# THE ART OF DESIGNING, FABRIC PATTERN BY MOLD WITH NATURAL DYES TO FASHION DESIGN ON CASUAL WEAR. 

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#### Abstract

The objective of this research is to studying history, background, type, format, technique, printing process of fabric pattern from natural mold. In addition and create three patterns for woman apparels on casual wear for woman between 20-25 years of age from fabric pattern that used printing technique from natural mold which leads to 11 patterns design. A researcher has studied these 3 patterns from 7 types of natural mold such as mango leaf, apple, Chinese radish, lotus root, Bodhi leaf, rosella and seaweed then takes these patterns to design, arrange and choose colors from natural material to create 3 patterns. After that a researcher has developed fabric pattern to 3 casual wears by focusing on pattern design on these apparels as much as possible. This is silhouette design which is not complicate and obviously seen fabric pattern. Selected techniques are digital fabric printing which makes sharp pattern combines with letter screen technique which makes apparels have more dimensions then using pastal color to design. With contemporary pattern and color make products more beautiful.


Keywords-- natural mold, patterns design, casual wear

## INTRODUCTION

Currently, there are several people overlooking the problems of pollution and environmental effects caused by wastewater generated by chemical dyeing. On the other hand, they mentioned on disadvantages of natural dye regarding its durability against washing and light. As long as this mindset still exists, value able local wisdom, especially on products obtained from natural mold and colors may be disappeared finally. How to survive and inherit this local wisdom?

The use of natural mold for designing patterns is another eco-friendly guideline. Natural molds are made of natural material including leaves, flowers, vegetables, and fruits, etc., that are used as molds for printing various patterns. Materials that will be used as molds should be made of appropriate materials without any danger including:

1. Generally available materials;
2. Materials with explicit patterns;
3. Materials that are not dangerous for utilization, for example, have no sharp prickle;
4. Materials with hard surface or consisted of small amount of water, therefore, color can be painted on its surface properly;
5. Materials with proper size and convenience for utilization

Based on above information, the researcher gave an effort to study on fabric patterns design process by using natural molds, for example, leaves, flowers, vegetables, fruits, etc. In addition, the researcher also improved colors obtained from natural materials to have similar properties as those of synthesized colors. Consequently, naturally gorgeous contemporary fabric patterns would be obtained that were also eco-friendly.

With this reason, researcher had conducted the study of "Fabric Decoration Art from natural mold for textile product design: specific study on technique and process of decorative design with natural mold such as leaves, flowers, vegetables, fruits, etc., from natural raw material". These decorations are used in 3 sets of female casual outfit design for women group of 20-25 years old.

## OBJECTIVES

1. To study on history, background, types, forms, techniques, and fabric patterns printing by using natural molds.
2. To study on fabric patterns design process by using natural molds.
3. To study the design principle of female casual outfit design for women group of 20-25 years old from decorative design with fabric printing technique from natural mold.

## METHODOLOGY

## I. Data Collection

This is an experiment research to study academic technique and process to establish the knowledge about "Fabric Decoration Art from natural mold for textile product design: specific study on technique and process of decorative design with natural mold such as leaves, flowers, vegetables, fruits, etc." then apply into 3 sets of female casual outfit design properly.
Conceptual Framework
Figure 1
(Conceptual Framework)


## II. Research Methodology

1) Research for experiment examples
2) Research about experiment material and process
3) Controlling extraneous variable during the experiment
4) Data Collection
5) Research Result Analysis

## III. Data Analysis

The researcher collected data from the experiment on printing fabric patterns obtained from 7 types of natural materials then such data were analyzed with the criteria on data analysis regarding shapes of patters created by natural molds. Data obtained from such analysis would be used as the guidelines for further fabric patterns design.

Table 1
Table of the Mold Analysis 1

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :---: | :---: | :--- |
|  |  | Obtained patterns were <br> consisted of frame lines <br> upon the shapes of mango <br> leaves. In addition, its fibers <br> could be seen clearly. |
| mango leaves |  |  |

Table 2
Table of the Mold Analysis 2

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :--- | :---: | :---: |
| Cut |  | The core of pattern created <br> by horizontal line resembled <br> five-pointed star. |

Table 3
Table of the Mold Analysis 3

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :---: | :---: | :---: |
| Oblatained pattern resembled |  |  |
|  |  | Obtase with layered petals. <br> a rose |
| white radish |  |  |

Table 4
Table of the Mold Analysis 4

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :---: | :---: | :---: |
|  |  | Obtained pattern resembled <br> combination of oval <br> channels. |
| ans |  |  |
| lotus root |  |  |

Table 5
Table of the Mold Analysis 5

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :--- | :---: | :---: |
| leaf | Bodhi | Obtained pattern was <br> consisted of frame line of <br> Bodhi leaf with clear lines <br> of its leaf lines. |

Table 6
Table of the Mold Analysis 6

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :---: | :---: | :---: |
|  |  | Pattern of its outer frame <br> was the shape of pentagon <br> with clear five channels. |
| roselle |  |  |

Table 7
Table of the Mold Analysis 7

| Materials used for making <br> molds | Patterns obtained from printing | Description |
| :---: | :---: | :---: |
|  |  | Obtained pattern showed <br> leaf's lines scattering as the <br> bunch of the top of seaweed <br> clearly. |
| seaweed |  |  |

## RESULTS

1) History, background, types, designs, techniques, and process of fabric decoration printing from natural mold were studied
2) The process of fabric decorative design with natural mold printing was obtained
3) The principle of female casual outfit design for women group of 20-25 years old from fabric decorative design with natural mold printing was obtained

The experiment result of fabric decorative design with 7 natural molds printing is used for data analysis by using design shapes from natural mold as the analysis criteria. Then, researcher had used the data from analysis as the guideline for 11 fabric decorative designs as follows;

## Pattern 1

Figure 2

## The contribution of fabric patterns design 1



Obtained patterns were created by using several types of natural molds in order to adjust printing patterns to suit with development of scarf design. Such created patterns were consisted of printing patterns created by the following natural materials: Seaweed, Cut apple, Potato and Sweet pepper.

## Pattern 2

Figure 3

## The contribution of fabric patterns design 2



Obtained patterns were created by using several types of natural molds in order to adjust printing patterns to suit with development of scarf design. Such created patterns were consisted of printing patterns created by the following natural materials: Mango's leaf, White radish, Bodhi leaf, Cut apple and Lotus root.

## Pattern 3

Figure 4
The contribution of fabric patterns design 3


Obtained patterns were created by using several types of natural molds in order to adjust printing patterns to suit with development of scarf design. Such created patterns were consisted of printing patterns created by the following natural materials: Seaweed, Cut apple and Crafted pumpkin.

## The result of casual outfit design from natural mold pattern design

From 3 fabric decorative designs as mentioned above, researcher had developed those patterns into 3 sets of female casual outfit design for women group of 20-25 years old with the detail of designs as follows;

Figure 5
Design Set 1


Design Pattern
Shirt Style
Pants Style
Skirt Style
Color
Fabric

Skirt: soft light chiffon
Decoration Outer shirt and pants: natural mold decorations no. 1
Inner shirt: English alphabet decoration
Technique Digital Printing
Figure 6

## Design Set 2



## Design Pattern

Shirt Style
Pants Style slim fit pants with front zipper, decorated with different fabrics on the front with zig-zag sewing lines
Color Pastel light pink, old rose pink, and light blue
Fabric Inner shirt: Cotton100 single jersey with printed decoration
Outer shirt: duchess-spandex with printed decoration
Pants: duchess-spandex
Decoration Shirt: natural mold decorations no. 9 with Alphabet decoration on the sleeves
Technique Digital printing
Tiled sewing line at the patches and sequin decorated
English alphabet silk screening on the pants

Figure 7
Design Set 3


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Design Pattern <br> Shirt Style <br> \section*{Description} <br> Sleeveless slim fit opened back crop top with zipper at middle front, upright collar, patched with other fabrics on the chest and collar <br> \begin{tabular}{cl}

Pants Pattern \& | Loose shorts with opened back, 2 buttons at the inner waist and |
| :--- |
| invisible zipper | <br>

Color \& | Pastel light green, light grey, light blue |
| :--- | <br>

Fabric \& | Shirt: duchess-spandex with printed decoration, patched with printed |
| :--- |
| chiffon | <br>

Decoration \& | Pants: duchess-spandex |
| :--- |
| Shirt and pants: natural mold decorations no. 7 with alphabet decoration |
| on the chest cutting line |
| Digital printing | <br>

Technique \& | English alphabet silk screening on the pants |
| :--- |
| Beads embroidering on the collar and pants bottom |

\end{tabular}

}

## DISCUSSION

In this study, researcher had designed by using decorations from natural molds that caused some pattern lines not appeared clearly as expected, therefore, selection process of material used as a mold must choose the material with sharp surface for better visibility with the results of various and unique designs.

When applying with fabric decoration designs for using in casual outfit designs, decorations are adjusted properly for outfit structure and used decorations must fit for the circumstance which conformed to the study of Sombat PrajonSan (2015), implied that Khmer castle decorations must be well-analyzed for appropriateness and circumstances that they must not affect any beliefs (Sombat PrajonSan, 2015, P.333). Then, researcher had utilized the natural molds by adjusting the composition on the outfit with repetitions the same or similar patterns on the edges of the outfits which conformed to the design theory of Sombat PrajonSan (2015), The process of Graphic Design, or visible symbolic image design, by using the transformation of element by subtractive method to simplify the decoration details that remains only the primary structure of decorations (Sombat PrajonSan, 2015,P.333).

For the development of fabric decorations to casual outfit, researcher concentrates on displaying most of the decorations on the outfits by designing simply silhouette that allows the decorations to be clearly visible. Techniques used in this study are as follows; Digital printing for sharp decoration outlines with text silk screening for dimensional look of the outfit and fabric decorations are able to develop using in fashion accessories design such as bags, hats, shoes, earrings, necklaces, and headbands as well. Researcher chooses Pastel color tone in the design process to create 3 special occasion outfits with colorful and contemporary decorations.

## SUGGESTION

In this study, researcher had designed by using decorations from natural molds that caused some pattern lines not appeared clearly as expected, therefore, selection process of material used as a mold must choose the material with sharp surface for better visibility with the results of various and unique designs and fabric decorations are able to develop using in fashion accessories design such as bags, hats, shoes, earrings, necklaces, and headbands as well.

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