

## Conservation of Manuscripts – The Natural Way

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### ABSTRACT

The earliest scripts would have been written on materials such as *Taalapatra* and *Bhurjapatra*, which could not be readily preserved. In the treasure of *Ayurvedic* literature, many texts are missing or partially available. Only references or few verses from many such texts are mentioned in later texts. Unfortunately, a large number of *Ayurvedic* texts are unexplored till today are likely to exist in palm-leaf manuscripts, which are decaying or undergoing permanent annihilation. As such many unique and valuable information contained in these texts are being lost. According to a recent survey, there are more than a hundred thousand unpublished palm-leaf manuscripts on various aspects of traditional Indian knowledge in Tamil, one of India's two classical languages, the other being Sanskrit. The present work tells about conservation and preservation of manuscripts, the natural way.

**Key words:** Manuscript, Palm – leaf, Conservation

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### INTRODUCTION

Medical manuscripts form a precious part of India's cultural heritage. Today only a very small fraction of these manuscripts is accessible to medical practitioners and researchers. Traditional medicine is an area where a large number of manuscripts are still in private hands. A large number of manuscripts are in a precarious state and are in danger of getting irretrievably lost.

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.

Being organic in nature, palm-leaf manuscripts are susceptible to decay and disintegration over time. Normally chemical treatments are given using fumigation chambers to protect palm-leaves from white ants, fungus and other insects. Insecticides and pesticides are useless as the pests develop immunity over time.

Herbals And Natural Products For Conservation <sup>1</sup>: 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* (*Withania somnifera*) in small packets are kept with the manuscripts covered in clothes to repel insect attack.

Fig No – 1 Aswagandha (*Withania somnifera*)



Fig No – 2 Vacha (*Acorus calamus*)



Fig No – 3 Shunti (*Zingiber officinale*)



Fig No – 4 Lemon-grass (*Cymbopogon citrates*)



Fig No – 5 Maricha (*Piper nigrum*)



Fig No – 6 Chandana (*Santalum album*)



2. Along with bundles of manuscripts pieces of *Vacha* (*Acorus calamus*) or *Shunti* (*Zingiber officinale*) are kept to save these from insect attack.



Fig No – 7 Clove (*Syzygium aromaticum*)



Fig No – 8 Ajamoda (*Carum copticum*)



Fig No – 9 Custard-apple (*Anona reticulata*)



Fig No – 10 Mint (*Mentha longifolia*)



Fig No – 11 Krishna Jeeraka (*Nigella sativa*)



Fig No – 12 Nimba (*Azadirachta indica*)



Fig No – 13 Karanja (*Cesalpinia crista*)

Fig No – 14 Nirgundi (*Vitex negundo*)



Fig No – 15 Naga-damani (*Artemisia nilagirica*)



Fig No – 16 Karpura (Camphor)



3. Coatings of lemon-grass oil (*Cymbopogon citrates*) are given to strengthen the leaves of manuscripts and destroy the growths of micro-organisms.
4. Powdered roots of dried sweet flag known as *Vacha* (*Acorus calamus*), filled in small bags are kept in cupboards of manuscripts which has got very good medicinal value and insecticidal power.
5. Oil extracts of some natural products like black pepper (*Piper nigrum*), sandal (*Santalum album*) wood or clove (*Syzygium aromaticum*) facilitate in the restoration of flexibility to the palm leaf manuscripts.
6. The use of fresh palm leaf extract has also the possibilities of imparting flexibility to the old and brittle leaves.
7. Powdered *Ajamoda* (*Carum copticum*) also acts as an insect killer and fungicide.
8. Custard-apple (*Anona reticulata*) seeds powder is used to kill the insects that thrive on manuscripts.
9. Mint (*Mentha longifolia*) leaves also repel ants and cockroaches.
10. **Krishna Jeeraka** (*Nigella sativa*) Black-Cumin which gives a strong aromatic smell also used as an insect repellent. Scattering of the seeds at the manuscript storage keeps away insects.
11. Sandal wood (*Santalum album*) dust is commonly used by many libraries to ward off insects.
12. The mixture of neem leaves (*Azadirachta indica*), *Karanja* (*Cesalpinia crista*), *Nirgundi* (*Vitex negundo*) and citronella are known to have insecticidal properties for which it could be used in the manuscript libraries.
13. 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



Fig No – 17 *Haridra* (*Curcuma longa*)



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.

14. *Naga-damani* (*Artemisia nilagirica*) known as Indian worm wood bears an essential oil whose sweet aroma and insect repellent action helps to eradicate insects from the manuscripts.

15. 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.

16. Besides, synthetic Camphor Oil is also used to protect palm leaf manuscripts against insect attack.

17. Application of turmeric paste to the seasoned palm leaves is well known for its disinfecting effect.

#### **Traditional Medical Texts:**

Today there is a growing appreciation worldwide about traditional knowledge, particularly in the field of medical science. Most Indian palm-leaf manuscripts on traditional science pertain to medicine such as the Ayurveda and Siddha systems of treatment along with the Unani system.

Modern research has demonstrated that these traditional systems give lasting relief to many chronic diseases. Their curing effect is remarkable, even for very serious diseases which may not be cured by allopathic treatment. Moreover, the native medicines are based either on herbs or metals which are not injurious to health when used according to the traditional prescription.

#### **CONCLUSION**

The publication of these rare manuscripts will undoubtedly be a welcome contribution to medical research in India, Asia and worldwide. If we all work together to maintain and improve the materials entrusted to our care, we can ensure that many generations of students and researchers have access to our unique and wonderful collection.

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 mam shalatha vandhanat Ashubhya parahastebhya Evam badati pustakam* //”

That means: “The book itself appeals to the owners to protect it from water, oil, slack binding, and 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*” )

## **REFERENCES**

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