INDIGENOUS METHODS OF PRESERVING MANUSCRIPTS: AN OVERVIEW

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Abstract:

The holdings of libraries, museums, archives, and other documentation centers are the priceless heritage of mankind. Not only in the context ancient lore but also in the context of medieval and modern age manuscripts are considered as the most important source of authenticity. The manuscripts constitute our most precious national and cultural heritage. Thus Preservation of manuscripts is a serious issue for the custodians, Librarians, Information scientists, Archivist, Curators, and Scholars. In spite of the advent of suitable chemicals for preservation and their availability, traditional methods for preservation are in practice. In this paper an attempt has been made to summarize the effectiveness of the Indigenous Methods of preservation.

Introduction:

Preservation of documents is an important subject for the Librarians, Information scientists, Archivist, Curators, Scholars and also for different types of institutions. The problem of preservation of rare documents has continued ever since human beings acquired the knowledge of writing. It may be Babylonia, Assyria, Sumeria, China or India; the scribes were always worried to preserve their writings for posterity with whatever means they had. Scholars like Aristotle, Ovid and Horace were also worried about the safety of the manuscripts from the insects. So, preservation of manuscripts is a serious problem for the custodians through out the world. Palm leaf manuscripts constitute our most precious national heritage as rare pieces of recorded knowledge. These manuscripts are the powerful medium for preservation of our literary, linguistic, artistic and cultural heritage. These are the only source of the unknown and unknowable. So every possible effort must be taken to save these treasures for the future generation.

Why Indigenous Methods?

At present there are no dearth of modern chemical pesticides and repellants for the safe upkeep of manuscripts. The advent of technology has also given rise to greater concerns of preservation of manuscripts by adopting modern technologies. Still the

traditional methods of preservation are in vogue, as these methods have their own merits like:

- these are not hazardous for human health.
- these do not have any adverse effect on the materials.
- the methods do not require much expertise, equipment and money.

In this context an attempt has been made to summarize the effectiveness of various traditional practices, Indian herbal pesticides and insect repellants which are being used by different organizations or could be used by the organizations to seize the growth of insect infestation in the manuscript repositories.

Traditional Preservation Methods:

The knowledge of preservation is not new to Indians. From ancient times several indigenous methods have been used for preservation of manuscripts. The people were also quite aware of the basic factors of deterioration of the manuscripts namely light, dust, heat and humidity. So in order to protect the manuscripts from these possible factors, the manuscripts were usually covered by clothes. Nevertheless some traditional practices, which were adopted by the custodians of manuscripts and are still being practised, are enumerated below:

(a) Safe upkeep of manuscripts is ensured even before writing on the leaf. Seasoning of the leaf by burying them under the mud or boiling them in water are considered to have some antiseptic effect against the damage caused by the insects.

(b) Usually to fasten the manuscripts, holes are punched on the leaves and cords are passed through them. These are then placed in between two stiff flat wooden boards having the same type of holes for passing the cords. The wooden boards press the leaves from both the sides, prevent curling at the edges and chipping by abrasion.

(c) Wrapping the manuscripts in clothes, protect them from dust, worms and also to a great extent from variation in atmospheric humidity and absorption of acidic fumes.

(d) Palm leaves are usually wrapped in red or yellow colour clothes. It is believed that red is a repelling colour for the insects and yellow colour if, produced by turmeric possess some germicidal power that repel the insects from getting in contact with the manuscripts.

(e) Manuscripts are also wrapped in silk clothes as silk is remarkably free from bookworms for which its extensive use has been seen.

(f) The bundles of manuscripts are also kept in heavy wooden chests to reduce the rigorous changing of climate.

(g) Exposing palm leaves in the kitchen have the scientific fact that smoke particles have the capacity to repel the insects. Though the smoke deposits bring out undesired changes on the leaves yet this system is effective for prevention of insect attack over the palm leaf manuscripts.

(h) Exposure of the leaves to the tender rays of the rising or setting Sun destroys the traces of growth of insects and micro-organisms.

(i) The palm leaves are usually arranged and strung together with the help of a needle made of bamboo and a string of cotton or silk which keep the leaves intact.

(j) At some places underground cells are prepared for preservation of manuscripts.

(k) Manuscripts are generally exposed to the Sun in the Lunar month of Bhadraba i.e. in August as the rays of the Sun in that particular month are very favorable. By this the worms are killed under the Sun.

(l) The indigenous method is to take out palm leaves on Vijaya Dashami day then they are cleaned and kept back.

Herbals and Natural Products:

Some of the plants and their products, which have been recognized since ancient times for their germicidal properties and insect repellency potentialities, have been mentioned below:

1. Dried and powdered leaves of *Aswagandha* in small packets are kept with the manuscripts covered in clothes to repel insect attack..

2. Along with bundles of manuscripts pieces of *Vasambu* or dried ginger are kept to save these from insect attack..

3. Coatings of lemon-grass oil are given to strengthen the leaves of manuscripts and destroy the growths of micro-organisms.

4. In some repositories people use vermillion or *kumkum* fruit powder (which is red in colour) that act as a very good insect repellant.

5. Powdered roots of dried sweet flag known as *Bacha,* filled in small bags are kept in cup-boards of manuscripts which has got very good medicinal value and insecticidal power.

6. Oil extracts of some natural products like black pepper, sandal wood or clove facilitate in the restoration of flexibility to the palm leaf manuscripts.

7. The use of fresh palm leaf extract has also the possibilities of imparting flexibility to the old and brittle leaves.

8. Powdered *Ajwain* also acts as an insect killer and fungicide.

9. Custard-apple seeds powder is used to kill the insects that thrive on manuscripts.

10. The mixture of neem laves, karanja, nirgundi and citronella are known to have insecticidal properties for which it could be used in the manuscript libraries.

11. Dried Tamakhu leaves also protect the manuscripts against attack of insects. The leaves are generally packed in small cloth bags or spread on the shelves where manuscripts are kept. The nicotinic acid of the leaves keeps the insects at bay.

12. Leaves of the Five-leaved-chaste tree (Vitex Incisa) are dried in Sunrays and kept along with the bundles of the manuscripts. As these trees are grown in abundance in Orissa, its use is very common here.

13. Naga-damani known as Indian worm wood bears an essential oil whose sweet aroma and insect repellant action helps to eradicate insects from the manuscripts.

14. Mint leaves also repel ants and cockroaches.

15. Black-Cumin (Kala Jeera) which gives a strong aromatic smell also used as an insect repellant. Scattering of the seeds at the manuscript storage keeps away insects.

16. Sandal wood dust is commonly used by many libraries to ward off insects.

17. Neem oil contains limonoids, a class of compounds that acts as anti-feedants or growth regulators in insects; they don't kill instantly but wipe out a whole generation of insects by preventing the young ones from maturing and adults from reproducing. Dried Neem leaves and seeds are also useful in keeping away insects. So its use has been widely recognized since ancient times.

18. As the wooden planks attached to the bundles of manuscripts are prone to insect attack, in some libraries the planks are made of neem wood which can ward off termite.

19. The annual ritual is to apply coconut leaf juice (*Coccinia Indica*), wood charcoal and turmeric paste with a clean cloth and after wards it is wiped away to make the leaf proof against insect and fungal attack.

20. Another natural product – Camphor (*Karpura*) is commonly used in India to protect valuable documents. Filled in small cloth bags it is kept inside the storage of manuscripts. Besides, synthetic Camphor Oil is also used to protect palm leaf manuscripts against insect attack.

21. Small bags of a sort grass – Panadi by name (which is grown in Jaisalmir and used in making perfumes) are placed among the bundles of manuscripts to save them from white ants.

22. Application of turmeric paste to the seasoned palm leaves is well known for its dis-infecting effect.

Conclusion:

The safe upkeep of manuscripts has also been inscribed by the authors of manuscripts, generally written in the colophon which is evident from the following lines:

" Jaladraksha Tailadraksha raksha man

shlatha vandhanat

Ashubhya parahastebhya

Ebam badati pustakam"

that means: "The book itself appeals to the owners to protect it from water, oil, slack binding, rats and from the hands of other people who do not know proper handling". Some of the authors also request the user to treat the manuscripts as their own sons (… "*Putravat paripalayet*")

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