings. Ecological awareness can be characterized by three aspects: (1) Sensitivity to the environment and the existence of other living beings, (2) Responsibility, and (3) Collaboration with others to preserve and conserve the environment (Waligereja Conference in Sulastri, 2019). The emergence of a new awareness about the environment has led to significant positive changes in treating elements of the natural universe (Inayah, 2017). Ecological awareness is crucial, especially as endemic plant or tree species in Indonesia begin to face scarcity. Conditioning is needed, such as education capable of making people aware of the importance of the potential or benefits possessed by this tree which is enabling wise utilization (Harun, 2015). Motivating the community as a driving factor creates enthusiasm and opens minds to better conservation efforts (Gerry et al., 2017).

Efforts can be made in various ways and through different media depending on the creative actors' sensitivity to understanding issues and providing solutions in their environment.

Ecology of Nugmeg Tree in Sukabumi

Nutmeg is a native plant of Indonesia, and its primary use is as a culinary spice specifically in the seed part. Indonesia is one of the main global producers of nutmeg, alongside Grenada. West Java is a significant nutmeg center in Indonesia, covering an area of approximately 6.253 hectares, including regions in Bogor, Tasikmalaya, Kuningan, Ciamis, Purwakarta, and Sukabumi (Directorate General of Plantation, 2015). Sukabumi, with a nutmeg plantation area of 1.476 hectares that is spread across the City and Regency, including the sub-districts of Cisaat, Gunung Guruh, Cidahu, Parakansalak, Cikidang in Sukabumi Regency, and Tegal Karamat, Babakan Jawa in Sukabumi City (Bermawie, 2018). The oldest nutmeg tree (parent stock) in Sukabumi used as the initial seed source by nutmeg farmers that is now only consist of two trees located in Kampung Rambay Kaler, Sukamanah Village, Cisaat District, Sukabumi (Supriadi, 2011). These nutmeg trees were planted since 1920 with their seeds obtained from the Dutch who brought them from the Maluku Islands. Both trees continue to grow and produce well. Ten other descendants grow in a nearby village namely Cikiray Village, Cikidang Sub-district (Ilham, 2011). The potential of nutmeg trees can be developed into various products, such as essential oil for aromatherapy and

perfume industry ingredients, fruit flesh for food and beverages (Purwianti, 2018).

The nutmeg tree population in Sukabumi has distinctive characteristics. The morphological features of nutmeg trees in Sukabumi include a pyramidal-shaped canopy, round trunk, irregularly branched tree, dark green leaves with a somewhat smooth texture (Ma'mun, 2018). Nutmeg flowers are light yellow with a moderate size, and the brownish-yellow fruit skin is round with a spicy taste and a distinctive nutmeg aroma. The characteristics of the aril or fuli and nut of Sukabumi nutmeg indicate a thick aril or fuli (nutmeg seed husk) with a sharp nutmeg aroma (Nurliani, 2018). The majority of the nutmeg yield in Sukabumi is used as a spice (Bernawie, 2018). Home-based nutmeg essential oil distillation facilities, known as nutmeg essential oil distillation plants, are scattered in the Sukabumi and Bogor regions, with 10-14 home-based facilities (Handi, 2011). Nutmeg traders in Sukabumi are quite unique; fruit gatherers come to orchards and directly purchase from farmers. Nutmeg tree can bear fruit throughout the year, but the yield is not as abundant as during the harvesting season, typically in the middle of the year (Wicaksono, 2011). Currently, the presence of nutmeg tree in Sukabumi is decreasing attributed to factors such as tree logging for land expansion, poorly maintained trees, or even due to the lack of knowledge among Sukabumi residents regarding the potential of nutmeg tree.

Creation of Contemporary Batik Motifs

Batik ornamentation is the result of efforts by artists or craftsmen as creators of style in the creation of batik motif artworks. The creation of contemporary batik motifs is not bound by any strict rules or regulations. Batik craftsmen are free to reflect the cultural image and personality patterns of a region in the form of various decorative batik motifs. A craftsman is inseparable from their community, and the concept of creating artworks is oriented towards meeting the needs of the community (Musman, 2011). A craftsman creates batik motifs based on values highly esteemed by their community, so the process of creating batik can be said to originate from the traditions of the supporting community (Ismia, 2021). Craftsmen present batik motifs through a creative process connected to both external and internal objective realities of the craftsman and visualized in the artwork. Besides fulfilling their aesthetic desires, craftsmen go through a creative process driven by various issues in their surrounding environment (Wulandari, 2011). Craftsmen who are integrated into their environment will produce selected works that draw from the richness of tradition or artistic heritage with contemporary thinking (Musman, 2011). The variety of decorative batik motifs is crucial for the development of batik in a region, as it demonstrates the creative attitude of each craftsman and their community during the batik production process (Helmi, 2019). Batik has already existed with various symbols that reflect Javanese cultural values in Indonesia, symbols in motifs contain meaning and

become an incentive to act following their meaning (Sharuddin, et al., 2021; Sugiarto, et al., 2023)

Batik motifs are a crucial component in bringing forth a batik artwork. In Indonesia, batik craftsmen from various regions present batik inspired by observations and sources of ideas derived from forms of flora, fauna, ornaments, and carved decorations (Ismia, 2021). Batik motifs presented continually undergo development based on the experiences and philosophies developed by craftsmen (Safira, 2022). The process of creating craft art can be done intuitively, but it can also be carefully planned, analyzed, and systematic (Gustami in Safira, 2022). This means that the creative process of creating batik motifs can be carried out systematically, from selecting objects to the actualization process of the motif. The creative process of craftsmen, as per the theory of art psychology by Graham Wallas, involves four stages: preparation, incubation, illumination, and verification (Wallas in Belinda, 2020). Through the creative process, batik motifs are presented with distinctive aesthetic values, in line with the different regions and aesthetic values. In the West Java or Sundanese region, there are aesthetic values in the art of motifs that include form, color, meaning, and batik composition patterns. The mandala or kacu (whole) composition pattern used by craftsmen is related to the Sundanese philosophical expression, Masagi (square), which signifies a balanced life (Jakob, 2014). The uniqueness of the decorative variety of batik created by craftsmen lies in the substance that displays

differences, indicating the identity of each batik-producing region (Harto, 2019).

METHODS

This research was conducted at the Batik Lokatmala production house which is located at 20-Z Kenarie Street, Selabatu Subdistrict, Cikole District, Sukabumi City. A batik craftsman from Sukabumi established the first batik production house in Sukabumi, namely Rumah Batik Lokatmala founded in 2010 (FM Interview, 2023). Since 2009, FM has been studying batik techniques and how to create representative, unique, and distinctive batik motifs that reflect the local wisdom of Sukabumi. With a strong determination, the craftsman creates batik motifs that not only showcase the icons of local wisdom in the city or regency of Sukabumi but also motifs with interesting storytelling value. The batik motifs are created based on in-depth research on a local wisdom object that has been previously conducted. One example is the craftsman attempting to highlight the nutmeg tree with its potential beauty, developed in the distinctive Sukabumi batik motif called 'Palawan.'

This research employs a qualitative descriptive case study approach following the methodology outlined by Creswell (2013). The study focuses on three main aspects: narratives and documentation regarding the creative process of batik craftsmen in innovating the contemporary batik motif Palawan, illustrations of the Palawan batik motif, and unveiling the ecological awareness of nutmeg trees in Sukabumi's community through the Palawan

batik motif. The subject of this research is the Palawan batik motif, starting from the creative process of craftsmen or artists in designing contemporary batik to how the Palawan motifs contributes to raise ecological awareness about nutmeg trees among the Sukabumi community. Gaining a comprehensive understanding of this case, observations were conducted on the motif object along with the design process carried out by craftsmen supplemented by understanding the reasons behind the choice of the nutmeg tree as the motif. Additionally, a search was conducted regarding the community's awareness indicators of nutmeg tree ecology. Therefore, interviews were conducted with batik craftsmen and nutmeg farmers or owners. In-depth insights were gathered from interviewed batik craftsmen about their experiences, starting from the research process on nutmeg trees as the initial stage of batik creation, the manifestation process of batik, to efforts to convey the message contained in the Palawan batik motifs to the community. Researchers also looked for information about growing conditions nutmeg trees in two nutmeg plantation locations. Apart from that, interviews were also conducted with several Sukabumi residents, as users of Palawan motif batik.

The main informants for this research are batik craftsmen in Sukabumi and the founder of Rumah Batik Lokatmala, namely FM (48 years old). FM has been involved in the field of batik since 2009, establishing the only batik production house in Sukabumi. Currently, FM has created more than 45 distinctive batik motifs, incorporating

elements of Sukabumi's local wisdom. Some of the batik motifs have obtained copyright certificates (HAKI). The second informant is a nutmeg farmer and owner of a plantation in Tegal Karamat (Babakan Jawa), Sukabumi City, named HTP (41 years old). HTP inherited the nutmeg plantation from his grandfather, and currently there are more than 20 nutmeg trees still utilized as raw materials. Both informants (FM-HTP) frequently engage in discussions about the existence of nutmeg trees in Sukabumi. The third informant is the owner of a nutmeg plantation in Kampung Rambay Kaler Cisaat, Sukabumi Regency, named BI (48 years old). Additional informants, including batik consumers were included to explore the ecological awareness of nutmeg tree through the Palawan batik motifs in the Sukabumi community. Additional informants are Sukabumi residents, as users of Palawan motif batik.

Data were collected through several stages including the observation of the research locations, Rumah Batik Lokatmala, and the nutmeg plantation. Additionally, participant observation involved the researcher directly observing and experiencing the process of raising ecological awareness about nutmeg tree used as a data source. In-depth interviews were conducted, exploring documentation such as images and literary sources. Unstructured interviews were conducted while observing when craftsmen were narrating the creative process of creating the Palawan batik motif, and interviews with the plantation owner aimed to gather information about nutmeg in Sukabumi. Data collection took place from August 2023

to November 2023. The data analysis process followed Creswell's model (2013) through three stages: First, the data reduction process involved reorganizing collected data into a more systematic form based on the predetermined categorization. Second, the data verification process aimed to conclude data based on the reduced categorization. Third, the data presentation process involved describing the obtained data and then presenting it in the form of interview quotes and photo images as essential findings in this study. From these three processes, further inductive data analysis was conducted as the basis for interpreting the data. The stages and analysis techniques used in this study allowed for the formulation of a conclusion regarding ecological awareness through the Palawan batik motifs.

RESULT

The Artisan Process in Creating Palawan Batik Motifs

Sukabumi Batik is a contemporary type of batik that is not bound by strict rules regarding motif composition, color, and size, allowing artisans to create freely according to their preferences. Lokatmala batik house artisans created the Palawan motif in 2014, inspired by the nutmeg fruit. Generally, the duration of creating batik motifs cannot be estimated precisely. According to an interview with FM (2023), *"Batik is not only drawing motifs and then pouring wax or hot wax onto white fabric but also the process and philosophical values bound within it must be carefully considered and accounted for"* FM (interview, 2023).

Emphasized that before creating batik motifs, it is crucial to thoroughly observe and study everything present in nature to seek answers. Therefore, FM's batik motifs are often inspired by natural phenomena, geographic locations, plant vegetation, animal species, and folklore legends that thrive in Sukabumi.

The artisan process in creating batik motifs is done gradually with a relatively short sketching period. Starting from the process of searching for local wisdom objects to be incorporated into the batik motif, artisans encountered an issue when one of Indonesia's endemic vegetation growing in Sukabumi the nutmeg tree, which has many benefits, but has become rare and neglected by the community. Artisans studied the varieties of nutmeg trees in Sukabumi that is visiting several nutmeg plantations still in production, including those in the Cisaat District of Sukabumi Regency and Tegal Karamat in Sukabumi City. They not only studied the interaction between the local community and the nutmeg tree in terms of utilization but also learned about the morphology of nutmeg trees growing in Sukabumi. Gathering data through direct observation, visiting nutmeg plantations, and interviewing nutmeg plantation owners, the artisans conducted this process as a deepening and internalization process towards the batik object. Based on FM's interview (2023), artisans obtained a lot of information about

nutmeg such as information about the lineage of nutmeg in Sukabumi, fruit morphology, and interaction relationships with the local community.

"The nutmeg tree is valuable. I had a friend who studied in Bandung, he paid his tuition fees by selling nutmeg harvested by his father until he graduated. Now, there are only two oldest trees left in Kampung Rambay Kaler, Sukamanah Village, Cisaat District. It is said that these nutmeg trees were planted since 1920, the seeds obtained from the Dutch brought from Maluku and planted in Sukabumi. Until now, both trees are still growing well, despite their old age. They must be preserved continuously." (FM Interview, 2023)

Now a days, the presence of nutmeg tree in Sukabumi has been decreasing due to factors such as tree cutting for land expansion, poorly maintained trees or even due to the lack of knowledge among Sukabumi communities about the potential or benefits of nutmeg trees. According to FM (interview, 2023), nutmeg tree has become an icon of local wisdom for the Sukabumi community. The efforts being made now represent a personal awareness among batik artisans and it is hoped that in the future, it will become communal awareness involving collaboration from all parties or ecosystems in the preservation of nutmeg trees.

Table 1. Nutmeg plantation observation with batik artisans

Source: Authors

NO	DESCRIPTION
1	 Tegal Karamat Nutmeg Plantation (Babakan Jawa) Sukabumi City. The owner of the plantation is named HTP who is a nutmeg farmer inheriting the trade from his grandfather, with more than 20 trees spread over an area of ½ hectare. Nutmeg trees have been planted since 1985 as part of a government program. According to an interview with HTP (2023), the nutmeg yield in Sukabumi is mostly used as a spice ingredient sent to other cities. One nutmeg tree can produce 1-100 kg. The reason the owner of the plantation still maintains nutmeg trees is because they are aware of the economic and ecological benefits of nutmeg.
2	 Nutmeg Tree in Kampung Rambay Kaler, Sukabumi Regency. The owner of the plantation named BI, according to an interview (2023), nutmeg trees have been planted since 1920, with seeds obtained from the Dutch who brought them

from Maluku and planted them in Sukabumi. There is the oldest nutmeg tree (parent stock) growing in Sukabumi, which serves as the first source of seeds for nutmeg farmers.

The deepening process of craftsmen's knowledge about nutmeg is continued by attempting to process nutmeg into other innovative products, this process is done before the creation of the Palawan batik motif. Based on an interview with FM (2023), craftsmen process nutmeg into culinary products namely nutmeg jam for products *Palatarts* (nutmeg tarts) and nutmeg drinks *Chocopalalu* which are still marketed in several culinary centers (cafés) in Sukabumi. According to FM interspersed with other activities, the process of creating batik motifs is not saturated, and the ideas that have been presented in the previous process will naturally connect with each other. Until the craftsmen get inspiration about the form of sketching motifs directly which becomes the result of thought processing in fulfilling the desire to express oneself. The time for creating motifs is very short, it is said that the idea comes suddenly, FM calls it "*ujug-ujug*". The idea comes from the *fuli* or nutmeg seeds having unique veins and textures that is contrasting red with the color of nutmeg fruit. In creating the Palawan batik motif, craftsmen make sketches of new motif stylizations without a selection process, the ideas obtained by the craftsmen flow freely. The form is unique, yet still maintains the main characteristics or uniqueness of the object (FM interview, 2023). After sketching process, FM then arranges the motif

composition based on *mandala* or *kacu* patterns (Sundanese aesthetics) until obtaining the visual design of the Palawan batik motif that will be applied to fabric as the next stage of the process, craftsmen choose to use stamp and write techniques to test their batik motifs.

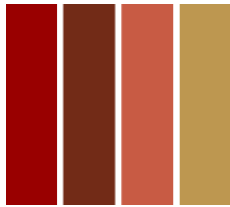


Figure 1. First Sketch FM (craftsmen) Motifs Batik Palawan Ornament and Color Palette

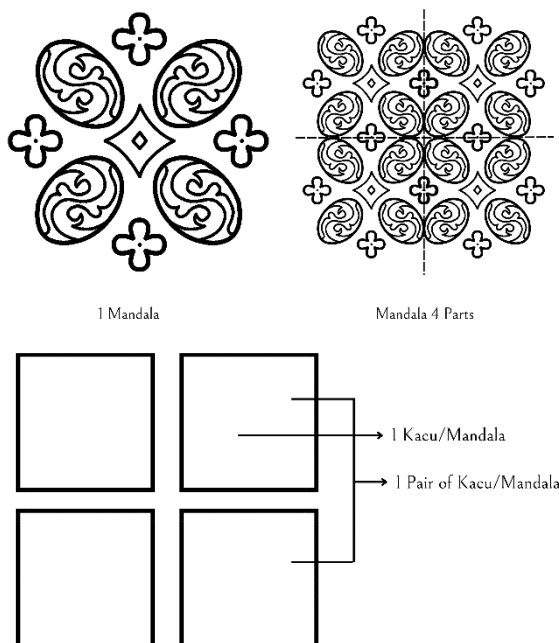


Figure 2. Mandala or Kacu Concept in Palawan Motifs Batik

Illustration and Meaning of Palawan Batik Motifs

Craftsmen present a visualization of batik motifs that involve their innovative

concepts in conveying the narrative of raising awareness about nutmeg tree ecology thus pushing boundaries to engage the community emotionally and intellectually. Craftsman FM interprets Palawan batik motifs as icons and symbols which is representing the nutmeg tree that thrives in Sukabumi and serves as one of the natural resources or assets with numerous benefits. The word Palawan originates from the Sanskrit word "*pahlawan*" meaning "*phala-wan*", which refers to individuals who produce quality nutmeg fruit for the nation, state, and religion.

"This nutmeg holds a meaning associated with heroes. The nutmeg tree which can grow tall and live long can provide many benefits to humans and is always remembered. Meanwhile, heroes are high-quality individuals who take revolutionary and reformative steps while still adhering to local wisdom, serving as inspiration and role models for society. It is hoped that they exist within every individual, bringing benefits to many people and making Sukabumi even better." (FM Interview, 2023)

The main visualization forms of nutmeg fruit are the nutmeg seed or *fuli* and nutmeg flower developed within the Palawan batik motif. Craftsmen observe the visual forms of nutmeg trees that have aesthetic potential. Their principle is to create motifs with novel shapes so craftsmen make a real effort to present unique forms. Thus, the illustration of the nutmeg batik motif. Here is the explanation:

Table 2: Palawan Motifs Batik Illustration

Source: Authors

NO	ELEMENT	STYLIZATION
1		 

The stylized form of the nutmeg seed is the primary shape of the Palawan batik motif. The characteristic vein motif of the nutmeg seed forms interconnected 'S' shapes. "S" stands for Sukabumi. Additionally, 'S' represents *silih* or *saling* which is an expression of the Sundanese philosophy of life. *Silih asah* (mutual reminder), *silih asih* (mutual love), and *silih asuh* (mutual guidance).

2



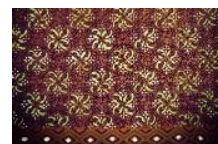
Nutmeg flowers are added as complementary motifs in the batik design or *isen-isen*. They are arranged according to the *Mandala* pattern. In Sundanese culture, there is a philosophy of life derived from the geometric square shape,

called *Masagi* which means balance. Craftsmen apply the square pattern to compose the Palawan batik motifs (FM interview, 2023).

Table 3: Final Result Palawan Motifs Batik

Source: Authors

**FINAL RESULT OF PALAWAN BATIK MOTIFS
(DESIGN AND FABRIC)**



Batik Fabric of Palawan
Motifs *Tulis* or Manual
with *Canting* Technique



Batik Fabric of
Palawan Motifs *Cap*
or stamp Technique

The composition of the Palawan batik motif is similar to the classic Kawung batik motif, the difference is the detail of the ornaments and stylized objects of Fuli/nutmeg which were developed into batik motifs.

**Raising Awareness of Nutmeg Tree
Ecology through Palawan Batik Motifs**

Batik craftsman FM attempts to innovate by developing batik culture in Sukabumi that accurately represents local wisdom. The idea of creating batik is obtained by responding to the issues present in its environment. Lack of knowledge about local wisdom elements in society results in the neglect of natural assets that should be utilized properly (FM interview, 2023). Therefore, art becomes one of the means to cultivate a sense of concern for the preservation of natural assets. This effort cannot be solely undertaken by one party (craftsmen), but other parties also contribute that is including other communities in academia, business, communities, media, and the government. Thus, the effort to raise awareness of nutmeg

tree ecology by batik craftsmen through Palawan batik motifs becomes a catalyst in creating attractive methods for nutmeg tree preservation.

"When I sell batik, I do not want it to be a transaction of buying fabric. I also want to convey a message or narrative through the continuous progression of batik motifs. That was my initial goal. Similarly, when I created the Palawan batik motif with its unique shape, I hope the people of Sukabumi will enthusiastically inquire about its meaning. I want the people of Sukabumi to know and be proud of living in Sukabumi with the natural richness of nutmeg trees growing well, nutmeg fruit that has many benefits, and the hope that in future generations, our descendants can still enjoy its benefits." (FM Interview, 2023)

The campaign to raise awareness about the ecology of nutmeg trees in the community which occur in the environment of the Lokatmala batik production house are directly observed by researchers. Some of these efforts include during the process of purchasing fabric where consumers verbally inquire about the meaning of the philosophical motifs contained in Palawan batik motifs. Additionally, in the EDU-Batik Lokatmana program enthusiastic students who participate in batik workshops ask about the meaning of Palawan batik motifs. In another case, through catalog orders inserted into batik packaging to be read when used as souvenirs or special gifts. Lokatmala batik has become the only batik production house in Sukabumi City, so to

cultivate pride in using local products, Lokatmala batik collaborates with local governments and media to campaign for the use of typical Sukabumi batik. Lokatmala batik designs traditional Sukabumi attire such as *pangsi* and *kebaya sinjang* combined with Palawan batik motifs as uniforms in several Sukabumi City government agencies. Furthermore, through Palawan batik motifs, some culinary businesses are inspired and try to develop unique nutmeg culinary products from Sukabumi. As a result, several environmental communities are moved to participate in preserving nutmeg by planting a number of nutmeg seedlings as an investment for future generations. With these efforts, indicators of ecological awareness among Sukabumi communities are emerging to better recognize the potential of nutmeg trees.

Table 4: The Evidence of Raising Awareness of Nutmeg Tree Ecology through Palawan Batik Motifs

Source: Authors

NO	DESCRIPTION	PICTURE
1	The EDU-Batik "Selendang Palawan" Lokatmala program educates students about nutmeg trees through batik motifs in Sukabumi City. The students become enthusiastic and inquire about the batik motifs (Palawan).	 

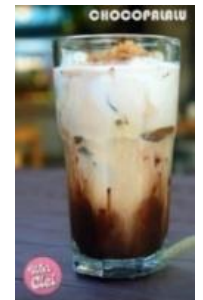
- 2 Purchasing from (DISKUKJABAR) specifically requesting batik shirts with Palawan motifs. The client directly inquired about the meaning of the Palawan motif and intends to showcase it at the West Java Craft Week (PKJB) 2023 event. Description of the motif's meaning will be provided through the Instagram platform.
- 3 Special request for Lokatmala batik fabric packaging with an inserted catalog providing explanations of the meaning of Palawan batik motifs. The goal is to provide recipients of the gift with insights into the narrative of the batik motifs.



- 4 The application of batik motifs on traditional attire uniforms in several government agencies in Sukabumi City. The government authorities directly selected the Palawan motif to be incorporated into the traditional attire.



- 5 Several culinary entities are inspired by the Palawan motif and create unique nutmeg culinary products. *Chocopalalu* beverage, an innovation combining chocolate and nutmeg. Snacks such as nutmeg tart (Palatarts) and nutmeg chocolate which were the result of FM's experiments are now developed into typical Sukabumi culinary products under the brand *PalaOne*.



- 6 The environmental community and the Environmental and Agricultural Department collaborate on a nutmeg tree planting program. Lokatmala batik craftsmen are also involved in the program.



- 7 The Sukabumi community on social media inquiring about the meaning of motifs on the Instagram platform. Several media articles covering Lokatmala batik inspired by nutmeg tree.



nutmeg tree which has many benefits that is decreasing in number and their existence is beginning to be neglected by society. Through batik motifs, the craftsmen make an effort to preserve awareness among society about the ecological significance of nutmeg tree. The first stage of the creative process is called the preparation stage which involves initial research on nutmeg tree in Sukabumi including interviews, observations, and searching for related documents about nutmeg tree, exploring problems while also beginning to present solutions. The second stage is incubation which occurs when the subconscious mind takes over to solve problems are leaving behind ideas that have emerged. The abundance of information obtained complements independent thinking processes; the craftsmen leave behind batik motif ideas and begin working on other activities. The craftsmen develop nutmeg as a culinary product with the aim of triggering insights in the form of batik motif ideas. The third stage is illumination, where new insights or ideas emerge and become clear. Craftsmen begin to conceptualize the design of Palawan batik motifs, consciously processing to create the first sketches, naming the Palawan batik motifs, and interpreting the batik motifs. The fourth stage is verification, which involves evaluating and selecting ideas when they need to be tested against reality. The craftsmen carry out the embodiment stage of motifs, involving direct compositional processes, getting a motif concept without going through a sketch selection process. This process differs slightly from Wallas' testing process due to the in-depth

DISCUSSION

The creative process of creating Palawan batik motifs consists of several stages where forms are perceived by the craftsmen through their senses then reprocessed to present new batik motif shapes. Based on research results, the stages of the craftsmen in creating batik motifs consist of four stages which will be discussed based on the theory of the artist's creative process by Graham Wallas as described in Belinda (2020). Craftsmen FM encountered a nutmeg tree object, then realized the problem when

observation of nutmeg objects, giving the craftsmen strong conviction and immediately conceptualizing Palawan batik motifs.

Based on the stages of the process outlined, the creative process of creating Palawan batik motifs is carried out systematically, but it differs from Wallas' theory of the creative process in previous research. Lokatmala batik craftsmen create Palawan batik motifs with full confidence, so preparation regarding concepts, techniques, and media is carefully considered. This applies when dealing with works that are inherited such as batik where motivation or belief plays a very strong role in the creative process of craftsmen which can be influenced by several factors, both internal and external. Internal factors include the craftsmen's desire to present solutions regarding batik as a medium for raising awareness about nutmeg tree ecology and simultaneously preserving batik culture in Sukabumi. External factors occur when craftsmen gain insights from various sources of information about nutmeg trees in Sukabumi. Thus, craftsmen's motivation in the creative process of creating batik motifs is driven by direct experiences of seeing, experiencing, and feeling the potential of nutmeg trees in Sukabumi that need to be preserved. Additionally, support from the surrounding environment adds encouragement for craftsmen to continue efforts to preserve other local wisdom elements.

The visual motif of Palawan batik falls into the category of non-geometric ornamentation with stylized objects derived

from the shape of nutmeg seeds or *fuli*. Based on the research results, craftsmen arrange batik compositions using the *mandala* or *kacu* concept. Therefore, the author will elaborate on Sundanese aesthetic elements in Palawan batik motifs through the approach used in previous research by Suryana (2018). The form of Palawan patterns consists of a series of dots forming curved lines, creating a plane. In batik motifs, the lines are dynamically arranged, resulting in ornamental patterns resembling nutmeg seed or *fuli* veins, with repeating motifs encompassing values of unity, balance, and prominence. The depiction of motifs involves abstraction (development) from forms found in nature and flora; craftsmen's activities when observing natural objects influence the depiction of batik patterns, without intricate *isen-isen*, giving an impression of spaciousness. Palawan motifs raise the theme of preserving agrarian objects in nature, depicting the craftsmen's spirit in educating society through batik motifs. The main colors used in batik motifs are black or hideung and ivory or gumading, symbolizing firmness and strength, "*Teu unggul kalinduan teu gedag kaanginan*" meaning not shaken by earthquakes or winds, interpreted by Sundanese society as consistent in maintaining what is true. The naming of the Palawan batik motif comes from the name of nutmeg (Sanskrit), then associated with the meaning of the word *pahlawan* (hero). As a means of communicating identity, status, and gender, batik is given content in the form of philosophical values attached to the motifs (Erwanto, H, et al., 2023).

The composition of batik arranged using the *mandala* or *kacu* pattern, Palawan batik motifs as a product of batik craftsmen's thinking can be analyzed based on the motif's shape which is a symbol of the cosmology of Sukabumi society. In accordance with the Sundanese philosophy of life, "*Masagi*" which comes from the word "*persegi*" (square), there is an expression "*Hirupmah kudu Masagi*", meaning life must be balanced, like the shape of a square with equal sides. The main composition of the Palawan motif consists of one part of the *mandala* or *kacu* forming a square that depicts the four directions of space. The vein motif forming the letter "S" that is unbroken represents the concept of a complete *mandala*, one batik cloth for sinjang wear consists of pairs of twin *mandala* motifs. In classical batik motifs, this pattern can be found in the *kawung* motifs.

Ecological awareness of nutmeg tree through Palawan batik motifs in Sukabumi society will be analyzed based on ecological awareness indicators in previous research by Sulastri (2019), namely sensitivity, responsibility, and cooperation aspects. Sensitivity represents the community's awareness of issues present in its surrounding environment as seen when people begin to question the meaning of Palawan batik motifs both directly and in written form (on social media). Verbal communication is conducted by batik craftsmen with interested consumers regarding the narrative of Palawan motifs, and there is enthusiasm among students in the EDU-Batik Lokatmala program. A sense of responsibility drives Sukabumi society to

develop their creativity in promoting ecological awareness of nutmeg trees through batik motifs. When consumers request the inclusion of catalogs containing the narrative interpretation of motifs in every batik product packaging, it is a form of responsibility emerging in the community to continue conveying the craftsmen's message through batik motifs (Interview with Palawan motif batik users/consument, 2023). Furthermore, the cooperation indicator involves various parties supporting efforts to raise awareness of nutmeg tree ecology among Sukabumi society which is including nature lovers' communities in tree planting programs supported by the local government in Sukabumi City. Additionally, the local government is attempting to promote the use of local products by incorporating elements of wisdom while stakeholders in the culinary sector help develop nutmeg culinary products to educate the people of Sukabumi about nutmeg trees. Batik is a major tourist attraction as well as a local economic generator (Kurniati, R, et al., 2023).

Deeply-observed, the process of raising ecological awareness of nutmeg trees through Palawan batik motifs results in collaboration between craftsmen and 5 parties in the penta-helix cooperation model known as the ABCGM concept which stands for Academic, Business, Community, Government, and Media in previous research. In the process, conditioning is required, namely social and ecological approaches. Social and ecological approaches are implemented to preserve nutmeg trees through educational actions by

motivating various parties, including academia in the EDU-Batik program, the government advocating the use of local products through traditional clothing uniforms, social media platforms like Instagram and articles, environmental enthusiast communities, and business actors developing nutmeg products. Thus, raising community awareness (consciousness-raising) and information delivery roles (informing). Based on previous research, motivation can influence community behavior, including towards their environment (Gerry in Sulastri, 2023). Both educational and ecological approaches are inseparable from the role of actors campaigning for ecological awareness of nutmeg trees to the community in Sukabumi. Based on the phenomena outlined, it is evident that the people of Sukabumi are beginning to realize the value of nutmeg trees, and the ecosystem relationship involving various parties to campaign for nutmeg tree preservation is progressing with a positive response.

CONCLUSIONS

Based on the analysis of contemporary batik motif art research, it can serve as a means of raising awareness among the community regarding the ecological significance of nutmeg trees in Sukabumi. This stems from the creative process of creating the Palawan batik motif which involves collaboration between craftsmen and various other parties, indicating an awareness of nutmeg tree ecology in the community. Sensitivity, a sense of responsibility, and cooperation are evident in

supporting the role of motifs in efforts to raise nutmeg ecological awareness in Sukabumi. The first batik craftsman in Sukabumi created a batik motif inspired by the seeds/*fuli* of nutmeg fruits as a means of conveying a message about raising awareness of nutmeg tree ecology to the Sukabumi community. The creative process of creating the Palawan motif by craftsmen is systematic, starting from research on nutmeg trees in Sukabumi, the initial sketching process of the motif, to the realization of the batik motif on fabric. However, it turns out that the process differs from the stages proposed by Wallas in previous research; in the testing stage, there is no selection process for shapes (sketches), so craftsmen directly get a picture of the motif, which is due to the deep appreciation of the object beforehand. The visual motifs of Palawan batik have forms, colors, and compositions that depict Sundanese aesthetic values; craftsmen use the concept of *mandala* or *kacu* holistically.

In this study, the author examines the role and potential of art as a medium for expressing ideas and concepts by artists. Batik art can serve as a method to address a problem. In this context, batik plays a role in promoting awareness of nutmeg tree conservation to the community in Sukabumi. The depth of understanding and appreciation by craftsmen in the process of creating motifs, along with the narratives presented as material for conveying ecological awareness messages and the positive responses from the community, demonstrate effective communication between the art motif and the art audience.

To create a sustainable motif, one way is to conduct in-depth research on the object to be developed so that the motif has a strong narrative. This approach can be applied by artists in developing their art concepts.

This study has limitations in analyzing indicators of ecological awareness in the community, as the research was conducted on a case study of the Lokatmala batik house. Additionally, the object of ecological awareness of nutmeg trees was only conducted in the Sukabumi region, West Java. However, there are other regions in Indonesia that serve as centers for nutmeg production. Various types of indigenous vegetation in Indonesia, especially in Sukabumi, some of which are also depicted in batik motifs by the Lokatmala production house. Therefore, in the future, the author will delve deeper and more broadly into studying cultural objects to generate knowledge.

AUTHOR'S CONTRIBUTION

In the study entitled "Ecological Awareness of Nutmeg Trees (*Myristica fragrans Houtt*) through the Creation of Contemporary Batik Motifs," the main author contributed significantly to all stages of the research process, from the formulation of ideas and theoretical basis to data analysis. The author explored information about the ecological potential and historical value of nutmeg trees as the main object of study, then explored the creative process of craftsmen in transforming them into visual forms of contemporary batik motifs that are full of environmental meaning. In addition, the author also led the documentation

process and the writing of the final research report in a comprehensive and systematic manner. This contribution shows the author's commitment to raising environmental issues through a contextual and local culture-based art approach.

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