

Pippalyadi Avaleha- Pharmaceutico Analytical Study

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ABSTRACT

Kasacaused due to vitiation of Tridoshas. The vitiated Prana Vayu along with Udana Vayu which further gets aggravated in association with other doshas and expelled out abruptly with a “Coughing sound” like the broken bronze vessel, called as Kasa. If it is neglected and not treated properly at proper time then the condition is worsen. In ayurveda our acharyas had explained many formulation for treating the Kasa like Swarasa, Vati, Churna etc, Avaleha is also one among them. Avaleha Kalpana was first described by Acharya Charaka and it was widely used as rejuvenator by Acharya Charak, Sushruta and Vagbhata. It is most popular due to its dosage form, which helps in easy administration, Palatability and long shelf life. Pippalyadiavaleha is one among them which is indicated in Kasa by Yogaratnakara in Kasa Adhyaya. The ingredients are Pippali, Yastimadhu, Yava, Godhuma, Mishri, Ikshurasa, Amalakiswarasa, Mrudwika, Tilataila, Goghruata, Godugdha. Pippali is main ingredient of the avaleha its active principle is Peperine, it pacifies the Kapha dosha because of its Katu rasa, Anushnaverya, Usnha and teekshnaguna, and Krimighna property. So Pippalyadiavaleha helps in fighting against infection and strengthens the immune system. Results of Antimicrobial & antioxidant activity of Pippalyadiavaleha shows presence of antibacterial and antioxidant activity.

Keywords: Pippalyadiavaleha, Pippali, Kasa

I. INTRODUCTION

Life science discoveries are helping in improving quality and standards of life and have applications in health and pharmaceutical modulations.

Rasashastra and Bhaishajya Kalpana have several preparations in Ayurveda and different methods of preparations are mentioned like Swarasakalpana, Kwathakalpana, Hima, Phanta etc.

Avaleha¹ is one of unique formulation in Ayurveda, it is secondary preparation of

Swarasakalpana. It is a semisolid preparation of herbal drugs prepared by using Swarasa, Churna, sweetening agents like jaggery and sugar.

Different varieties of Avaleha Kalpas are mentioned in various ayurvedic classics. They are most accepted varieties of ayurvedic dosage forms due to easy administration and palatability.

Pippalyadi avaleha² is explained in many texts like Yogaratnakar³ Rasendra Chintamani⁴, Sahasrayoga⁵, Bharata Bhaishajya Ratnavali⁶. Yogaratnakara explained Pippalyadiavaleha in Kasachikitsa indicated in Kasa, Shwasa, Hrudroga, Kshayaroga. In present days, there is necessity of modification of drug based on modern technology of analysis, knowledge of these adopted technologies helps in better understanding and interpretation of drug.

In developing countries due to poor hygiene and malnutrition wide spread of infectious disease across country, these infections caused by different microorganisms like bacteria, fungus etc present everywhere as result interaction between microorganism and defence mechanism of body and it causes serious disease like covid-19 pandemic, Pneumonia, Asthma and Bronchitis disease. Whereas drug Pippalyadiavaleha having Antimicrobial, Antioxidant along with Rejuvenative property.

AIM AND OBJECTIVE

AIM:

- Preparation and Physicochemical analysis of Pippalyadi Avaleha.

OBJECTIVES:

- Preparation of Pippalyadi Avaleha.
- Physicochemical analysis of Pippalyadi Avaleha.

II. MATERIALS AND METHODS

Materials:

The raw Materials Pippali, Yastimadhu, Yavagodhuma and other drugs are collected

from Gajarekar, Ayurvedic raw drug supplier Belgaum. Physio chemical analysis was carried out at Shri B.M.K Ayurvedic medical college Belagavi,

Antimicrobial activity is carried out at Cytaxon laboratory, Hubballi.

Methods:

Table no.1 Ingredients of Pippalyadiavaleha

SL. NO	DRUG NAME	QUANTITY
1	Pippali	15gm
2	Yastimadhu	15gm
3	Mishri	15gm
4	Goghruta	960ml
5	Godugdha	960ml
6	Ikshu rasa	960ml
7	Yava	120ml
8	Godhuma	120ml
9	Mrudwika	120ml
10	Amalakiswarasa	120ml
11	Tilataila	120ml

Method of preparation:

- Preparation of all the churnas⁷. i.e Pippali, Yastimadhu, Yava, Godhuma were prepared as mentioned quantity.
- Amalaki, Ikshu swarasa⁸ kept ready.
- Took Godugdha in stainless steel vessel.
- Add Yava and Godhumachurna into the vessel containing milk as mentioned quantity and boiled on Mandagni until milk get evaporated completely.
- Keep the paste to get cool down and dry the paste under the shade and make it into fine powder by pounding in a ulukhaluyantra.
- Take Ikshu rasa and Amalaka Swarasa in stainless steel vessel and add Mrudvikalka and Misri to this as mentioned quantity and boil it on mandagni till get pakasiddhilakshana.
- After getting paka siddhi lakshana, take the vessel out from the fire, add Yava and

Godhumachurna, Pippali Churna and Yastimaduchurna as mentioned quantity and mix it thoroughly till to get homogenous mixture.

- Murchit Tila taila⁹ and Murchit Goghruta were added as mentioned quantity to the vessel mix it well. Keep this mixture for self cooling, after that avaleha is collected in air tight container.

Observations:

- Tantu vatlakshana, Gandhavarnarasodbhava appears.
- Brown colour semisolid form obtained.

Precautions:

- Mandagni should be maintained throughout the procedure.
- Proper mixing of the ingredients should be done.
- Prakshepakadravyas should be added after taking the vessel away from the fire.

Table no.2 Results of process of Pippalyadiavaleha:

Sl.no	Particulars	Quantity
1.	Initial quantity	3.525 kg
2.	Obtained final product	1.250 kg
3.	Loss	2.27 kg

Analytical study:

Table no.3 Organoleptic characters of PippalyadiAvaleha:

Sl. No	Characters	Observations
1	Form	Semi solid
2	Colour	Brownish
3	Taste	Sweet
4	Odour	Pleasant

Table no. 4 Physico chemical standards of PippalyadiAvaleha:

Sl. No	Characters	Results
1	Loss on drying	5.282%
2	Ash Value	2.153%
3	Acid insoluble Ash	0.191%
4	Water soluble extractive	46.656%
5	Alcohol soluble extractive	49.325%
6	pH value	5.14
7	Fat Content	13.953%
8	Reducing Sugar	36.271%

Table no.5 Rf value details of Pippalyadiavaleha and standard

Sl.No.	Test sample	Methanol: Chloroform(1:5)	Chloroform: Acetone (1:5)	Ethyl acetate Ethanol (1:5)
1	Gallic acid	0.47	0.64	0.92
2	Quercetin	0.55	0.72	0.62
3	Pippalyadiavaleha	0.37	0.73	0.92

III. DISCUSSION

In this pippalyadiavaleha preparation the Amalakiswarasa and Godugdha are mentioned and both are having opposite qualities. According to general method of preparation if this avaleha is prepared after adding the Amalakiswarasa and

other ingredient to the Godugdha, the Godugdha spoiled due to the Amla rasa of the Amalakiswarasa. So to avoid the spoilage of Godugdha, Yavachurna and Godhumachurna are taken in a stainless steel vessel add godugdha boil in mandagni till milk get evaporates completely.

Paste was kept for drying under shade after that powder is made by pounding in ulukhaluyantra. Ikshurasa, Amalakiswarasa was taken in stainless steel vessel and added Mishri and Mrudwikakalka, boiled it on mandagni till 2-3 thread consistency appears. To that added mentioned quantity of prakshepakadrayyas after taking vessel out from the fire. Mentioned quantity of MurchitaGoghruta and MurchitaTilataila were added. And stored in air tight container.

IV. CONCLUSION

- Pippalyadiavaleha is a semi solid preparation.
- Pippalyadiavaleha is a unique preparation, prepared by using the murchitatilataila.
- Avaleha is easy to administration and easily palatable.

- Pippalyadiavaleha is brownish in color, pleasant odour, soluble in water and alcohol, sweet in taste.
- Pippalyadiavaleha is acidic in nature pH is 5.14
- On drying revealing the presence of moisture content.
- Total ash indicates the presence of moisture content
- Loss on drying reveals the presence of moisture content in the Pippalyadiavaleha.
- Thin layer Chromatography:Rf value of Pippalyadiavaleha is 0.92
- Avaleha contains Carbohydrates, Proteins, vitamin C, Flavonoids, amino acids.
- Analytical study shows the genuinity of the drugs, this results fulfils the analytical parameters of the avaleha.



Boiling of Godugdha



Adding of Yava&Godhumachurna



Adding of Mishri



Paka siddhi lakshana



Adding of Kalka



Adding of Prakshepakadrayya



Adding of Ghruta & Taila



Pippalyadi Avaleha

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