Int J Ayu Pharm Chem
ISSN 2350-0204
www.ijapc.com

RESEARCH ARTICLE

Pharmaceutico-analytical study of *Rohinyadi Pachana Arishta*

Author: Varsha[1]

Co Authors: Radhika Ranjan Geethesh P.[2], Ravindra Angadi[3], Sushmitha V.S[4] and Ashok Kumar B.N.[5]

[1-5]Department of PG and Ph.D. Studies in Rasashatra and Bhaishajya kalpana'Shri, Dharmasthala Manjunatheshwara College of Ayurveda Hospital and Research Centre, Kuthpady Udupi, Karnataka India

ABSTRACT

Introduction-*Rohinyadi Pachana Kwatha* is mentioned in *Brihat Nighantu Ratnakara*, *Atisara Chikitsa*, indicated for *Sarvatisara*. Due to limited shelf life *Kwatha* has been converted *Rohinyadi Pachana Arishta* as per the *Anukthamana of Arishta* mentioned in *Sharangadhara Samhitha.* **Aim**-To prepare *Rohinyadi Pachana Arishta* and analyse it using various physiochemical parameters. **Materials and Methods**-*Rohinyadi Pachana Arishta* prepared from *Rohinyadi Pachana Kwatha* which contains the drugs such as *Rohini, Vacha, Pata, Kushta, Ativisha* and added with *Madhura Dravya Guda* and *Sandhana Dravya Dhataki Pushpa, Prakshepaka Dravyas as ingredients of Rohinyadi Pachana Kwatha.* All the drugs were taken according to *Anuktamana* of *Arishta* and *Rohinyadi Pachana Arishta* was prepared as per standard operating procedure and pharmaceutico analytical parameters were tested and recorded. **Results**-The physico chemical parameters of *Rohinyadi Pachana Arishta* were as follows pH-3.02, Refractive index-1.34144, Viscocity-6.01, Total solids-61.05, Specific gravity-1.019, Alcohol percentage-10%, Total sugar-27.01, Reducing sugar-18.83, non-reducing sugar-8.18, and TLC at 290 nm. **Conclusion**-*Rohinyadi Pachana Arishta* was standardised as per API Guidelines and result of this study can be taken as its preliminary standard profile.

Key Words *Rohinyadi Pachana Arishta, Standardization, Atisara*

Received 18th December 2025 Accepted 09th January 2026 Published 10th January 2026

INTRODUCTION

Standardizing the drugs and formulation establishes a framework for assessing their quality and safety. Formulation quality was evaluated using organoleptic and physical characteristics, as well as qualitative and quantitative analysis. *Rohinyadi Pachana Kwatha* is mentioned in *Brihat Nighantu Rathnakara Atisara Chikitsa* indicated in *Sarvatisara*[1].

Sandhana Kalpana preparations are widely used in the present era. *Kwatha* has a shorter shelf life; hence, it is transformed into Arishta form. Arishta utilizes self-generated alcohol to preserve the active principles of medicinal drugs.

Int J Ayu Pharm Chem
ISSN 2350-0204
www.ijapc.com

RESEARCH ARTICLE

Fermentation is the essential process involved in this context. Microbial activity aids in extracting active components, resulting in a *Arishta* with long shelf life without affecting its therapeutic efficacy. This formulation contains a diverse range of active components, including alcohol and water-soluble constituents. This extraction procedures enhances potency while also conserving the formulation for an extended period of time.

AIM- To prepare *Rohinyadi Pachana Arishta* as per *Sharangadhara Samhita* and analyse it using various physicochemical parameters.

MATERIALS AND METHODS

The raw drugs were obtained from the GMP Certified SDM Ayurvedic Pharmacy, Kuthpady, Udupi. Karnataka. **As seen in Table 1 Ingredients of *Rohinyadi Pachana Kwatha* and as shown in Figure 1 to Figure 5.**

Table 1 Ingredients of *Rohinyadi Pachana Kwatha*

Drug Name	Botanical Name	Part Used	Ratio
Katuki[2]	*Picrorhiza kurroa*	*Mula*	1 Part
Ativisha[3]	*Aconitum heterophylum*	*Kanda*	1 Part
Pata[4]	*Cissampelos pariera*	*Mula*	1 Part
Vacha[5]	*Acorus calamus*	*Kanda*	1 Part
Kushta[6]	*Saussuria lappa*	*Mula*	1 Part

Figure 1 Katuki

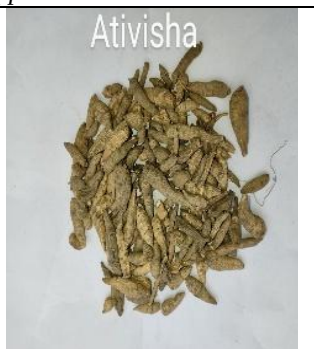


Figure 2 Ativisha

Figure 3 Pata

Figure 4 Vacha

Figure 5 Kushta

Method of preparation of *Rohinyadi Pachana Arishta*-

Purva Karma

- The raw drugs were thoroughly cleaned and dried.
- The raw drugs were transformed into coarse powder using a pulverizer and the resulting powder was sieved through a mesh.
- The coarse powder was then placed in a stainless-steel vessel and 16 times of water was added. The mixture was heated using an LPG gas cylinder and stove, with the flame set to the lowest possible level.
- After a reduction of 1/8th of the original volume, the *Kwatha* was filtered through a cotton cloth into a separate container and the residue left in the cloth was discarded.

Sandhana Patra selection

Mud pot is used to prepare the *Rohinyadi Pachana Arishta.*

Patra Samskara

RESEARCH ARTICLE

Lepana- A clean mud pot was selected and thoroughly cleaned. After cleaning, the pot was dried in sunlight. The vessel was then coated with a layer of *Gritha*.

Dhupana-The mud pot was subjected to *Dhupana*,a process of fumigation with the drugs like *Jatamansi*, *Guggulu*, *Usheera*, *Vidanga* and *Sarshapa*. They were placed in a *Sharava* in small quantity and burned to produce smoke and pot invertedly placed over *Sharava.*

PRADHANA KARMA

The *Kwatha* was transferred to stainless steel vessel, and 1kg of *Guda* was added to it. The mixture was stirred thoroughly until all the *Guda* dissolved in the *Kwatha.* After that *Kwatha* was filtered to remove any impurities and the filtered liquid was poured into *Samskaritha* mud pot.

Prakshepaka Dravya were added to the *Kwatha* in the mud pot. The pot was then securely sealed with a dry cloth. The mud pot was placed in a dark room to initiate the fermentation process.

On the 3rd day after the onset of fermentation process, *Sandhi Bandhana* was performed with the *Multhani Mitti*. Once the *Sandhi Bhandana* was completed, the mud pot was returned to the dark room. During this time, the pot was kept undisturbed until the completion of fermentation process. During the fermentation process, periodic checks were done to observe the signs of the completion of fermentation.

PASCHATH KARMA

After 1 month the pot was opened and checked for confirmatory signs and tests were conducted. Then the Arishta was carefully filtered through a clean and dry cloth to remove any solid particles. The filtrate was then stored for the further use. The preparation of *Rohinyadi Pachana Arishta* is shown in **Figure 6 to Figure 20.**

Figure 6 Transfer of Kwatha dravya

Figure 7 Addition of water

Figure 8 Boiling of Kwatha

Figure 9 Filtration of Kwatha

Figure 10 Addition of Guda

Figure 11 Gritha Lepana

Figure 12 Dhoopana Karma

Figure 13 Transferring the Kwatha

Figure 14 Addition of Prakshepaka dravya

Figure 15 Addition of Dhataki Pushpa

Figure 16 Kashaya kept for fermentation

Figure 17 Sandhibandhana done

Int J Ayu Pharm Chem
ISSN 2350-0204
www.ijapc.com

RESEARCH ARTICLE

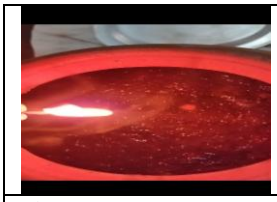


Figure 18 Burning Candle test

Figure 19 Filtration of Arishta

Figure 20 Samples of Rohinyadi Pachana Arishta

ANALYTICAL STUDY

The analytical parameters completed for *Rohinyadi Pachana Arishta* are given in **Table 3.**

Table 3 The Analytical parameters done for *Rohinyadi Pachana Arishta*[7]

Organoleptic Characters	Physico Chemical Analysis	Chromatography
Colour Smell Taste Consistency	pH Refractive Index Total solids Specific Gravity Viscocity Total acidity Alcohol percentage Total sugar Reducing sugar Non reducing sugar	HPTLC

OBSERVATION

The analytical parameters done for *Rohinyadi Pachana Arishta is given in* ***Table 4.*** Other observation during different stages of fermentation of *Rohinyadi Pachana Arishta is given in* ***Table 5.***

RESULTS

Organoleptic characteristics of *Rohinyadi Pachana Arishta* is given in **Table 6**. Results of standardization parameters of *Rohinyadi Pachana Arishta* is given in **Table 7**. R_f Value of *Rohinyadi Pachana Arishta* is given in **Table 8** and shown in **Graph 1.**

DISCUSSION

Rohinyadi Pachana Arishta was prepared using the *Rohinyadi Pachana Kwatha* as per *Anukta mana of Arishta* mentioned in *Sharangadhara Samhita*. Initially *Rohinyadi Pachana Kwatha* was prepared as per general ratio of *Kwatha Kalpana*. Later to the *Kwatha*, *Guda* was added and filtered, then this liquid is poured to the *Samskaritha Mrit Paatra* and added with *Prakshepaka Dravya* and covered with cloth and kept undisturbed for 3 days. After confirming the onset of fermentation like presence of effervescence *Sandhibandana* was done kept for 30 days. After 30 days, completion of fermentation was observed like sinking of *Prakshepaka Dravya*, absence of effervescence, and positive flame test. Later *Arishta* was filtered and stored.

Lepana and *Dhoopana samskara's* are employed to regulate the temperature and to maintain the aseptic condition.*Guda, Madhu and Sharkara* are the commonly used *Madura Dravyas* which

RESEARCH ARTICLE

Table 5 Other observation during different stages of fermentation of *Rohinyadi Pachana Arishta*

Parameters	Before Fermentation	Fermentation Onset	Completion Of Fermentation
Praksepaka Dravya	Floating	-	Settling
Effervescence	Absent	Present	Absent
Hissing sound	Absent	Present	Absent
Burning candles	-	Burning candle is put off	Burning candle continues to burn.

Table 6 Organoleptic characteristics of *Rohinyadi Pachana Arishta*

Organoleptic Characters	*Rohinyadi Pachana Arishta*
Colour	Dark brown
Taste	*Tikta*
Smell	Alcoholic odour
Consistency	Liquid

Table 7 Results of standardization parameters of *Rohinyadi Pachana Arishta*

Organoleptic Characteristics	Results N-3%W/W
pH	3.02
Total Acidity	0.44
Total Solids	61.05
Specific Gravity	1.019
Refractive Index	1.34144
Alcoholic Content (%)	10.0
Total Sugar (%)	27.01
Reducing Sugar (%)	18.83
Non-Reducing Sugar (%)	8.18
Viscosity (kg/ms)	6.01

initiate the fermentation. *Dhataki Pushpa, Madhuka Pushpa, Kinwa* are mainly used as *Sandhana Dravyas* to facilitate the fermentation process. The Pot is placed in a dark isolated room to avoid contamination from external environment and temperature is maintained through air conditioning.

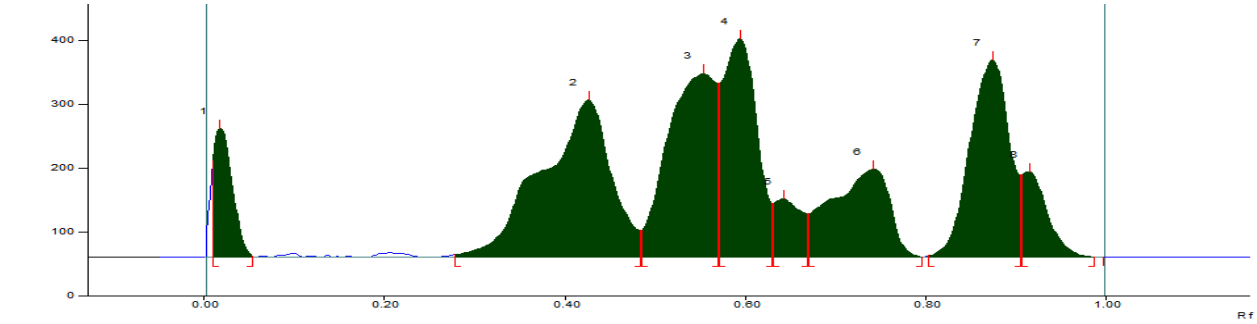
Table 8 R_f Value of *Rohinyadi Pachana Arishta*

Short UV	Long UV
-	0.08 (F. blue)
-	0.13 (F. blue)
-	0.26 (F. blue)
-	0.34 (F. blue)
0.40 (Green)	0.40 (F. blue)
-	0.47 (F. yellow)
0.49 (Green)	-
0.53(Green)	-
0.67 (Green)	0.66 (Black)
0.77(Green)	0.79 (F. blue)
0.82 (Green)	-
	0.86 (F. blue)
-	0.91 (F. blue)

Rohinyadi Pachana Arishta had *Tikta Rasa* with Alcoholic flavour. It was acidic due to presence of self-generated alcohol. Refractive index of Arishta was 1.34144 is due to the presence of dissolved solids. Total solids of *Rohinyadi Pachana Arishta* was 61.05 represents dissolved solids init. Arishta has specific gravity of 1.019 represents the component of the ingredients. Alcohol percentage of the *Arishta* is 10% which is within the limit. Total acidity is 0.44 it represents the amount of acid present in the formulation which indicates optimum fermentation process. Sugar is of 2 types Reducing and Non-reducing sugar, reducing sugar such as glucose involve in chemical reaction during fermentation and are converted in

RESEARCH ARTICLE

to alcohol. Whereas non-reducing sugar remains inert. Total sugar is a combination of reducing and non-reducing sugar. In *Rohinyadi Pachana Arishta* Reducing sugar is 18.83%, Non reducing sugar is 8.18%, Total sugar Is 27.01. Densiometric scan at 290 nm of *Rohinyadi pachana Arishta*, R_f value 0.60, 15.97%- Picroside I, R_f value 0.43, 23.52%- Picroside II.



Track 2, ID: Rohinyadi Pachana Arishta

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.01 Rf	150.5 AU	0.02 Rf	201.6 AU	11.54 %	0.05 Rf	1.2 AU	2978.5 AU	5.17 %
2	0.28 Rf	3.7 AU	0.43 Rf	245.6 AU	14.06 %	0.48 Rf	41.4 AU	13545.7 AU	23.52 %
3	0.49 Rf	41.6 AU	0.55 Rf	287.2 AU	16.44 %	0.57 Rf	71.5 AU	11138.3 AU	19.34 %
4	0.57 Rf	272.1 AU	0.60 Rf	341.6 AU	19.56 %	0.63 Rf	84.4 AU	9196.7 AU	15.97 %
5	0.63 Rf	84.5 AU	0.64 Rf	91.8 AU	5.26 %	0.67 Rf	67.3 AU	1955.8 AU	3.40 %
6	0.67 Rf	67.7 AU	0.74 Rf	136.9 AU	7.84 %	0.80 Rf	0.0 AU	6404.7 AU	11.12 %
7	0.80 Rf	2.3 AU	0.88 Rf	308.0 AU	17.64 %	0.91 Rf	28.3 AU	9697.0 AU	16.84 %
8	0.91 Rf	128.9 AU	0.92 Rf	133.8 AU	7.66 %	0.99 Rf	0.0 AU	2669.5 AU	4.64 %

Graph 1 Rohinyadi pachana Arishta, R_f - Rf 0.60(15.97%, Picroside I), 0.43 (23.52%, Picroside II)

CONCLUSION

In pharmaceutical study, *Rohinyadi Pachana Arishta* was prepared according to the general method of preparation of *Anuktamana* mentioned by *Acharya Sharangadhara* and subjected to specified analytical tests and the values were within the permissible limit and it was standardized as per the standard protocol. Hence it can be concluded that this study can be taken as a preliminary standard profile of these formulations.

RESEARCH ARTICLE

REFERENCES

1. Mathura Shri Dattha Rama Shrikrishnalal. (1925). Brihat nigantu rathnakara triteeya/chathurtha baga: Sarvathisarachikista (1st ed., p. 203, verse 1625). Khemaraja Shrikrishna Dasa Prakashana.
2. Hegde, P.L, & Harini, A. (2024). A text book of dravyaguna vijnana (2nd ed., Vol. 2, p. 382). Chaukhambha Publications.
3. Hegde, P.L, & Harini, A. (2024). A text book of dravyaguna vijnana (2nd ed., Vol. 2, p.84). Chaukhambha Publications.
4. Hegde, P.L, & Harini, A. (2024). A text book of dravyaguna vijnana (2nd ed., Vol. 2, p.532). Chaukhambha Publications.
5. Hegde, P.L, & Harini, A. (2024). A text book of dravyaguna vijnana (2nd ed., Vol. 2, p. 675). Chaukhambha Publications.
6. Shastri, J. I. N. (2008). Illustrated dravyaguna vijnana (3rd ed., Vol. II, pp. 307, 1134). Chaukhambha Publications.
7. Howard, S. V. (2012). A hand book of standardization of ayurvedic formulations : Procedures and tests required for standardisation of ayurvedic drugs and formulations (Chapter 4, p. 94). Chaukhambha Orientalia.