

## PHARMACOGNOSTICAL AND PHARMACEUTICAL EVALUATION OF MADUTAILIKA BASTI

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### ABSTRACT

**Introduction:** *Basti* (therapeutic enema) is considered as the most important *Panchakarma* procedure. Among all the *basti* practiced, *Madutailika basti* is the most commonest one. Many studies has proved its wide range of applications from low back pain to infertility. The microscopic evaluation of classically prepared *Madutailika basti* was attempted here along with its physico-chemical properties. **Methods:** Microscopic evaluation of freshly prepared *Madutailika basti* as per classical reference was done along with its organoleptic characteristics like color, odor, touch and taste. Its specific gravity and density was also done. **Results:** Presence of fibers of *erandamula* (*Ricinus communis*); epicarp cells, striated fibers and vascular strands

of *satapushpa* (*Anethum sowa*); aleurone grains and oil globules of *bala taila* was found. The sample was brown in color with oily odor, soft on touch and tastes sweet and salty.

**KEYWORDS:** *Madutailika basti*, pharmacognosy, physico-chemical property, *Panchakarma*.

### INTRODUCTION

Among the Ayurvedic treatment procedures *Basti* (therapeutic enema) is considered as most important. It is considered as half of the entire treatment or even sometimes as a complete treatment. The superiority of this treatment procedure is due to many reasons. It is the treatment procedure which directly have an action over the most important *dosha*, *vata*. Once the *vata* can be controlled all the other *doshas* can also be controlled. Its having action over

all the *rogamargas*, its an important treatment as far as the *marma* (vital point) are concerned, its action is over all the *dhatu*s.<sup>[1]</sup>

Among the *basti*, *niruha basti* or *basti* with decoction is considered to be most important. As the name suggests its action can't be predicted,<sup>[2]</sup> which means it's having a wide range of actions. One among the *niruha basti* types is the '*Yapana basti*'. *Yapana basti* can be given without any complications, can be administered in all seasons and can be used continuously for a longer duration. *Madutailika basti* is considered as type or even as a synonym of *yapana basti*.<sup>[3]</sup> It is one among the most commonly used *niruha basti* practically because of its wide range of actions and its nature of not producing any complications. Here an attempt is made to find out the physico-chemical properties as well as the microscopic evaluation of *Madutailika basti*.

## MATERIALS AND METHODS

### Collection of raw drugs

*Saidava* (Rock salt) and *Bala taila* were obtained from PG Hospital, ITRA, Jamnagar. Honey (Agmark grade) and *Satapushpa* (*Anethum sowa*) powder were obtained from local market, Jamnagar. *Erandamula* (*Ricinus communis*) was obtained from Pharmacy, ITRA, Jamnagar. The ingredients were authenticated at Department of Pharmacognosy, ITRA, Jamnagar. The dried roots of *eranda* was coarsely powdered and stored in air tight container.

### Preparation of *erandamula* decoction

The coarse powder of *erandamula* and water is taken in the ratio of 1: 8, boiled and reduced to ¼ part. This is then filtered and used as decoction for the *basti* preparation.

### Preparation of *Satapushpa* paste

*Satapushpa* powder is made into fine paste form by grinding it with sufficient quantity of water.

### Preparation of *Madutailika basti*

The ingredients of *Madutailika basti* with its quantity is given in Table 1

**Table 1: Ingredients of *Madutailika basti*.<sup>[4]</sup>**

Content	Latin/English name	Quantity
<i>Madhu</i>	Honey	120ml
<i>Bala taila</i>		120ml
<i>Saindava</i>	Rock slat	12gm
<i>Satapushpa kalka</i>	<i>Anethum sowa</i>	24gm
<i>Erandamula kwata</i>	<i>Ricinus communis L.</i>	240ml

Honey was poured into the mortar and triturated. Finely powdered *saindava* was added into it and triturated well. When it was properly mixed *Bala taila* was poured slowly while continuing the trituration. After that paste of *satapushpa* was added and mixed thoroughly. When it was properly mixed, decoction of *erandamula* was added and triturated until a homogeneous mixture is obtained.<sup>[5]</sup>

#### **Physico-chemical characteristics of *Madutailka basti***

The possible physico-chemical parameters such as Specific gravity and Density of freshly prepared *Madutailika basti* was done at Pharmaceutical laboratory, ITRA, Jamnagar.

#### **Pharmacognostical analysis of *Madutailika basti***

Organoleptic and microscopic study of freshly prepared *Madutailika basti* was done at Pharmacognosy laboratory, ITRA, Jamnagar.

**Organoleptic study:** This study helps in authentication of drugs used and there by ensures safety and efficacy of medicine. The details are enumerated in Table 3.

**Microscopic study:** *Madutailika basti* was prepared and microscopy of the sample was done. Microphotographs of *Madutailika basti* was also taken under Carl-Zeiss trinocular microscope.

### **OBSERVATIONS AND RESULTS**

#### **Physico-chemical characteristics of *Madutailka basti***

Physico-chemical characteristics of *Madutailka basti* are shown in Table 2.

#### **Organoleptic characters of *Madutailka basti***

Organoleptic characters such as color, odour, taste etc were examined by sensory organs and the results obtained are shown in Table 3.

**Table 2: Physico-chemical characteristics of *Madutailika basti*.**

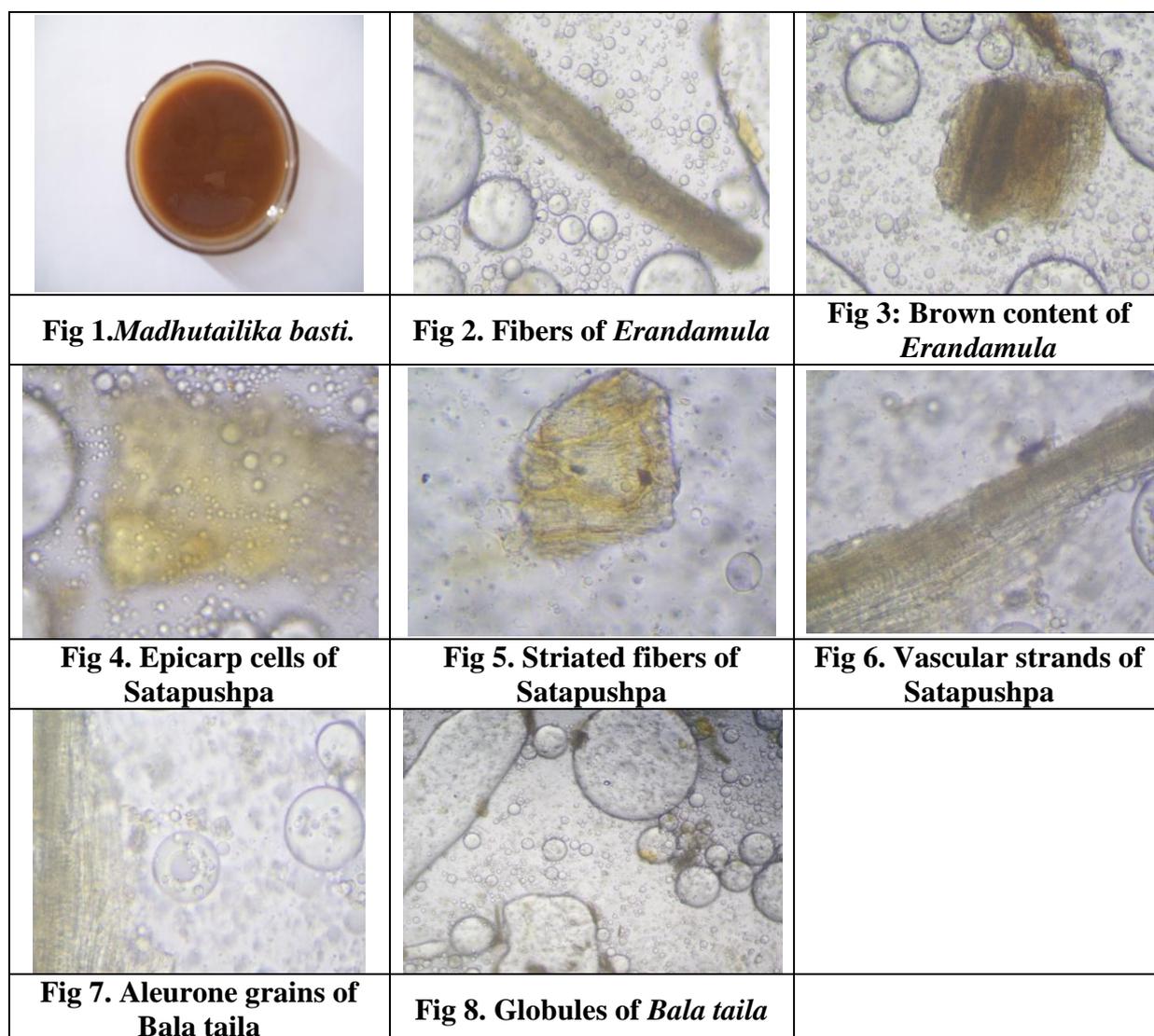
Sr. No	Characteristics	Results
1.	Specific gravity	1.057
2.	Density	1.0327 gm/ml

**Table 3: Organoleptic characters of *Madutailika basti*.**

Sr.No	Character	Results
1	Color	Brownish
2	Odor	Oily
3	Touch	Slimy, Soft
4	Taste	Sweet and salty

**Microscopic study of *Madutailika basti***

Microphotographs of *Madutailika basti* shows the presence of fibers (Fig.2) and brown content (Fig.3) of *erandamula*; epicarp cells (Fig.4), striated fibers (Fig.5) and vascular strands (Fig.6) of *satapushpa*; and Aleurone grains (Fig.7) and globules (Fig.8) of *bala taila*.



## DISCUSSION

The physico-chemical parameters analysed were found to be within the normal reference range. The physico-chemical analysis showed specific gravity as 1.057 and density as 1.0327 gm/ml. Pharmacognostic evaluation of madutailika basti showed the characteristics of ingredients present in it. Epicarp cells, vascular strands and striated fibers of *Anethum sowa*; aleurone grains and oil globules of *bala taila*; and fibers and brown content of *Ricinus communis* were identified under the microscope.

## CONCLUSION

The pharmacognostical and physio-chemical study suggests that the study sample of *Madutailika basti* was prepared with authentic ingredients and it meets the qualitative standards. These parameters may be used for identification and quality assessment tools for *Madutailika basti*.

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