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PHARMACEUTICO-ANALYTICAL INSIGHTS INTO SOMA GHRITA: A CLASSICAL AYURVEDIC FORMULATION

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ABSTRACT

Soma Ghrita is a classical *Snehakalpana* formulation described in Bhaishajya Ratnavali under **Yonivyapad Chikitsa**. It is prepared using **Ghrita** as the base along with herbal and mineral ingredients such as **Shatavari, Yashtimadhu, Kushta, Sariva, Shankhapushpi, Draksha, Punarnava, Katuki, Devadaru, Phalatraya, Priyangu, Shuddha Gairika, Vasa Pushpa etc** . The formulation was prepared according to classical *Sneha Kalpana* procedures, ensuring proper **Sneha Paka** and observation of **Sneha Siddhi Lakshanas** to obtain the final product. The present study focuses on the **pharmaceutico-analytical standardization of Soma Ghrita**. The prepared formulation was subjected to **organoleptic evaluation** including color, odor, taste, and consistency, followed by **physicochemical analysis** such as pH, specific gravity, refractive index, acid value, saponification value, iodine value, and moisture content. These analytical parameters help in establishing the **identity, purity, and quality standards** of the formulation. This study highlights the **pharmaceutical preparation and analytical standardization of Soma Ghrita**, providing baseline data for quality control and further research on this classical Ayurvedic formulation.

KEYWORDS: Soma Ghrita, Pharmaceutico-analytical standardization, Sneha Kalpana, Ghrita Kalpana, Bhaishajya Ratnavali.

INTRODUCTION

Standardization of Ayurvedic formulations is essential to ensure their quality, safety, and consistency. Soma Ghrita, a classical *Snehakalpana* described in Bhaishajya Ratnavali under *Yonivyapad Chikitsa*, is prepared using Ghrita along with ingredients such as Shatavari, Yashtimadhu, Kushta, Sariva, Shankhapushpi, Draksha, Punarnava, Katuki, Devadaru, Phalatraya, Priyangu, Shuddha Gairika, Vasa Pushpa etc**.**

The formulation is prepared according to classical Sneha Kalpana procedures where attainment of Sneha Siddhi Lakshanas is essential for proper preparation. To ensure the identity, purity, and quality of the formulation, pharmaceutico-analytical standardization is required. Therefore, the present study focuses on the pharmaceutical preparation and analytical evaluation of Soma Ghrita to establish standard quality parameters.

AIMS AND OBJECTIVES

1. To prepare Murchita ghrita and soma ghrita as per SOP's told in classics.
2. To carry out shodhana of Swarna gairika.
3. To conduct physico chemical analysis of Murchita ghrita and Soma ghrita.

MATERIALS AND METHODS

The ingredients used for the preparation of **Murchita Ghrita[1]** and **Soma Ghrita[2]** were procured from an authenticated source and identified according to classical Ayurvedic standards. The formulations were prepared following the classical *Sneha Kalpana* procedure. The prepared samples were then subjected to **organoleptic evaluation and physicochemical analysis** to assess their quality and standardization parameters.

Gairika shodhana (Rasaratna samuccchaya)[3] materials : Ashudha swarna gairika – 93.5g

Godugdha -150ml

Equipments – Khalwa yantra, Measuring jar, Spoon

Procedure

- 93.5 g of Ashodhita Gairika was taken in a clean *Khalva Yantra* and finely powdered by *Mardana*.
- Required quantity of Godugdha was added to immerse the Gairika.
- *Mardana* was continued until Subhavita Lakshana appeared.
- This completed one Bhavana; the process was repeated 7 times using fresh milk each time.
- After completion of 7 Bhavanas, the Shuddha Gairika obtained was dried and stored in an airtight container.

Observations

- Raw Gairika was solid, reddish-brown with earthy odor and uneven surface.
- It became soft and easily powdered with smooth texture.
- Earthy smell was noticed up to the 2nd Bhavana; later milky odor appeared.
- Color changed from bright red (1st Bhavana) to dark reddish-brown (7th Bhavana).
- Initial Bhavana dried quickly, while the last two Bhavanas were sticky and took more time to dry.

Precautions

- Ensure the Khalva Yantra is clean and dry before the procedure.
- Powder the Gairika finely before adding Godugdha.
- Add only sufficient milk to immerse the material to avoid spillage.
- Begin the next Bhavana only after complete drying of the previous one.
- Add fresh Godugdha immediately after drying for the next Bhavana.

Table no. 1: Showing the Quantity of Gairika before and after Bhavana.

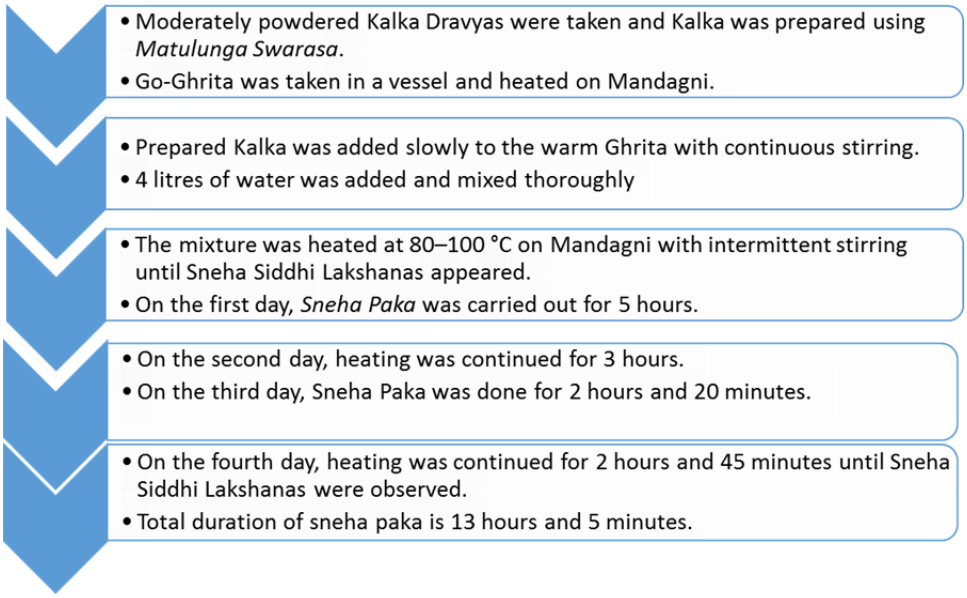
SL NO	Date	Quantity of Gairika before Bhavana (In gms)	Quantity of Godugdha used(In ml)	Quantity of Gairika After Bhavana (In gm)	Weight Gain (In gm)	Duration of Mardana
1	27/11/2024	93.5	150	106.5	13	5hrs 30 min
2	29/11/2024	106.5	145	127.5	21	6hrs 30 min
3	03/12/2024	127.5	120	135	7.5	8hrs 30 min
4	31/12/2024	135	130	145	10	6 hrs
5	08/01/2025	145	120	154.5	9.5	5 hrs 30 min
6	21/01/2025	154.5	115	164.5	10	4 hrs 30 min
7	03/02/2025	164.5	120	176.5	12	5 hrs

Preparation of Murchita Ghrita

Apparatus - Weighing machine, Wide-mouthed Vessel, Gas stove, clean cloth, Ladle, Match box.

Ingredients – *Haritaki* - 125gm, *Vibhitaki*-125gm, *Amalaki*-125gm, *Musta-125gm*, *Haridra*-125gm, *Matulunga Swarasa* – 125ml, *Ghrita* - 2000ml, Water – 4 litres.

Method of Preparation



OBSERVATION

- Ghrita melted and appeared light yellow in colour.
- After addition of Kalka and water, frothing and boiling were observed.
- Characteristic aroma developed during heating.

After completion of Paka, the Sneha Siddhi Lakshanas were observed, including Shabda Heenatva on Agni Nikshipta, formation of Varti, and the characteristic Rasa and Gandha of the formulation.

- Final product obtained was clear, dark yellow Murchita Ghrita.

Precutions

- Continuous stirring was done to prevent charring and sticking of Kalka to the vessel.
- Kalka and water were added carefully to the warm Ghrita.
- Paka Siddhi Pariksha was done timely to avoid Khara Paka.

Paschath Karma

- Warm Kalka was pressed to obtain maximum Ghrita.
- Filtered Murchita Ghrita was cooled and then stored in airtight container properly.

Preparation of Soma Ghrita

Apparatus: Weighing machine, ladle, collecting vessel, wide mouthed vessel, filtering cloth, Gas stove.

Ingedients: *Kalka* – 437.5gm, *Murchita Ghrita*- 1750ml, Jala – 7000ml

Table no. 2: **Showing Kalka dravyas of Soma Ghrita (S.G).**

Sl.No	Drug Name	Quantity
1.	*Sarshapa*	*17gm*
2.	*Vacha*	*17gm*
3.	*Brahmi*	*17gm*
4.	*Shankhapushpi*	*17gm*
5.	*Purnanava*	*17gm*
6.	*Ksheera kakoli (shatavari)*	*17gm*
7.	*Yashtimadhu*	*17gm*
8.	*Kushta*	*17gm*
9.	*Katuki*	*17gm*
10.	*Haritaki*	*17gm*
11.	*Bibhitaki*	*17gm*
12.	*Amalaki*	*17gm*
13.	*Shwetha sariva*	*17gm*
14.	*Krishna sariva*	*17gm*
15.	*Haridra*	*17gm*
16.	*Patha*	*17gm*
17.	*Bringaraja*	*17gm*
18.	*Devadaru*	*17gm*
19.	*Suvarchala*	*17gm*
20.	*Manjishta*	*17gm*
21.	*Drakshaphala*	*17gm*
22.	*Kashmarya phala*	*17gm*
23.	*Parushaka phala*	*17gm*
24.	*Priyangu (Shyama)*	*17gm*
25.	*Vasa pushpa*	*17gm*
26.	*Shudha gairika*	*17gm*

Method of preparation

- A clean and wide mouthed stainless steel vessel was taken , *Murchita Ghrita* was added and kept on *mandagni*.
- Once *Ghrita* gets heated *kalka* was added slowly with continuous stirring, next to this Jala was added and stirred well.

- Heating was carried out in *mandagni* (around 80-100^{0}c) and the boiling was continued till the *sneha siddhi lakshanas* observed.
- On the first day, *Sneha Paka* was carried out for 3 hours.

- On the second day, heating was continued for 5 hours.
- On the third day, *Sneha Paka* was done for 4 hours and 10 minutes.

- On the fourth day, heating was continued for 2 hours and 40 minutes until Sneha Siddhi Lakshanas were observed.
- The total duration of Sneha Paka was 14 hours and 50 minutes.

Observation

- Development of characteristic aroma of Kalka Dravyas during heating.
- Kalka thickened and separated from Ghrita, forming a bolus.
- Color change of Ghrita from yellow to dark greenish-yellow.
- After completion of Paka, the Sneha Siddhi Lakshanas were observed, including Shabda Heenatva on Agni Nikshipta, formation of Varti, and the characteristic Rasa and Gandha of the formulation.
- In liquid state, SG was dark greenish yellow in colour.
- After solidifying attained yellowish colour.

Precautions

- Use clean, dry and non reactive utensils.
- Maintain a clean environment to prevent contamination.
- Maintain *mandagni* throughout the procedure.
- Constant stirring should be performed to prevent the ghrita from sticking.
- Timely performance of the *sneha Siddhi Parikshas* and observations of *Siddhi Lakshanas*.

Paschat Karma

- The prepared SG was filtered by a clean cloth when it was warm.
- The collected Ghrita was stored in a clean air tight container.

RESULTS

Table No. 3: Showing the results of Weight gain of *Gairika before and after each Bhavana*.

Sl No	Quantity of Gairika before shodhana (In gms)	Quantity of Godugdha used (In ml)	Quantity of Gairika After Shodhana (In gm)	Weight Gain (In gm)	Weight gain in (%)
1	93.5	150	106.5	13	13.9%
2	106.5	145	127.5	21	19.71%
3	127.5	120	135	7.5	5.8%
4	135	130	145	10	7.40%
5	145	120	154.5	9.5	6.55%
6	154.5	115	164.5	10	6.47%
7	164.5	120	176.5	12	7.29%

Table no 4: Showing Results of Ghrita murchana.

Quantity of *Goghrita*	**2000 ml**
Observations	All *Siddhi lakshanas* observed.
Obtained Quantity	1850 ml
Loss	150 ml
Color	Yellow
Yield in %	92.5%

Table no 5: Showing the Result of SG.

Quantity of MG	**1750 ml**
Observations	All *Siddhi lakshanas* observed.
Obtained quantity	1300 ml
Loss	450ml
Color	Dark greenish yellow
Yield in %	74.29%

Table no.60: Showing Classical Parameters for Analysis of MG, SG.

Sl no	Classical Parameters	OBSERVATION	
		MG	**SG**
1	*Varna*	Peetabha	Gahana harita Peetabha
2	*Gandha*	Sadravya lakshana gandha	Sadravya lakshana gandha
3	*Rasa*	Tikta	Madhura, Tikta
4	*Kalka vartivatlakshana*	+++	+++
5	*Shabdahina when put on agni*	+++	+++
6	*Phenashanti*	+++	+++

MODERN PARAMETERS

A.ORGANOLEPTIC PARAMETERS: Colour, odour, taste of the given sample was tested using sensory organs and the same were noted.

Table no. 6: Showing organoleptic characters of MG, SG.

Physical test	MG	SG
Colour	Yellow	Dark Greenish Yellow
Odour	Characteristic	Characteristic
Taste	Astringent, slightly bitter	Sweet, Bitter
Texture	Grainy greasy	Grainy greasy

B.PHYSICO-CHEMICAL PARAMETERS

Table no 7: Showing Results of Standardization parameters.

Sl no	Parameter	*Results n = 3 %w/w*	
		MG	SG
1	Loss on Drying at 105°C	0.32%	0.48%
2	Saponification value	182.32	125.24
3	Iodine value	5.07	34.26
4	Acid value	1.9	1.57
5	Ester value	180.416	123.67
6	Refractive index	1.476	1.477
7	Specific gravity	0.90	1.082
8	Viscosity (cP)	39.48	128.62
9	Rancidity test (Kreis test)	Negative	Negative

Table no 8: Showing results of Total bacterial count of MG, SG.

	MG	SG
Total bacterial count	7 CFU (limit<10CFU/ML)	7 CFU (limit<10CFU/ML)

Results: There is no growth of bacterial colonies in the sample MG, SG

Table no.9: showing results of total fungal count of MG, SG.

	MG	SG
Total Fungal count	8 CFU (limit<10CFU/ML)	6 CFU (limit<10CFU/ML)

Results: **There is no growth of fungal colonies in the sample MG, SG.**

Table No 10: Showing results of TLC – Under Visible light.

	MG	SG
Under white light	0.567	NIL
Under short UV (254nm)	0.562	0.33
Under Long UV(365nm)	0.237	0.33
	0.51	
	0.56	0.71

Table no 11: Showing the unsaponifiable matter of Soma ghrita.

Parameter	Somaghritha
Unsaponifiable matter	1.84%

HPTLC

Table no. 12: Showing Observation of HPTLC at 254nm.

SL no	RF values	Colour observed	Inference
1	0.64	Green	Chlorophyll And Related Plant Pigments Such As Flavonoids Or Phenolic Compounds.
2	0.87	Green	Flavonoids Or Other Polyphenolic Compounds In The Sample.

Table no. 13: Showing Observation of HPTLC at 366nm.

SL no	RF values	Colour observed	Inference
1	0.41	Fluorescent blue	Presence Of Alkaloids Or Coumarins
2	0.51	Fluorescent blue	Presence Of Flavonoids.

3	0.60	Fluorescent blue	Presence Of Phenolic Compounds.
4	0.76	Fluorescent green	Presence Of Coumarins Or Chlorophyll-Related Compounds,

Table no 14: Showing observation of HPTLC Post derivatisation.

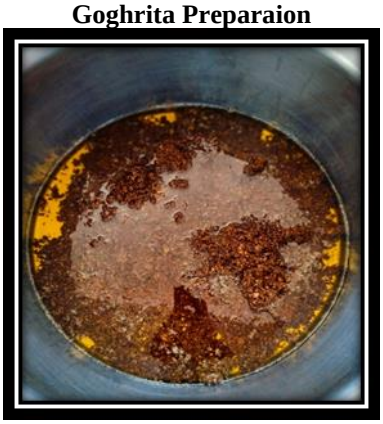
SL no	RF values	Colour observed	Inference
1	0.39	Purple	Presence Of Anthocyanins
2	0.56	Purple	Presence Of Tannins.
3	0.65	Purple	Presence Of Phenolic Compounds
4	0.75	Purple	Presence Of Flavonoids.
5	0.89	Purple	Presence Of Alkaloids

Figures

Goghrita Preparaion

Ghrita murchana dravyas

Kalka



Adding kalka dravya

Attainment of paka

Murchita goghrita

Ashudha Gairika

Godugdha for Bhavana

Adding Godughdha For ashudha gairika

During bhavana procedure

After 1st bhavana

After 2nd bhavana

After 3rd bhavana

After 4th bhavana

After 5th bhavana

After 6th Bhavana

After 7th Bhavana

Ingredients of Soma ghrita Drugs

Kalka dravyas

Adding of murchita Ghrita

Adding kalka to murchita

Kalka dravyas in murchita ghrita

Adding jala ghrita

Ghrita paka

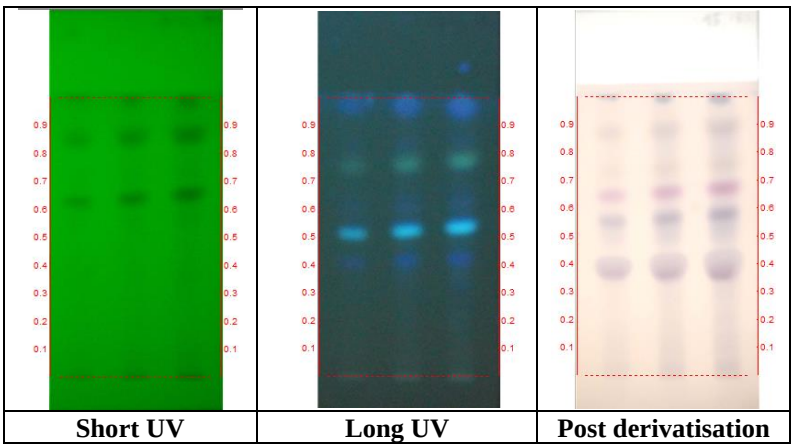
Varti Lakshana

Shabda heena Lakshana

Filtering of Ghrita

Soma ghrita

HPTLC RESULTS



Short UV	Long UV	Post derivatisation

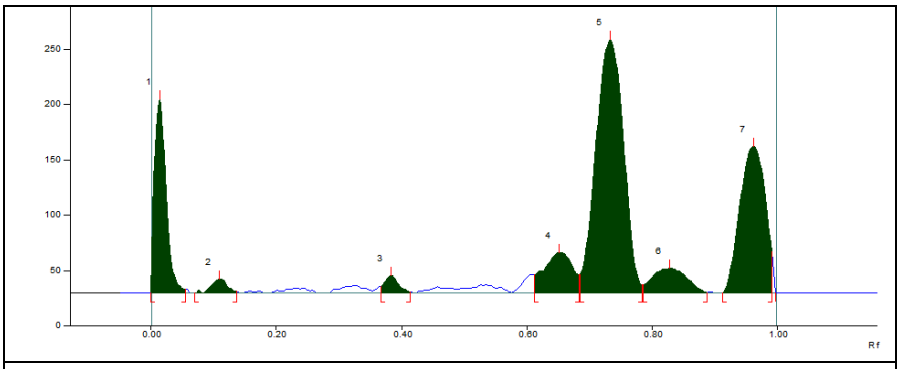
Figure 1: HPTLC photo documentation of chloroform fraction of Soma ghritha.

Track 1 – Soma ghritha – 3µl
Track 2 – Soma ghritha – 6µl
Track 3 – Soma ghritha – 9µl
Solvent system – Toluene: Ethyl acetate (9:1)

Table 2: R_f values of samples.

At 254nm	At 366nm	Post derivatisation
-	-	0.39 (Purple)
-	0.41 (F. blue)	-
-	0.51 (F. blue)	-
-	-	0.56 (Purple)
-	0.60 (F. blue)	-
0.64 (Green)	-	0.65 (Purple)
-	0.76 (F. green)	0.75 (Purple)
0.87 (Green)	-	-
-	-	0.89 (Purple)

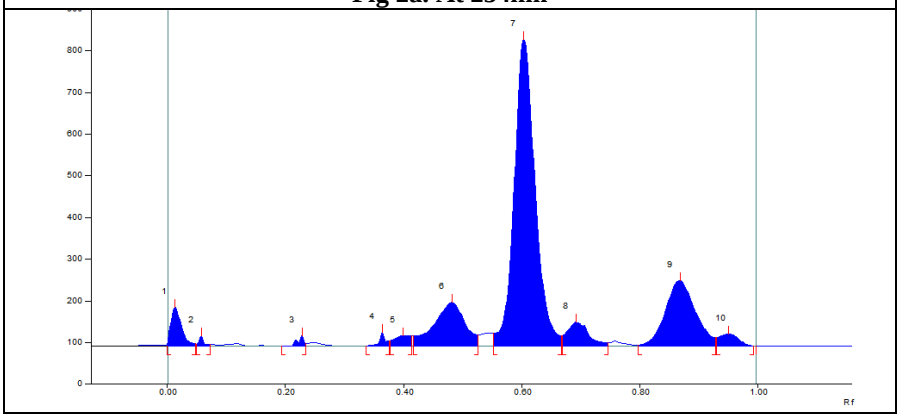
***F – fluorescent; L –light; D – dark**



Track 7, ID: Soma ghritha

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.00 Rf	0.0 AU	0.01 Rf	175.0 AU	28.07 %	0.05 Rf	3.0 AU	2334.0 AU	14.60 %
2	0.07 Rf	0.1 AU	0.11 Rf	12.4 AU	1.99 %	0.14 Rf	1.3 AU	230.7 AU	1.44 %
3	0.37 Rf	6.0 AU	0.38 Rf	16.1 AU	2.58 %	0.41 Rf	1.1 AU	250.6 AU	1.57 %
4	0.61 Rf	16.6 AU	0.65 Rf	36.4 AU	5.84 %	0.68 Rf	16.5 AU	1195.7 AU	7.48 %
5	0.69 Rf	16.8 AU	0.73 Rf	228.8 AU	36.71 %	0.79 Rf	7.1 AU	7266.2 AU	45.46 %
6	0.79 Rf	7.2 AU	0.83 Rf	22.1 AU	3.54 %	0.89 Rf	0.4 AU	882.6 AU	5.52 %
7	0.91 Rf	0.1 AU	0.96 Rf	132.4 AU	21.25 %	0.99 Rf	36.9 AU	3824.4 AU	23.93 %

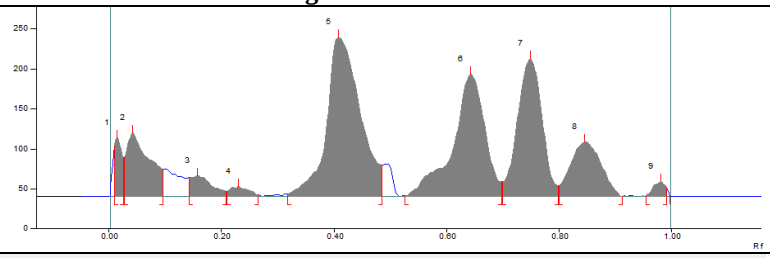
Fig 2a. At 254nm



Track 7, ID: Soma ghritha

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.00 Rf	0.0 AU	0.01 Rf	94.0 AU	7.32 %	0.05 Rf	5.3 AU	1218.9 AU	3.70 %
2	0.05 Rf	4.8 AU	0.06 Rf	24.2 AU	1.89 %	0.07 Rf	3.2 AU	142.5 AU	0.43 %
3	0.19 Rf	0.4 AU	0.23 Rf	25.7 AU	2.00 %	0.24 Rf	5.3 AU	200.5 AU	0.61 %
4	0.34 Rf	0.6 AU	0.36 Rf	32.4 AU	2.52 %	0.38 Rf	12.9 AU	244.1 AU	0.74 %
5	0.38 Rf	13.4 AU	0.40 Rf	24.8 AU	1.94 %	0.41 Rf	24.1 AU	508.3 AU	1.54 %
6	0.42 Rf	23.8 AU	0.48 Rf	104.4 AU	8.13 %	0.53 Rf	26.9 AU	3927.6 AU	11.92 %
7	0.55 Rf	30.9 AU	0.60 Rf	734.8 AU	57.25 %	0.67 Rf	25.0 AU	18737.7 AU	56.89 %
8	0.67 Rf	25.4 AU	0.69 Rf	57.0 AU	4.44 %	0.75 Rf	8.5 AU	1531.9 AU	4.65 %
9	0.80 Rf	2.4 AU	0.87 Rf	156.7 AU	12.20 %	0.93 Rf	20.2 AU	5730.2 AU	17.40 %
10	0.93 Rf	20.2 AU	0.95 Rf	29.6 AU	2.31 %	0.99 Rf	0.1 AU	697.9 AU	2.12 %

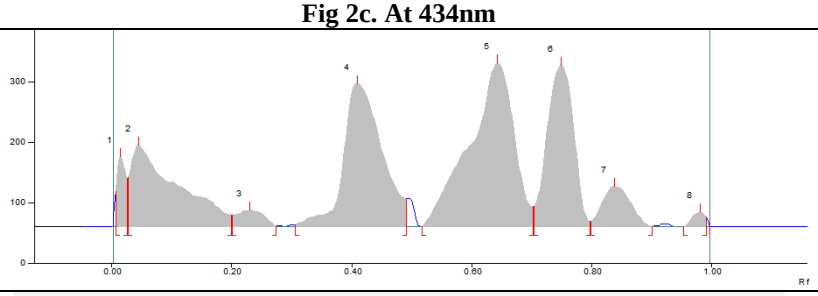
Fig 2b. At 366nm



Track 7, ID: Soma ghritha

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.01 Rf	63.3 AU	0.01 Rf	73.6 AU	9.18 %	0.03 Rf	48.4 AU	696.5 AU	2.56 %
2	0.03 Rf	48.6 AU	0.04 Rf	79.5 AU	9.92 %	0.10 Rf	33.9 AU	2374.4 AU	8.73 %
3	0.14 Rf	23.4 AU	0.16 Rf	25.7 AU	3.21 %	0.21 Rf	6.4 AU	709.4 AU	2.61 %
4	0.21 Rf	6.4 AU	0.23 Rf	12.2 AU	1.52 %	0.27 Rf	1.6 AU	293.4 AU	1.08 %
5	0.32 Rf	3.0 AU	0.41 Rf	199.2 AU	24.85 %	0.49 Rf	39.5 AU	8561.6 AU	31.49 %
6	0.53 Rf	0.6 AU	0.64 Rf	153.2 AU	19.11 %	0.70 Rf	18.1 AU	6246.4 AU	22.97 %
7	0.70 Rf	18.2 AU	0.75 Rf	172.2 AU	21.48 %	0.80 Rf	13.6 AU	5394.3 AU	19.84 %
8	0.80 Rf	13.7 AU	0.85 Rf	67.9 AU	8.48 %	0.91 Rf	0.1 AU	2642.8 AU	9.72 %
9	0.96 Rf	0.6 AU	0.98 Rf	18.1 AU	2.26 %	0.99 Rf	11.2 AU	272.6 AU	1.00 %

Fig 2c. At 434nm



Track 7, ID: Soma ghritha

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.01 Rf	57.2 AU	0.01 Rf	115.9 AU	10.16 %	0.03 Rf	79.9 AU	1234.5 AU	2.69 %
2	0.03 Rf	80.7 AU	0.05 Rf	134.6 AU	11.80 %	0.20 Rf	19.4 AU	7490.3 AU	16.33 %
3	0.20 Rf	19.4 AU	0.23 Rf	27.8 AU	2.43 %	0.27 Rf	0.7 AU	891.2 AU	1.94 %
4	0.31 Rf	3.5 AU	0.41 Rf	236.0 AU	20.68 %	0.49 Rf	46.7 AU	10906.7 AU	23.78 %
5	0.52 Rf	0.4 AU	0.64 Rf	270.3 AU	23.68 %	0.70 Rf	32.6 AU	14299.8 AU	31.18 %
6	0.70 Rf	33.4 AU	0.75 Rf	266.4 AU	23.34 %	0.80 Rf	8.4 AU	8429.4 AU	18.38 %
7	0.80 Rf	8.6 AU	0.84 Rf	66.2 AU	5.80 %	0.90 Rf	0.2 AU	2252.9 AU	4.91 %
8	0.95 Rf	0.0 AU	0.98 Rf	24.0 AU	2.11 %	0.99 Rf	15.6 AU	363.1 AU	0.79 %

Fig 2d. At 620nm

Figure 2: Densitometric scan of Soma ghritha.

DISCUSSION

➢ Organoleptic Characters

MG appeared as a greasy semisolid with canary yellow colour, while SG showed a dark greenish-yellow colour, both with characteristic odour. The colour difference indicates extraction of different phytoconstituents into the lipid base during *Snehapaka*, confirming successful incorporation of herbal constituents.

- **Loss on Drying (105 °C)**

MG showed 0.32% and SG 0.48%. Both values are below 1%, indicating low moisture content, reduced microbial growth, and good stability. The slightly higher value in SG may be due to the presence of additional herbal constituents.

- **Saponification Value**

MG showed 182.32 whereas SG showed 125.24. The lower value in SG suggests the presence of long-chain fatty acid esters and lipid–phytoconstituent complexes, indicating incorporation of herbal constituents during processing.

- **Iodine Value**

MG recorded 5.07, while SG showed 34.26. The higher iodine value of SG indicates greater unsaturation of fatty acids, which may enhance tissue permeability and absorption of active constituents.

- **Acid Value**

MG showed 1.9 and SG 1.57. The slightly lower acid value in SG indicates better stability and minimal fat hydrolysis, reflecting good quality and resistance to rancidity.

- **Ester Value**

MG showed 180.416 whereas SG showed 123.67. The reduction in SG suggests conversion of simple triglycerides into complex lipid-phytoconstituent compounds, improving stability and controlled release of active principles.

- **Refractive Index**

MG and SG showed values of 1.476 and 1.477 respectively, indicating similar lipid composition. The slight increase in SG suggests incorporation of un saponifiable and bioactive herbal constituents.

- **Specific Gravity**

MG showed 0.90, whereas SG showed 1.082. The higher value in SG indicates greater density due to dissolved phytoconstituents and heavier molecules, reflecting enhanced herbal impregnation.

- **Viscosity**

MG showed 39.48, while SG showed 128.62, indicating that SG is more viscous. Increased viscosity suggests structural modification of the lipid matrix due to incorporation of herbal constituents.

- **Rancidity Test**

Both MG and SG showed negative results, indicating absence of rancidity and presence of natural antioxidants that maintain stability.

- **Microbial Limit Test**

Both formulations showed no bacterial or fungal growth, indicating good hygienic preparation, minimal moisture, and proper storage.

- **TLC Analysis**

MG showed more bands, while SG showed fewer bands, indicating modification of phytochemical profile due to incorporation of Soma Ghrita ingredients and interaction with the lipid base.

- **HPTLC Analysis**

SG showed distinct bands at different Rf values under 254 nm and 366 nm, confirming the presence of phenolic compounds, flavonoids, steroids, terpenoids, and fatty acids, which indicates successful incorporation of bioactive constituents during *Ghrita paka*.

CONCLUSION

The present study successfully established the **pharmaceutico-analytical standardization of Soma Ghrita**, a classical formulation described in Bhaishajya Ratnavali. The formulation was prepared following classical *Sneha Kalpana* procedures using *Murchita Ghrita* and 26 ingredients including **Godugdha Bhāvita Gairika**. The obtained physicochemical parameters such as loss on drying, saponification value, iodine value, acid value, ester value, refractive index, specific gravity, and viscosity indicated proper processing and good stability of the formulation. TLC and HPTLC profiling revealed characteristic phytochemical patterns confirming successful incorporation of active constituents into the lipid matrix. These results provide **baseline standards for identification, quality control, and further research on Soma Ghrita**.

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