

# Exploring Dry Teak Leaves As A Material For Indoor Sculpture

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*Abstract: Teak is a tropical tree used widely by sculptors and wood designers. True teak is indigenous to South East Asia, but similar wood species also grow in Africa. Artists throughout the centuries have done immensely well in coming out with wide variety of art materials which artists used as basis to develop many master art pieces. This work aims at using teak leaves as the main material that will add up to the already known ones. This could be cheaper in acquisition for the art industry in the localities where it can be found. Dry teak leaves were collected and soaked in water for at least three days. They were then squeezed out and pounded into fine paste. Three different experiments were conducted. In experiment one, the pounded teak paste and cement were mixed in the ratio of 3:1. Secondly, the teak paste and POP were mixed in the ratio of 3:1 and in the third case, which is in the ratio of 4:1 paste and white glue were mixed. The paste materials took five, two and six days respectively to bone dry. Sketches of the work were made and drawn on the prepared background. White glue was spread over the sketch on the board and the mixture (leaf-paste and cement) was used on it to get the desired design. After drying, the work was decorated. This compared significantly in desired qualities to existing materials in common use. The research proved that teak leaves can be used as a substitute material for sculpture. The research encourages artist to take keen interest in using dry teak leaves to execute outstanding projects in art.*

**Keywords:** "la victoire", Teak leaves, teak paste, relief sculpture.

## I. INTRODUCTION

Sculpture, one of the oldest visual art, which over the years, assists humanity historically, economically, socially, politically etc. It is an important yard stick to measure the past as far as the marking of important events about life are concerned. It is also used to upgrade knowledge about the past, and a source of employment for the artists. Sculpture cuts across all human horizons with the use of different outstanding materials.

The world is richly endowed with numerous and potential raw materials in exploring tangible ideas in order to express oneself through art that enriches the cultures of the people from time to time. Some materials are realized with great perseverance, toil and suffering, while many are lying closely around us, wasting from time to time, which the artists sometimes, think invaluable, even though less expensive, their identification as excellent and potential materials for the art industry are yet to come into realization. Many expensive media such as wood, metal, plastics, cement, plaster of Paris, fabrics, etc. were utilized in executing sculpture works such as car manufacturing, architectural objects, home appliances, decorations and agricultural equipment etc. This paper came

out with dry teak leaves as a possible material for the sculpture industry.

Cottingham (2005), in his book, points out that because the starting point of these explorations has been a questioning of the materials, conventions, and skills of art practice itself. This questioning has been conducted via a range of gestures that has run from the iconoclastic, such as Picasso's use of newspaper and wall paper, old tin cans, and other junk to make his collages and sculptures.

Most artists may admit that before starting a work of art, there are many questions as regard to the right material and the requisite mechanics used in turning it into the desired art form as Cottingham suggested. Every art material has its own properties and needs to be experimented before been used. Many malleable materials dry without firing them, and according to Bruner (2006) air-dried or non-firing clay (also known as self-hardening or air-hardening) do not need to be fired in a kiln, and are generally ceramic clay body formulas with a natural additive, such as cornstarch, to make them harden." other materials such as plaster, Polymer Clay (Plastic), etc do not need firing since there are hardening substances in their composition.

It is in line with the above composition that the cement, POP or white glue has been added to the mashed teak leaves to make the finished work hardened.

Burner further stated that, after a finished piece has dried and been sealed, it can be decorated for display in a number of interesting ways. One can add bright colours using acrylic, oil, latex, or watercolor paint, or can achieve mute colour effects using wood stain, wax pigmentation applications, or clothes dyes. The finished piece of work can be sprayed.

Fulcher et al (1981), stressed the need of preparing good backgrounds for all surfaces on which works are to be presented. This adds to the aesthetic quality of the work thereby prolongs its durability.

## II. METHODOLOGY

Experimental method was used to portray the effectiveness of the teak leave paste as a potential material for sculpture. Descriptive method was employed to describe how the various binding materials such as Plaster of Paris, cement and white glue can be mixed effectively with the teak leaves paste for the production of the works. Practical method was used to portray works in relief art using teak leave paste.

## III. MATERIALS AND METHODS

### A. BACKGROUND STUDY OF TEAK

Teak is a yellow to dark brown hardwood which is extremely heavy, strong and durable. Often strongly figured, teak may show straight grain, mottled or fiddle back figures. It carves well, but because of its high value, is often used as a veneer. Teak shares its leaves annually especially getting to the dry season. The leaves spread and cover a wide range of space under its tree where they are cultivated as shown in figure 1, 2, and 3. Since man sees no use of them, they are burnt by bush fires in every dried season.



Plate 1: Teak Forest



Plate 2: Under the



Plate 3: Pile of Teak Leaves

### B. PROCESSING THE TEAK LEAVES

The dry teak leaves were collected, pounded and mixed separately with the binding materials such as cement, Plaster of Paris (P.O.P), white glue and water.



Plate 4: Pounding the Teak Leaves

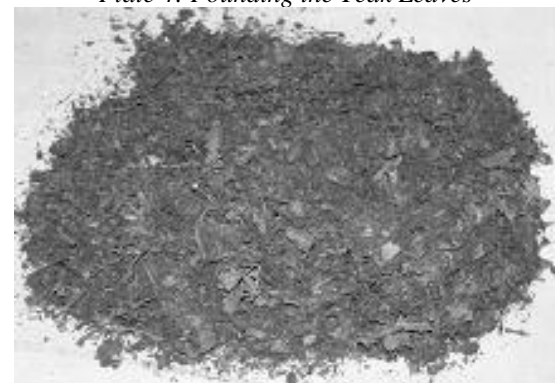


Plate 5: Pounded Leaves

#### IV. EXPERIMENTS

Finding out how effectively cement, POP and white glue can bind the pounded teak leaves material for the work. The following experiments were made to confirm the use of the teak leaves for relief sculpture.

##### A. EXPERIMENT 1

The Plaster of Paris (A1) was mixed with the pounded leaves (A2) in the ratio of 3:1 and sprinkled into a sizeable water in a bowl. The result is (A3), which is the caked mixture of the Plaster of Paris and the pounded leaves. (Plate 6. A1, A2 and A3). The mixture took two days to bone dry under a good ventilated ground.



Plate 6: A1, A2 and A3

##### B. EXPERIMENT 2

The cement (B1) was mixed with the pounded leaves (B2) in the ratio of 3:1. The result is (B3), which is the caked mixture of the Plaster of Paris. and pounded leaves. (Plate 6. B1, B2 and B3). The mixture took two days to bone dry under a good ventilated ground.



Plate 6: B1 B2 and B3

##### C. EXPERIMENT 3

In this experiment, the teak leaves (C2) was mixed with white glue (C1) into the ratio of 4:1. The result is (C3), which is the caked mixture of the white glue and the pounded leaves. (Plate 6. B1, B2 and B3). The mixture took six days to dry in the sun.



C1.

Plate 6: C1, C2, C3.

#### V. PRELIMINARY DESIGN

Series of sketches were made for each work, and the best were selected and developed the final works. Figure 1, 2 and 3 show three final sketches entitled "the fight", at the back of the bird" and " the gold" respectively were used as guides for the finished works.



Figure 1: The Fight



Figure 2: At Back of the Bird



Figure 3: The Gold



Plate 7: Modelling

## VI. WORKING PROCEDURE

### A. PREPARATION OF SURFACE

Some of the surfaces on which these works can be executed depending on the artist; some of these substrates include wood, plywood, plastics, fabrics, metal, aluminum, glass, wall, etc. However, in this study, cardboard which can be easily accessible by the artist, was used as the base of the works since it is one of the common and cheapest backgrounds available in the market. The cardboard was cut to size, framed, made good, primed and undercoated for the finished work to be pasted on.

All the three works share common material and the same working procedures were used for all. The mixed materials were picked differently according to the already mentioned ratios. The mixed material was watered and re-mixed for use.

**STEP I.** A flat cardboard was prepared and the sketch of the scene was transferred onto it.

**STEP II.** A piece of transparent polyethylene sheet was used to cover the surface of the cardboard where the scene sketched plate as indicated in plate 7. This facilitates the modelling process. This transparent polyethylene sheet prevents the background from being soiled with moisture emanating from the work.

**STEP III.** The mixing teak paste with cement, POP. and glue as explained in experiment, plate 6, were used differently to mould the scenes on the polyethylene sheet and reinforced with binding wire and fibre. The layers were built with mixed paste gradually till the three scenes were completed in basic forms, plate 7. Small amount of the paste was mixed at a time to avoid waste.



Figure 4: Sketch Covered



Plate 8: Removing The with Rubber the Work Rubber under the Work

### STEP IV. DEFINING THE FORM OR SUBJECT

At this stage, the forms of the works were defined by building up where there were dents or inaccuracies, by adding the fresh paste or scouring out parts of the modelled works carefully to create rough edges. The works were then rendered damp or wet for the application of the fresh layers of paste on the old one, thereby achieving the exact forms or subjects being modelled. The works were then allowed to dry (leather hard).

### STEP V. DETAILING OF THE FEATURES

At this stage, the detailed treatments or characters were given to the works, using detailing modelling tools to portray the right forms or shapes of the subjects they are depicting, and then allowed to dry (bone dry).

### STEP VI. FINISHING

Abrasives were utilized to achieve the right texture of the subjects after drying, while cracks were filled with wood or wall filler. The works were allowed to dry thoroughly and polished. The pieces of rubber were carefully pulled out from the base of the works, plate 8 and their backs were abraded to aid in gluing. The works were finally fixed with white glue and finishing coatings were applied to enhance their beauty.

## VII. RESULTS AND DISCUSSION

The works have been given titles which were used as interpretative guides. Each of them was produced as a result of deep thinking, leading to creative ideas.

The work "La Victoire", Plate 9 is a relief sculpture measuring 90 cm x 47cm x 4 cm. The main material used was the teak leaves paste mixed with POP, experiment plate (6 A1, 2 and 3)). A semi abstracted human figure and a horrible beast were presented in fighting position in which the beast is defeated by the human figure through the use of a long sword. The lines and the textured surfaces, add to the quality of the work. There are two main colours contrasting each other: white and black, differentiating the colour of the abstracted figure and that of the beast. The work critically looked at in term of visual appearance, is a sign of victory. The study employed smoothness, texture, lines and circles interchangeably to design the work. The use of the reddish background as against the white, red and black in the work depicts danger, which brought victory to the human figure.



Plate 9: "La Victoire"

The second work "at the back of the bird" Plate (10) comprises of a semi abstracted large bird carrying an abstracted figure, flying in the shaded blue space. It was the second experiment, using the mixture of teak leaves paste and cement, plate (6 B1, 2and 3). A colour scheme used on the textured surface of the bird as against the shaded bluish background, has given an added beauty to the work and this also represent an atmosphere of love and peace.



Plate 10: At the Back of the Bird

The work "The Gold", Plate 11 is a relief sculpture measuring 90 cm x 67 cm x 4 cm. The mixture of teak leaves paste and white glue plate 6C were used to produce the work. The three heads of the creature at the right side of the work have mouths resembling that of the bird. The middle part of it looks like sacks containing some items. This is seen vomiting the strange creature. The work depicts a powerful creature vomiting substances that the artist termed as "the gold", which cannot be achieved easily but through determination and perseverance. Watching the creature, it appears that the substances are not easily coming out, and this can portray the difficulties in acquiring wealth.



Plate 11: The Gold

In the light of the above experiments, the study has proved that dry teak leaves could be effectively used as a substitute material, mixed with other binding materials such as P. O. P. cement and white glue, for the production of art or relief sculpture. The works presented could be duplicated with same materials, techniques as decorated pieces at public places such as hospitals, schools, children's homes for beauty, learning and problem solving. The works can also be exhibited by hanging at resting apartments where people can use them as recreational, meditational or relaxation facilities.

## VIII. CONCLUSIONS

The study explored the possibility of using dry teak leaves, which become waste and burnt in every dry season, as a potential material for the sculpture industry. The price of art materials are going high, coming out with this inexpensive one will facilitate the acquisition of cheaper but quality material for the art industry, which can also reduce cost of production. The study has come out with a relevant and potential material that sculptors and other artisans can easily use to bring out many skillful art forms in reliefs and three dimensions. It is also a material that art teachers and students in schools and colleges can adopt and capitalize upon in teaching and learning in order to develop their skills in the art profession, and produce works that can embellish the inner vicinities in our homes and our offices. Others may continue using in as a ground for further research works.

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