



SIGNIFICANCE OF DHANYAMLA BHAVANA IN VIDANGADI LEPA CHURNA

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ABSTRACT

Introduction

Pharmacutico- analytical studies are used to evaluate the quality and authenticity of drugs before human trail hence this present study has been undertaken to prepare *Vidangadi lepa churna* and *Dhanymla Bhavitha Vidangadi lepa churna* subjecting it to standard analytical parameters of *Churna*. And also standard pharmacutico analytical patameters of *Dhanymla* also mentioned in it.

Materials-Method

Vidangadi Lepa Churna is an Ayurvedic herbal powder, while Dhanymla Bhavitha Vidangadi Lepa Churna is the same formulation processed with Dhanymla for enhanced potency, with both requiring analysis for quality, purity, moisture content, and active compounds.

Result and discussion

Physico-chemical changes were observed in both the formulation and analysis of *Dhanymla*, which were also examined in the process. *Dhanymla Bhavitha Vidangadi Lepa Churna* shows higher extractive values, both in alcohol-soluble and aqueous extractive fractions, compared to *Vidangadi Lepa Churna*. This is because certain properties of *Dhanymla* are incorporated during the *Bhavana* process or due to possible adulteration that occurs during the drying of the *Dhanymla Bhavitha*.

Conclusions

Vidangadi Lepa Churna is more acidic than *Dhanyamla Bhavitha*. Both formulations contain equal amounts of insoluble minerals or inorganic components.

Keywords: *Vidangadi lepa churna, Dhanymla bhavitha vidangadi lepa churna, Dhanyamla*

INTRODUCTION

Pharmaceutical study focuses on the processes involved in drug manufacturing. An essential aspect of treating ailments is ensuring that the preparation of drug is done correctly. Since many drugs are not readily absorbed by the biological system, specialized techniques are employed to enhance their absorption and achieve the desired therapeutic effects. These specialized methods are known as pharmaceutical processes. India is rich heritage in traditional herbal medicine is explained by the Ayurvedic system, which offers numerous herbal formulations for treating various ailments. Among these, *Churna* is a key formulation, defined as a fine powder obtained by grinding and filtering herbs through cloth using a traditional method known as *Khalwa Yantra*. One such formulation is *Vidnagadi Lepa Churna*, explained in *Bhaishajya Ratnavali Kustha Chikistaadyaya*. This formulation includes ingredients like *Vidanga* [5] (*Embelia ribes Burm*), *Chakramarda* [6] (*Cassia tora Linn*), *Sarshapa* [9] (*Brassica campestris Linn*), *Kushta* [7] (*Saussurea lappa*) *Haridra* [8] (*Curcuma longa Linn*),

and *Saindhava lavana* [10] (*Sodium chloride*). These components are combined with *Dhanyamla* which is applied topically for treating *Dadru Kustha* [4]. Pharmacutico- analytical studies are used to evaluate the quality and authenticity of drugs before human trail hence this present study has been undertaken to prepare *Vidangadi lepa churna and Dhanymla Bhavitha* [3] *Vidangadi lepa churna* subjecting it to standard analytical parameters of *Churna* with *Dhanyamla*

MATERIALS AND METHODS

Pharmaceutical study

Required raw drugs for the preparation will be collected from the reliable source and authentication will be carried out in the Department of *Dravyaguna* and *Rasashastra & Bhaishajya kalpana*, Sri *Dharmasthala Manjunatheshwara* College of Ayurveda and Hospital, Hassan.

Preparation of *Vidangadi lepa churna* and *Dhanyamla Bhavitha Vidangadi Lepa Churna* will be carried out in department of *Rasashastra* and *Bhaishajya Kalpana*, Sri *Dharmasthala Manjunatheswara* College of *Ayurveda* and Hospital Hassan.

Table 1: Ingredients- vidangadi lepa churna

S. No.	Drugs	Quantity taken
1	Vidanga	50gm
2	Kusta	50gm
3	Sarshapa	50gm
4	Haridra	50gm
5	Chakramarda	50gm
6	Saindava lavana	50gm

Method of preparation-

All the above drugs mentioned in Table 2 were taken in equal quantities and individually grounded into fine powder, then

sieved the fine powder of all the ingredients were mixed thoroughly to achieve a homogeneous blend.

Table 2: Dhanyamla- ingredients

Sl no	Drugs	Quantity taken
1	Tandula (<i>Oryza sativa L.</i>)	50gm
2	Prathuka (<i>Oryza sativa L.</i>)	50gm
3	Kulattha (<i>Macrotyloma uniflorum (Lam) Verdc.</i>)	50gm
4	Laja (<i>Oryza sativa L.</i>)	20gm
5	Kangubeeja (<i>Panicum sumatrense Roth ex Roem. & Schult.</i>)	20gm
6	Kodrava (<i>Paspalum scro-biculatum L.</i>)	20gm
7	Shunti (<i>Zingiber officinale Roscoe.</i>)	10gm
8	Dantashata (<i>Citrus aurantifolia (Christm.& Panzer)</i>)	20gm
9	Dipyaka (<i>Trachyspermum roxburghianum(DC)</i>)	10gm
10	Ushnodaka (Warm water)	4lit



KODRAVA



USHNA JALA



SHALI



KANGUBIJA



KULATTHA



LAJA



DIPYAKA



PRATTUKA



NIMBUKA



SUNTI



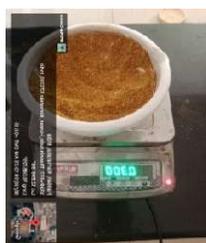
**TOTAL
INGREDIENTS
OF DHANYMLA**

Method of preparation of Dhanyamla [1]; Dhanyamla will be prepared by immersing the bundles holding drugs, in a vessel containing boiled water. The vessel will be applied with moderate heat for a period of seven consecutive days. On 8th day the obtained quantity of the liquid should be added with equal quantity of hot water.

Method of preparation Dhanyamla Bhavitha Vidangadi Lepa Churna;

Bhavana is a single or compound powdered drugs with liquid media is a unique process and probably the most extensively used pharmaceutical procedure of *Ayurveda*.

To prepare *Vidangadi Lepa Churna* with *Dhanyamla*, start by mixing 600ml of *Dhanyamla* with *Vidangadi Lepa Churna* and perform continuous *Bhavana* for 13hours then get a *Subhavitha Lakshana*.



INITIAL
WEIGHT OF
VIDANGADI
LEPA CHURNA



DOING BHAVANA
WITH
DHANYMLA IN
KHALWAYANTRA



FINAL
WEIGHT OF
DHANY

Table 3: Time and quantity taken during bhavana of dhanyamla in vidangadi lepa churna

S. No.	Days required	Amount of dhanyamla	Time taken
1)	Day 1	500ml	7hours
2)	Day 2	100ml	5hours

Analytical study

We are using Vidangadi Lepa Churna, which is processed with Dhanyamla. Both the Vidangadi Lepa Churna and Dhanyamla will be analyzed based on parameters mentioned in the API, including pH [11], specific gravity [12], viscosity [13], total soluble solids [14], alcohol content [15], reducing and non-reducing sugars [16], total ash [17], acid-insoluble ash [18], alcohol-soluble extractive [19], water-soluble extractive

[20], and loss on drying [21]. These parameters are used to assess the quality of the final product.

OBSERVATION AND RESULT

Pharmaceutical observation vidangadi lepa churna and dhanyamla bhavitha vidangadi lepa churna

Vidanga, *Haridra*, and *Sarshapa* have moderate hardness, making them relatively easy to powder. However, *Sarshapa* tends to be sticky while pounding. On the other hand,

Chakramarda root and *Kustha* are harder, making them challenging to powder and resulting in coarse particles. *Chakramarda* root also leaves fibrous residues when sieved. When freshly collected, *Chakramarda* root is moist and takes longer to dry. *Saindhava Lavana* is hygroscopic and can be easily ground into a fine powder. In the preparation of *Dhanyamla Bhavitha Vidangadi Lepa Churna*, the process begins with taking 300g of the *Churna* on the first day. 500ml of *Dhanyamla* is then added to the powder. The mixture is processed using a technique called *Bhavana* in a *Khalwayantra* for 7 hours. During this time, the powder gradually turns into a paste, with

its particle size reducing. The drug becomes softer, achieving a fine consistency, and when pressed between the fingers, it should form a smooth, flat cake

Pharmaceutical observation on *Dhanyamla*

The fermentation process should be carried out for one hour each day over a span of seven consecutive days. By the eighth day, the water should turn a pale yellow, signaling a high concentration. As heat is applied daily, the water evaporates, causing a decrease in the water level. Over time, the *Pottali's* size grows due to fermentation. On the eighth day, the preparation will have an acidic smell and a sour taste with a hint of bitterness.

Table 4: organoleptic characters of *Vidangadi lepa churna* and *Dhanyamla bhavitha vidangadi lepa churna*

S. No.	Parameters	<i>Vidangadi lepa churna</i>	<i>Dhanyamla bhavitha vidangadi lepa churna</i>
1)	Colour	Yellowish brown	Yellowish green
2)	Odour	Characteristic turmeric odour	Characteristic turmeric odour
3)	Taste	Bitter astringent	Bitter astringent
4)	Appearance	Powder	Powder

Table 5: Physico chemical parameters of *Vidangadi lepa churna* and *Dhanyamla bhavitha vidangadi lepa churna*

S. No.	Parameters	<i>Dhanyamla bhavitha vidangadi lepa churna</i>	<i>Vidangadi lepa churna</i>
1	pH	4.47	5.10
2	Total ash	13%	13%
3	Acid insoluble ash	5%	5%
4	Alcohol soluble extractive	62.4%	32.2%
5	Water soluble extractive	42.2%	23%
6	Loss on drying 105	4.4%	14.2%

Table 5: Organoleptic characters *Dhanyamla*:

S. No.	Parameters	Value
1)	Colour	Pale yellow
2)	Odour	acidic
3)	Taste	Sour, bitter
4)	Appearance	watery

Table 6: Physico-chemical parameters of *Dhanyamla*

S. No.	Parameters	Value
1)	Ph	3.47
2)	Specific gravity	1.003
3)	Viscosity	41.53sec
4)	TSS	1
5)	Alcohol content	0.5%
6)	Reducing and nonreducing sugar	Green with yellow precipitate 0.5percent
7)	Total acidity	

DISCUSSION

The pharmaceutical observation reveals that in *Vidangadi Lepa Churna*, *Vidanga*, *Haridra*, and *Sarshapa* have moderate hardness, making them relatively easy to powder. However, *Sarshapa* shows stickiness during pounding. *Chakramarda* root and *Kustha*, due to their hard nature, are challenging to pound into a coarse powder, with *Chakramarda* root leaving fibrous residues when sieved. Additionally, freshly collected *Chakramarda* root is moist and requires longer drying time. *Saindhava Lavana* is hygroscopic and can be easily ground into a fine powder. In the preparation of *Dhanyamla Bhavitha Vidangadi Lepa Churna*, the *Bhavana* process lasts for thirteen hours, during which the drug displays certain "*Subhavitha lakshanas*" or characteristic signs. These include the drug becoming soft and finely consistent, and when pressed between the fingers, it should form a flat cake. Another confirmatory sign is that the drug can be easily shaped into pills without sticking to the fingers.

The experiments were carried out to assess the physico-chemical properties and compare the quality of *Vidangadi Lepa*

Churna and *Dhanyamla Bhavitha Vidangadi Lepa Churna*. The pH of *Vidangadi Lepa Churna* is more acidic compared to *Dhanyamla Bhavitha*. Additionally, the acid-insoluble ash and total ash content are identical in both formulations, as these refer to the inorganic residue left after the sample is fully burned and the inorganic residue that remains undissolved in acid, which is the same in both formulations.

Dhanyamla Bhavitha Vidangadi Lepa Churna shows higher extractive values, both in alcohol-soluble and aqueous extractive fractions, compared to *Vidangadi Lepa Churna*. This is because certain properties of *Dhanyamla* are incorporated during the *Bhavana* process that occurs during the drying of the *Dhanyamla Bhavitha*. The moisture content or volatile substances are higher in *Vidangadi Lepa Churna* compared to *Dhanyamla Bhavitha*.

Dhanyamla is an acidic liquid, due to the fermentation process. This is reflected in its pH of 3.47, which grants it penetrating properties that help in clearing blocked *Srotases*. With a specific gravity of 1.033, it suggests that the solution is not highly concentrated or viscous. Instead, it is a

watery, non-viscous solution, as the water-to-other-ingredient ratio is high, allowing it to flow easily without sticking to the skin. The minimal alcohol content in *Dhanyamla* results the fermentation process used in its preparation. It also contains 0.5% sugar, as it includes monosaccharides, polysaccharides, aldehydes, and other components.

CONCLUSION

The compare to *Vidangadi lepa churna* the *Dhanymla bhavitha vidangadi lepa churna* was carried which is easy for application. Without making it combustion by mixing the liquid media by the process of bhavana easy and feacible process. The physico-chemical analysis shows that the aqueous and hydroalcoholic extracts of *Vidangadi Lepa Churna* are higher than those of *Dhanyamla Bhavitha*. Furthermore, *Vidangadi Lepa Churna* is more acidic than *Dhanyamla Bhavitha*. Both formulations contain equal amounts of insoluble minerals or inorganic components. They also include hydrollic substances such as *Sarshapa* and *Saindhavalava*, contributing to higher moisture content and longer drying times. In the case of *Dhanyamla Bhavitha*, the incorporation of additional *Bhavana Dravya* during the *Bhavana* process, which involves interaction with organic or inorganic liquids, along with the drying duration, may result in unique and beneficial physico-chemical transformations in the preparation.

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