

PRESERVATION OF PALM LEAF**Dr. S. Loorthurani**

Assistant Professor, Department of History, Muthurangam Government Arts College, Vellore, Tamilnadu



Cite This Article: Dr. S. Loorthurani, "Preservation of Palm Leaf", International Journal of Interdisciplinary Research in Arts and Humanities, Special Issue, December, Page Number 15-16, 2017.

Introduction:

Since early times various materials have been used to write on. Before the introduction of paper, the most common material used to write on in South and Southeast Asia was the palm-leaf. Large collections of manuscripts on palm-leaves are found in museums and libraries everywhere in this region. In parts of north India, birch-bark was also used. In Egypt the most popular material for writing was papyrus. In some countries, not so much in India, parchment, prepared from animal skin, was much in use. After the introduction of paper, all other materials gradually fell into disuse. Most manuscripts were then written on paper. Paper manuscripts, books and documents are to be found in large numbers in museums, libraries, archives, etc.

Palm - Leaf Manuscripts:

Before the advent of paper, palm-leaf was by the most important writing material in almost all South and Southeast Asian countries. Palm-leaves were dried, boiled in water for a few hours, and then dried again. The leaves were cut to size, according to need. This was the general method, but slightly different processes for preparing the leaves were undoubtedly developed in different parts of the region. Palm leaves are long but narrow. Sometimes two or more leaves were stitched together to give a broader writing surface. For writing on palm-leaves, either a pointed metal stylus was employed to incise letters and illustrations on the leaves or pen and ink were used to write on the leaves as is done on paper. To bind leaves of a manuscript, holes were punched in the centre of the leaves or on either side of them, and cords passed through them to keep the leaves together. The manuscripts were placed between stiff boards, generally of wood, sometimes decorated by a carving or painting.

As time passed palm-leaf became brittle and got easily broken even when bent only slightly. This happens especially when the atmospheric conditions are very dry. Brittle palm-leaf manuscripts should be stored in small boxes so that their handling is minimized. If the leaf is too weak and has lost all its strength, a laboratory must be consulted for its treatment. The most delicate part of the palm-leaf is the edge. In most cases, it is friable and is damaged by handling. It is, therefore, necessary that the leaves be always stored between two stiff boards, slightly larger in size than the leaves, as was the custom in ancient times. In order to avoid frequent handling, it is wise to have microfilms or microfiche of the manuscripts. Insects inflict heavy damages on palm-leaves, probably much more than on paper. Fumigation with vapour types of insecticides and application of insecticidal solutions are efficacious remedies.

Paper:

The paper was first invented by the Chinese and is was thin felted material. In India paper making became known by about 12-13th century A.D. Paper is manufactured of fibrous materials like cotton, wood, bamboo, rice straw and similar materials. The fibres from these materials are separated mechanically, cleaned and suspend in water. Screens of net are dipped into the suspension, and the fibers are lifted out and felt together to make the paper sheet. It is then sized with solutions of gelatin, starch, or rosin to prepare the surface for writing.

The most important constitute of paper fibres are cellulose and lignin. Lignin is more vulnerable to destructive agencies than cellulose. For this reason all-cellulose paper, for example all rag paper, is considered more suitable from the preservation point of view than the other types.

Manuscripts suffering from acidity are treated in a conservation laboratory for neutralizing the acidity, most commonly by treating it with a water solution of calcium bicarbonate. Ever so often paper manuscripts develop stains, particularly water stains, which in most cases are caused by bad storage. A manuscript should never be touched with oily and greasy hands.

Insects are another great menace to paper. Silverfish (it damages mostly the surface of the paper) and bookworms commonly attack manuscripts. Regular inspection of materials on exhibition and in storage is essential in order to make sure insects are discovered promptly and eliminated. If a manuscript gets soaked with water accidentally, immediate action must be taken to dry it, otherwise fungi are bound to grow on it. Light, especially sunlight, direct or indirect, has a serious damaging effect on manuscripts. It not only causes the colour to fade, but also weakens the material of the paper. Paper manuscripts should be exposed to light for as short a period as possible

Manuscripts are sometimes ornamented with painted decorations or with miniatures. In such cases the methods of preservation described in the chapter on paintings should be followed. Proper storage of manuscripts is extremely important for their preservation. The traditional Indian technique of wrapping the manuscript in square piece of coloured cloth, usually red or yellow, has much value to recommend it. This Practice not only saves manuscripts from physical damage due to handling, but also protects them from dust, insects and light. To a certain extent environmental control is also ensured. Another method is to store the manuscripts in boxes made of non- acidic boards.

Conclusion:

Bound manuscript, generally the case with Persian and Arabic manuscripts, are subject to chemical as well as physical deterioration. Rough handling is the greatest cause of physical deterioration. Manuscript, bound or unbound, if wrapped in clean cloth before being stored, as was the traditional method in India, will be saved to a great extent from the damage caused by dust,

International Journal of Interdisciplinary Research in Arts and Humanities**Impact Factor 5.225, Special Issue, December - 2017****National Conference on Disseminating Knowledge on Preservation and Conservation of Ancient Monuments and Antiquities of India****On 19th & 20th December 2017 Organized By****PG & Research Department of Botany & Biotechnology & History, Bons Secours College for Women, Thanjavur, Tamilnadu**

light and physical agents. A leather-dressing mixture may be applied on the leather of the binding to keep it from drying out and becoming brittle.

References:

1. Taglie, Italo: Biodeterioration caused by Insects on some Furniture and the Wood Structure on Italian Cultural Property : Prevention, Control, Struggle, Biodeterioration of Cultural Property, Ed. O. P Agarwal and Shashi Dhavan (MacMillan & Co., New Delhi, 1991)
2. Thomson, Garry: Calibration and use of and Ultra-violet Monitor, Museum Climatology, The International Institute for Conservation, London, 1968,pp. 159-182.
3. Thomson Garry: Climate and the Museum in the Tropics, Conservation in the Tropics, International Center for Conservation, Rome, 1974, pp. 37-52