

**Research Article****Pharmaceutico-analytical study of Lavana Kalpana w.s.r. to Narikel Lavana**Avinash D. Jagtap<sup>1\*</sup>, Bagul S. Shrikant<sup>2</sup><sup>1</sup>Associate Professor, Assistant Professor<sup>2</sup>

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**ABSTRACT:**

In ancient times of Ayurveda, many Aushadhi kalpanas are described to treat different diseases. Lavana Kalpana is one of them. Different herbs are treated with saindhav lavana and used in practice. Particularly Narikel lavana is useful in Amlapitta / Parinamshool. Method of Sajal Narikel Lavana as per Bhavprakash is evaluated on Pharmaceutical standards in this study and this narikel lavana is analysed physico-chemically in present study.

**KEY WORDS:** Narikel lavana, Kukkutputa, Saindhava Lavana**INTRODUCTION:**

Ayurveda particularly Bhaishajya Kalpana describes different dosage forms i.e. Kalpanas. Such as Sneha Kalpana, Dandhan Kalpana is one of the important Kalpana among above mentioned Kalpanas. Sainhav Lavana along with herb-mineral drugs is subjected to heat at high temperatures to get Lavana Kalpana<sup>1</sup>.

In Ayurveda texts, Narikela Lavana is the formulation mainly used to treat Amlapitta / Parinamshoola<sup>2</sup>. This formulation is used in day to day Practice by most of the Ayurved Practitioners. The Availability of Narikel Lavana in the market is very low. Some Practitioners do prepare Narikel Lavana at their own. Hence the result of this formulation may differ. Hence it is important to set some standards in manufacturing process i.e. pharmaceutical standards and standards in finished product of Narikel Lavana.

**Aims and Objectives:**

1. To study preparation of Narikel lavana.
2. To study Narikel lavana analytically.

**MATERIALS AND METHODS:****Materials:**

1. As per BhavaPrakash<sup>3</sup>
2. Pakwa Narikel (Coconuts) 03 avg. 400gm.
3. Saindhav Lavana – 300gm.
4. Multani Mitti (Fulter's Earth)

5. Cotton Cloth, Knife
6. Cowdung Cakes
7. Morter and Pestle
8. Pit for Kukkutputa

**Methods:**

Narikela Lavana was prepared as per text reference of (Bhavprakash) in 3 Batches.

**Raw Material:**

1. 03 Pakwa Narikel (Coconuts) filled with water were taken from local market of Dhule. Coconuts were weighing 370 gm, 400 gm, 410 gm respectively.
2. Saindhav Lavana (Rock salt) was purchased from Local market, having Pink shade in colour and authenticated by Dravyaguna Dept. of K.C. Ajmera Ayurveda College, Dhule (300 gm.).

**Pharmaceutical Study –**

1. All the 03 coconut weighing 370gm, 400gm, 410gm filled with water were cleaned removing outer fibers with Knife.
2. On the basis of avg. weight of coconut amount of saindhav lavana was fixed at 100gm.
3. Coconut were opened / punctured through its Black pore with knife. Saindhav lavana (100gm) was poured in each coconut with the help of funnel.

4. Coconuts were shaken with precaution so as to dissolve the inserted Saindhav Lavana.
5. The coconuts were sealed at the open point of Black pore with Multani Mitti (fulter's earth) and the whole coconut were covered with cotton cloth and Multani Mitti, with 1 angul thickness. These coconuts were dried in shade.
6. These dried coconuts were subjected to heat by kukkutputa<sup>5</sup>.
7. As per reference of Kukkutputa 2 x 2 x 2 Bitasti. Pit was arranged. Total 50 Cowdungs each weighing avg. 100gm of uniform size (diameter 3 inch) were taken from local market of Dhule. Each coconut was heated in Kukkutputa as per Ref. and the temp. was recorded continuously by pyrometer 405°C duration for 3 hrs. lasting 10 hrs. for swangsheets.
8. After the puta get swangsheets, coconuts were taken out of the pit, were observed for the changes occurred.
9. All the coconut were cleaned by removing burnt outer layer of multani Mitti and cloth. Also removed the seal made over black pore.
10. All the samples from all 03 coconuts were collected in stainless steel plates carefully. All three samples were weighed and labeled as Narikel Lavana. Total obtained Narikel Lavana was 99gm, 102gm, 95gm respectively. Finally subjected to physical and Chemical Analysis.

#### Analytical Study -

##### Organoleptic tests

- a. Colour (Varna) - Grayish Black to Black
- b. Odour (Gandha) - Pungent
- c. Taste (Rasa) - Lavana
- d. Texture (Sparsh) - Granular fine
- e. Sound (Shabda) - Nil

**Table No. 1: Physico-chemical parameters**

	A	B	C
<b>pH</b>	9.70	9.90	10.20
<b>Total Ash</b>	97.90	97.70	98.20
<b>Acid Soluble Ash</b>	5.90	6.10	6.15

#### DISCUSSION:

In this study we prepared Narikel Lavana with reference of Bhavprakash. This method of Sajala Narikel Lavana was first time described in Bhavprakash. It requires Kukkutputa i.e. around 405°C optimum temperature. Due to Multani lepa, prolonged heat can be given and reaction of Saindhav with coconut water occurs at low temperature for more time (about 3 hrs.).

This pharmaceutical study may be applied as standard procedure to produce Narikel lavana of same quality repeatedly.

Analytical study shows that Narikel lavana obtained is in grayish black to black colours and has pungent smell. Taste is obviously lavana (salty) physico-chemical analysis shows pH 9.90 avg. which is alkaline in nature. Total Ash% 97.70% acid insoluble ash 6.10% acid insoluble ash indicates inorganic matter in the sample i.e. 6.10%. It may be silica. Higher P<sup>H</sup> i.e. alkaline nature clearly indicates use in amlapitta and parinamashool.

#### CONCLUSION:

In this study, Narikel Lavana was prepared by reference of Bhavprakash. Pharmaceutical standards were observed while preparation. Avg. weight of

coconut was 400gm., Saindhav lavana was 100gm. in each batch. The kukkuputa was maintained at avg. 405°C. The total gain of Narikel lavan was avg 99gm.

Analytical study of Narikel lavana (Sajala) shows P<sup>H</sup> of 9.90 on avg. It is alkaline by nature. Hence it is advised to be used in Amlapitta / Parinamashoola.

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