

PHARMACOGNOSTICAL EVALUATION OF *MADHUTAILIKA BASTI*Dr. Rahul S. Gandhi^{*1}, Prof. Dr. Anup B. Thakar², Harisha C. R.³ and V. J. Shukla⁴¹Assistant Professor, Department of Panchakarma, Institute for Post Graduate Teaching & Research in Ayurveda, Gujarat Ayurved University, Jamnagar, Gujarat – 361008.²HOD, Dept. of Panchakarma, Director, I/c. Vice-chancellor, IPGT&RA, Gujarat Ayurved University, Jamnagar.³HOD, Dept. of Pharmacognosy, IPGT&RA, Gujarat Ayurved University, Jamnagar.⁴HOD, Dept. of Pharmaceutics, IPGT&RA, Gujarat Ayurved University, Jamnagar.Article Received on
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Department of
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Research in Ayurveda,
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Jamnagar, Gujarat – 361008.**ABSTRACT**

Introduction: The *Basti* in which *Madhu* and *Taila* are the chief constituents or used in excess is called as *Madhutailika basti*. '*Maadhutailika Basti*', a type of '*Aasthaapana Basti*' also termed as '*Niruha Basti*'. It is particularly indicated in king, the person of such tender nature, women, children, old person to remove the morbid *dosha* and to gain the strength and complexion, which indicates its *mrudu* nature. It is commonly used for management of Diabetic Polyneuropathy which commonly presents with burning sensation, loss of strength, loss of balance, loss of sensation, numbness etc. especially of feet. **Materials and methods:** Raw drugs of *Madhutailika Basti*,^[1] as per the reference in *Sushruta Samhita* were purchased from the local market of Jamnagar, Gujarat. It was prepared as per the standard preparation. The final product was then subjected to

pharmacognostical analysis. Pharmacognosy of *Madhutailika Basti* was carried out by preparing glass slide and cover slip. Then this slide was observed under the Carl Zeiss Trinocular microscope. Organoleptic characters were noted. **Results:** Pharmacognosy study of *Madhutailika Basti* revealed presence of lignified fibers and oil globules of castor root and Anethum sowa, stone cells and epicarp cells of *Randia dumetorum*. **Discussion and conclusion:** The pharmacognostical analysis of *Madhutailika Basti dravya* confirmed the purity and genuinity of the content drugs.

KEYWORDS: *Madhutailika Basti*, Pharmacognosy, Diabetic neuropathy.

INTRODUCTION

'*Basti*', one of the five therapeutic procedures in '*Panchakarma*' is an important '*Ayurvedic* therapy'. It is always compared with conventional evacuation and retention enema. According to *Ayurvedic* principles '*Basti*' plays a much more vital role in the disease management than conventional enema. '*Madhutailika Basti*', a type of '*Aasthaapana Basti*' also termed as '*Niruha Basti*' is a mixture of oil, honey, '*kwaatha*' (decoction) and '*Kalka*' (fine paste obtained after wet grinding of the plant material).

The *Basti* in which *Madhu* and *Taila* are the chief constituents or used in excess is called as *Madhutailika basti*.^[2] It is particularly indicated in king, the person of such tender nature, the women, the children, old person to remove the morbid *dosha* and to gain the strength and complexion, indicates its *mrudu* nature.^[3] It does not require any regimens, may be given at any time, without complication and provides much better results.

It also possesses have properties like *Brihana*, Aphrodisiac, Rejuvenative, and also useful in *Krimi*, *Kushtha*, *Arsha*, *Pliha Roga* and *Prameha* (DM and Diabetic neuropathy). Now to understand the mechanism of *Madhutailika Basti* as how does it successfully mitigate neuropathy an attempt has been made to get some clue in understanding the *Basti* liquid as a whole in terms of its microscopic analysis and physico-chemical analysis. Addition to this pharmacognosy of *Madhutailika Basti* was done to authenticate the ingredients used.

Objectives: To analyze the pharmacognostic characters of *Madhutailika Basti*.

MATERIALS AND METHODS

Collection of raw drugs

Raw materials of good quality required for preparation of *Madhutailika Basti* were purchased from the local market of Jamnagar, Gujarat. The ingredients and parts used in the preparation of the final products are listed in Table No. [1]. After collection and proper cleaning of all the ingredients, *Madhutailika Basti* was prepared at Dept. of Panchakarma, IPGT&RA, GAU, Jamnagar.

Table 1: Contents of *Madhutailika Basti*.

No.	Drug	Quantity
1.	<i>Madhu</i> (Honey)	200 ml
2.	<i>Saindhava</i> (Rock salt)	12 gms
3.	<i>Tila taila</i> (Sesamum oil)	200 ml
4.	<i>Shatapushpa kalka</i> (<i>Anethum sowa</i>)	25 gms
5.	<i>Erandamoola kashaya</i> (<i>Ricinis communis</i>)	400 ml
6.	<i>Madanaphala</i> (<i>Randia dumatorum</i>)	1 fruit

Preparation of *Madhutailika Basti*

Honey and rock salt were mixed together in the beginning followed by addition of Sesame oil. This mixture was then thoroughly mixed. The finely wet grinded paste of fennel and emetic nut was then mixed in it. The mixture was then again mixed thoroughly. The decoction of *Ricinus communis*, was then added to it and the mixture was subjected to thorough churning in a mortar and pestle to produce a homogeneous mixture. After completion of the preparation process the liquid was filtered and transferred into a clean vessel for storage.

Pharmacognostical study

Madhutailika Basti was observed and authenticated by the Pharmacognosy department of the institute. The identification of individual drugs was done on the basis of microscopic features of the finished product. Here, pharmacognostical evaluation of *Madhutailika Basti* was carried out by preparing a slide made with glass and cover slide. Then this slide was observed under the Carl Zeiss Trinocular microscope. The microscope was attached with a camera. Then photographs of *Madhutailika Basti* slide (finished product) at 40x magnification were taken without staining and after that with-staining (phloroglucinol and HCl staining).

Organoleptic Study

Madhutailika Basti liquid was observed for the organoleptic characters like color, odour and taste at the pharmacognosy laboratory of the institute.

RESULTS

Characteristics of *Madhutailika Basti*: Microscopic evaluation of *Madhutailika Basti* was conducted and microphotographs were taken as seen, Photo - 1.1 *Madhutailika Basti*, Photo - 1.2 Brown content of *Madanaphala*, Photo - 1.3 Epicarp cells of *Madanaphala*, Photo - 1.4 Fibres of *Eranda*, Photo-1.5 Group of stone cells of *Madana Phala*, Photo - 1.6 Lignified fibres of *Eranda*, Photo-1.7 Oil globules of *Eranda*, Photo - 1.8. Parenchyma cells of *Eranda*,

Photo-1.9 Stone cells of *Eranda*, Photo - 1.10 Epicarp cells of *Satapuspa*, Photo - 1.11 Fibres with oil globules of *Satapuspa*, Photo - 1.12 Mesocarp cells of *Satapuspa*, Photo - 1.13 Oil globules of *Satapuspa*, Photo-1.14 Parenchyma cells of *Satapuspa*.



Photo 1.1 – Madhutailika Basti

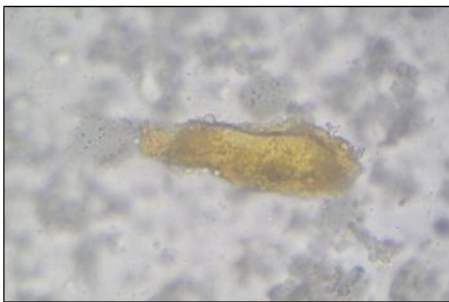


Photo 1.2 - Brown content of Madanaphala

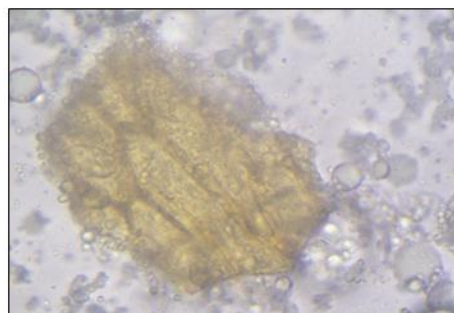


Photo 1.3 - Epicarp cells of Madanaphala

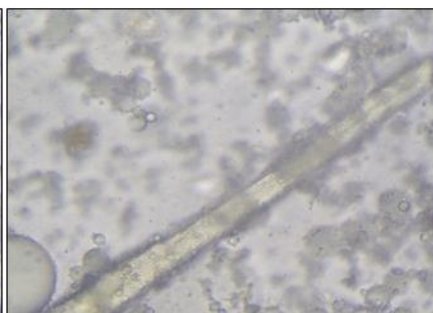


Photo 1.4 - Fibres of Eranda

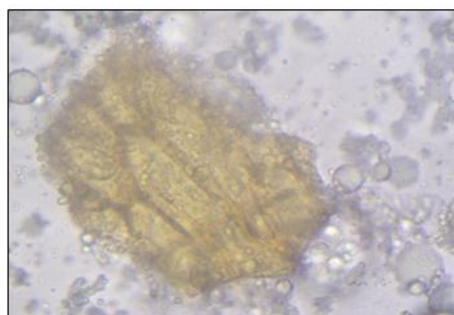


Photo 1.3 - Epicarp cells of Madanaphala



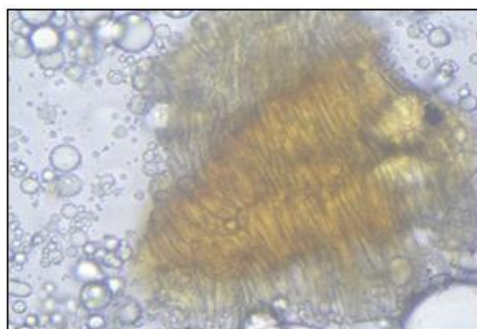
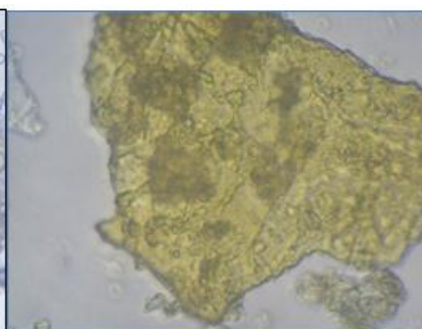
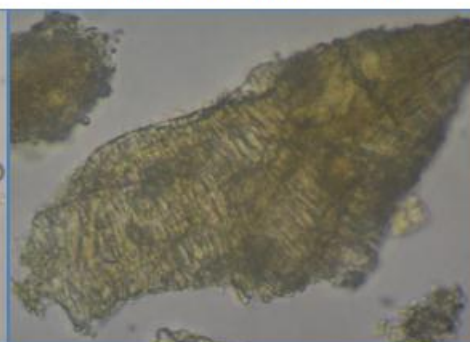
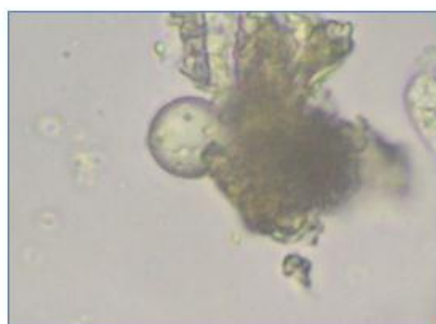
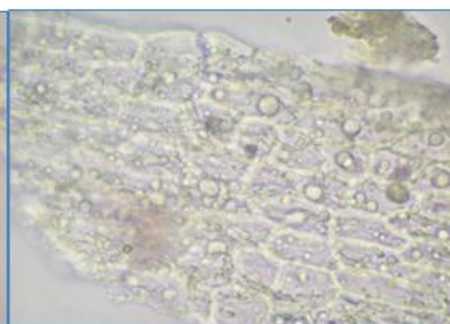
Photo 1.4 - Fibres of Eranda



Photo 1.5 - Group of stone cells of Madanaphala



Photo 1.6 - Lignified fibres of Eranda

Photo 1.9 - Stone cells of *Eranda*Photo 1.10 – Epicarp cells of *Satapuspa*Photo 1.11 - Fibres with oil globules of *Satapuspa*Photo 1.12 - Mesocarp cells of *Satapuspa*Photo 1.13 - Oil globules of *Satapuspa*Photo 1.14 - Parenchyma cells of *Satapuspa***Table 2: Organoleptic characters of *Madhutailika Basti*.**

Sr. No.	Character	Observation
1	Colour	Chocolaty Milky
2	Odour	Oily sweet
3	Taste	Salty sweet

DISCUSSION

Medicinal plants play an important role in the field of Ayurveda. The drugs which are used medicinally require detailed study prior to its use because the therapeutic efficacy absolutely depends on the quality of the plant used. Hence their proper identification is quite necessary. The present study was aimed at setting up a standard profile of *Madhutailika Basti* which was

prepared using pharmacognostically authenticated raw drugs. The microscopic and macroscopic characteristics identified in dry powder form, assisted in the authentication of the drugs.

CONCLUSION

Quality control of herbal formulation is very much necessary to assess the purity and safety of the drug. The pharmacognostical of *Madhutailika Basti* confirmed the purity and safety of the drug. Further studies may be carried out on the basis of observation made and results of experimental studies. This study may be beneficial for future researchers and can be used as a reference standard in the further quality control researches.

REFERENCES

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