

Pharmaceutical Standardization of *Drakshadi Gutika*

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ABSTRACT

Vati kalpana is a formulation of Ayurvedic Pharmaceuticals developed basing upon the *Panchavidha Kashaya Kalpana* in which the fine powder of raw drugs (Herbal or Herbo-mineral) are triturated along with liquid media to a fine paste, prepared in the form of pills or tablets. It is the modified form of *kalka kalpana* to increase the shelf life. The synonyms of *Vati* (tablets) are *Gutika* (pills), *Modaka* (Large size pills) and *Varti* (draggees). These are the names given for *Vati Kalpana* on the basis of shape, palatability, easy administration, convenient form for dispensing and transportation are the asset points of *Vati Kalpana*. *Drakshadi Gutika* mentioned in *Yogartnakara in amlapittachikitsa*¹ is chosen for the present study is because of its simple ingredients and easy method of preparation. An attempt is made here to analyze the parameters of *Gutika Kalpana* as per API standards for *Drakshadi Gutika*, like Loss on drying, Total Ash Value, pH, Alcohol soluble extractive, Water soluble extractive Acid Insoluble ash, water insoluble ash, starch, alkaloids, Saponin, flavonoids, glycosides, tannins and steroids.

Key Words *Drakshadi Gutika, Amlapittachikitsa, Analytical parameter*

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INTRODUCTION

The five basic classical forms of '*Panchavidha kashaya*' through which all other formulations are developed in *Bhaishajya kalpana* of *Ayurveda* Pharmaceuticals. *Vati Kalpana* is a modified form *Kalka Kalpana* to increase the shelf life, for easy administration and also make it palatable. The synonyms of *Vati* (tablets) are *Gutika* (pills) and *Modaka* (Large size pills) and *Varti* (draggees). These are the names given for *Vati Kalpana* on the basis of shape and size. *Vati Kalpana* is highlighted by acharya Sharangadhara

in his text book which is considered as one of the authentic samhita of Bhaishajya Kalpana. It has better shelf life as compared to *kalka Kalpana*. Moreover, it overcome the drawbacks such as bitterness and less palatability. On the name of *Drakshadi gutika* one can have two formulations from classics. In the present study, *Drakshadi gutika* taken from *Yogaratnakara Amlapitta Prakarana*. The ingredients of *Drakshadi gutika* can be easily procurable which fulfill the criteria of *Dravya Chatushpada*². In recent era *Amlapitta*, a common disorder found in daily

ORIGINAL RESEARCH ARTICLE

clinical practice can be easily treated with the above in view of its easy administration.

Standardization of an ayurvedic formulation is a great need of present era. Phytochemical studies of a plant are necessary for understanding the significance of phytoconstituents in terms of its observed activities. Phytochemistry also helps in standardizing the herbal preparations so as to get the optimal concentration of known active constituents. It also provides the objective parameters to fix up the standards for quality of raw drugs as well as finished products. Therefore,

standardization of the finished product is an essential prerequisite to ensure its safety and efficacy.

MATERIALS AND METHODS

द्राक्षापथ्ये समे कृत्वा तयोस्तुल्यां सितां क्षिपेत् ।
संकुटयाक्षद्वयमितां तत्पिण्डीं कारयेद्विषक् ॥१॥
तां खादेदम्लपित्तार्तो हृत्कण्ठदहनापहाम् ।
तृणमूर्च्छाभ्रममन्दाग्निनाशिनीमामवातहाम् ॥२॥
Yogaratanakara – (Amlapittachikitsa)

Principle – Trituration

Table 1 The ingredients of *Drakshadi Gutika*

Sr. No.	Ingredients	Botanical name	Batch 1	Batch 2	Batch 3
1.	<i>Draksha</i>	<i>Vitis vinifera</i>	100g	100g	100g
2.	<i>Haritaki Churna</i>	<i>Terminalia chebula</i>	100g	100g	100g
3.	<i>Sita</i>	-	200g	200g	200g
Total Obtained			390g	394g	388g

Material: Stainless steel vessel, weighing balance, spoon, air tight container, etc.

Method of preparation:

1. Raw drugs were procured from Sundar Ayurved Pharmacy.
2. *Draksha* was taken and it was soaked in 50 ml water for one night.
3. Next day *Draksha* were crushed.
4. Then sugar was added with soaked *Draksha* and was heated. As the *kuttana*

procedure for making this gutika is quite hectic, so we tried a new SOP by heating the mixture of *Draksha* and *Sita*.

5. As the mixture started getting thicker *Haritaki churna* was added eventually.
6. It was stirred continuously till it became homogeneous mixture.
7. After it became semisolid, *Drakshadi gutika* were made, of uniform sizes.

Table 2 Physico – chemical parameters of *Drakshadi Gutika*

Sr. no.	Parameters	Batch 1 Values	Batch 2 Values	Batch 3 Values	Average
1.	pH ³	4.92	5.21	4.83	4.98
2.	Loss on drying	10.60%	10.25%	10.55%	10.46%
3.	Total Ash Value	43.35%	43.18%	43.82%	43.45%
4.	Acid Insoluble ash	0.03%	0.04%	0.07%	0.09%
5.	Alcohol Soluble extractive	43.5% w/v	43.7% w/v	43.3% w/v	43.5% w/v
6.	Water Soluble Extractive	69% w/v	67% w/v	70% w/v	68% w/v
7.	Friability ⁴	0.45%	0.37%	0.56%	0.46%
8.	Hardness	0.5	0.5	0.5	0.5
9.	Disintegration Time	4.16min	5.20min	6.10min	5.15min

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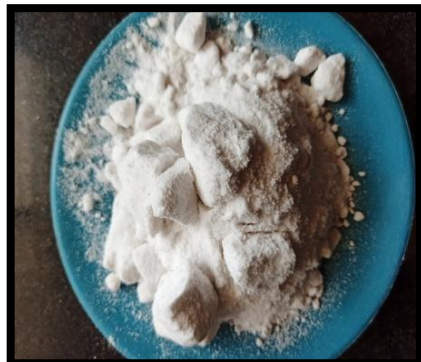


Fig. No. 1.1 *Sita*

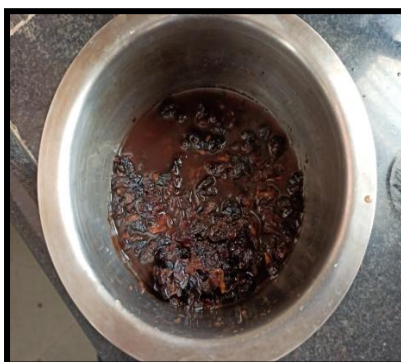


Fig. No. 1.2 *Draksha* (wet)



Fig. No. 1.3 *Haritaki Churna*



Fig. No. 1.4 Heating the mixture (in process)



Fig. No. 1.5 *Drakshadi Gutika*

Table 3 Phytochemical parameters of *Drakshadi Gutika*

Sr. no.	Parameters	Batch 1	Batch 2	Batch 3
1.	Starch	-	-	-
2.	Alkaloids	+	+	+
3.	Saponins ⁵	-	-	-
4.	Flavonoids	+	+	+
5.	Glycosides	+	+	+
6.	Tannins	+	+	+
7.	Steroids	+	+	+

DISCUSSION

Drakshadi Gutika is described in *Yogaratanakara* and recommended in our classics for the treatment of *Amla-Pitta*. *Draksha* is one of the ingredients having *Madhura rasa*, *Madhura Vipaka*, *Sheeta Veerya* and *Mrudu Guna*. *Haritaki* (*Termenalia chebula*) having *Lavana Varjita Pancha rasa Kashaya pradhana*, *Madhura vipaka*, *Vikruta doshanulomana*,

Aamapachana, and *Sita* having *Madhura rasa*, *sheeta veerya*, *trupti karaka*, *indriya prasadaka*. These properties fulfill the criteria to treat the *Amlapitta* with the karma of *Pitta shamana* and *Pitta rechana*. Here an attempt has been made to establish the standardize parameter of *Drakshadi Gutika*. For that analytical test like friability, hardness, disintegration time and all other analytical parameters as well as phytochemical

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screening of particular compound has been done.

The average value of pH is 4.98, Loss on drying is 10.46%, Total Ash Value is 43.45%, Acid Insoluble ash is 0.09%, Alcohol Soluble extractive is 43.5% w/v, Water Soluble Extractive is 68% w/v, Friability is 0.46%, Hardness is 0.5 and Disintegration Time is 5.15min.

CONCLUSION

The three batches of *Drakshadi Gutika* were prepared on classical bases and evaluated all the possible parameters. The present study suggests that the *Drakshadi Gutika* can be used widely as a treatment of *Amlapitta*.

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