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## Phytochemical Analysis of *Vishaghna Gana Chakrika* - An Ayurvedic Formulation

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#### ABSTRACT

Background: VishaghnaGanaChakrika is an Ayurvedicherbal formulation which is used as Dhoopanaprocedure for anti-microbial effect. Ayurvedicdrugs are natural products which are obtained from herbs, minerals and animal products. There are many formulations mentioned inAyurvedic classic texts which are either used single or combination with other drug, Charaka has explained 50 groups of 10 herbs each in Shad Acharya VirechanaShatashriteeyaAdhyaya. VishaghnaGana is one among them. Drugs which act against toxic substances are called as Vishaghna. It includes Haridra (Curcuma longa), Manjishtha (Rubiacordifolia), Suvahaa (Pluchealanceolata), Sookshamaelaa (Elettariacardamomum), Paalindee (Operculinaturpethum), Chandan (Santalum album), Kataka(Strychnospotatorum), Shireesha(Albizzialebbeck), Sinduvaara (Vitexnegundo), Shleshmaataka (Cordiadichotoma). With growing awareness of health care and safety aspects there has been an increase in demand for the Phyto-pharmaceutical products of Ayurveda.

Aims: The present work was carried to analyse the Phyto chemical activity of *Vishaghna Gana Chakrika*.

**Methodology:***VishaghnaGanaChakrika*is prepared as per the classical reference of preparation of *Chakrika*. Drug was analysed for the following parameters like phytochemical test and High Performance Thin Layer Chromatography (HPTLC).

**Results:** Phytochemical test revealed the presence of alkaloid, steroid, carbohydrate, tannin, resin, Quinone. HPTLC photo documentation, densitometric scan, R<sub>f</sub>values are presented in respective tables and figures.

**Conclusion:** On the basis of observations and experimental results of *Vishaghna Gana Chakrika*has evaluated presence of alkaloids, steroids, carbohydrates, tannin, resin and



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quinonein it. This study may be used as standard protocol in the further quality control researches.

#### **KEYWORDS**

VishaghnaGana, Dhoopana, Phyto-chemical, HPTLC, Anti-Microbial



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#### **INTRODUCTION**

Ayurvedic drugs are natural products which are obtained from herbs, minerals and animal products. There are many formulations are mentioned in Ayurvedic classic texts which in single or combination of drugs. Acharya Charaka has explained 50 groups of 10 herbs each in Shad VirechanaShatashriteeyaAdhyaya. *VishaghnaGana*is one among them. VishaghnaGanaChakrika is an Ayurvedic herbal formulation which is used as Dhoopana procedure for anti-microbial effect.

Drugs which act against toxic substances are called as Vishaghna. It includes Haridra (Curcuma longa), Manjishtha Suvahaa (Rubiacordifolia), Sookshamaelaa (Pluchealanceolata), Paalindee (Elettariacardamomum), (Operculinaturpethum), Chandan (Santalum album), Kataka (Strychnospotatorum), Shireesha (Albizzialebbeck), Sinduvaara (Vitexnegundo), Shleshmaataka (Cordiadichotoma). Standardisation of Ayurvedic drugs is necessary as growing awarenessof health care and safety aspects of herbal drugs. Hence analytical parameters are essential as a measure of quality control and standardization of the finished product.

#### **AIMS AND OBJECTIVES:**

The objective of the study was to prepare the VishaghnaGanaChakrika and analyse Phyto-Chemical and its parameters HPTLC.

#### **MATERIALS AND METHODS:**

Collection, Identification	and				
Authentication of Raw Drug					
The raw drugs for the study were p	rocured				
from the Sri Dharm	nasthala				
Manjunatheshwara Pharmacy, Hass	an. The				
ingredients were identified	and				
authenticated in the departme	ent of				
DravyaGuna, Sri Dharm	nasthala				
Manjunatheshwara College of Ay	yurveda				
and Hospital, Hassan. Phytocl	nemical				
screening procedure	of				
VishaghnaGanaChakrika is done	in Sri				
DharmasthalaManjunatheshwaraCenter for					
Research in Ayurveda and Allied Sciences,					
Udupi.					
Table 1         SHOWING THE INGREDIEN           VISHAGHNA GANA AND PART USED					

SL	DRUG	PARTS
•		USED
Ν		
0		
1.	HARIDRA (Curcuma longa) <sup>2</sup>	Rhizom
		e
2.	MANJISTA (Rubiacordifolia	Root
	Linn) <sup>3</sup>	
3.	SUVAHA	Roots
	(Plunchealanceolataoliver&hiern	
	) <sup>4</sup>	
4.	SUKSHMA ELA	Seeds
	$(Elettaria cardamomum)^5$	
5.	PALINDI	Root

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(Operculinaturpethum) <sup>6</sup>	powdered form separately in equal
6. CHANDANA (Santalum album) <sup>7</sup> Heart	
wood	quantity. Under all aseptic precautions,
7 KATAKA Seeds	the second and an index of the second and a
(StrychnospotatoriumLinnn.f) <sup>8</sup>	these powders mixed together and made
8. SIRISHA (Albizzialebbeckbenth) <sup>9</sup> Seeds.	into a fine paste. Then it made into
9. SINDUVARA (Vitexnergundo) <sup>10</sup> Leaf.	_
10. SLESHMATAK Bark.	Chakrikas of equal size weighing about 5
(Cordiadichotoma) <sup>11</sup>	and the second the second s
Method of Drug Preparation	grams each. Then it is dried under sunlight
Ingredients mentioned in Table 1 are	for 2 days.
C C C C C C C C C C C C C C C C C C C	Phyto chemical screening procedure:
10VishaghnaGana drugs taken in	r ny to enclinear ser centing procedure.
Table 2 Qualitative tests performed are	
Alkaloids	Carbohydrate
Dragendroff's test	Molish test
Wagners test	Fehlings test
Mayers test	Benedicts test
Hagers test	
Steroids	Tannin
Liebermann- buchard test	With FeCl <sub>3</sub>
Salkowski test	
Flavanoids	Saponins
Shinoda's test	With NaHCO <sub>3</sub>
Triterpenoids	Coumarins
Tin and thionyl chloride test	With 2 N NaOH
Phenols	Carboxylic acid
With alcoholic ferric chloride	With water and NaHCO <sub>3</sub>
Amino acid	Resin
With ninhydrine reagent	With aqueous acetone
Quinone	
Conc. sulphuric acid	

#### HPTLC

VishaghanaGanaChoornaChakrika,1g,po

wder was extracted with 20 ml of alcohol and kept for 24hrs for cold maceration then was filtered. The above extract 3, 6 and 9µl was applied on a pre-coated silica gel F254 on Aluminium plates to a band width of 7 mm using Linomat 5 TLC applicator. The plate was developed in Toluene: Ethyl acetate (9.0: 1.0). The developed plates were visualized in short UV, long UV, and then derivatised with vanillin sulphuric acid and scanned under UV 254nm, 366nm and 620nm. Rf, colour

of the spots and densitometry scan were recorded.

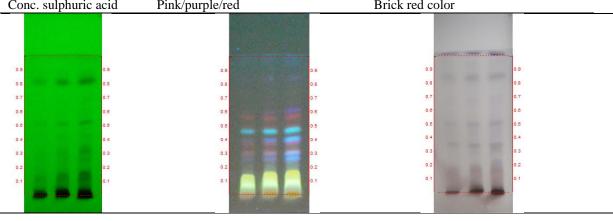
#### DISCUSSION AND RESULTS

Aim of the analysis was to check the quality of VishaghnaGanaChakrikaand to standardize the formulation.

Table	3	Showing	Results	of	preliminary			
phytoch	nemi	cal	screen	ing	of			
VishaghanaGanaChoornaChakrika								

Test	Inference	
Alkaloid	+	
Steroid	+	
Carbohydrate	+	
Tannin	+	
Flavanoids	-	
Saponins	-	
Terpenoid	-	

Coumarins	<u> </u>	Resin	
Phenols		Quinone	+ +
Carboxylic acid		(+) - Present; $(-)$ – neg	
Aminoacids	-	(+) - Flesent, $(-)$ – neg	ative
	of preliminary phytochemical colo	un conconin a of Viele ac	h an aC an aCh o orre aCh abril
	or premimary phytochemical colo	Alcoholic extr	
Tests Alkaloids	Colour if positive	Alconolic extr	act
		0	
Dragendroff's test	Orange red precipitate	Orange red pre	
Wagners test	Reddish brown precipitate	Reddish brown	
Mayers test	Dull white precipitate	Dull white pred	
Hagers test	Yellow precipitate	Yellow precipi	tate
Steroids			
Liebermann- buchard	Bluish green colour	Bluish green co	olour
test			
Salkowski test	Bluish red to cherry red color in		herry red color in
	chloroform layer and green	chloroform lay	
	fluorescence in acid layer	fluorescence in	n acid layer
Carbohydrate			
Molish test	Violet ring	Violet ring	
Fehlings test	Brick red precipitate	Brick red preci	ipitate
Benedicts test	Red precipitate	Red precipitate	2
Tannin			
With FeCl <sub>3</sub>	Dark blue or green or brown	Brown color	
Flavanoids			
Shinoda's test	Red or pink	Brown color	
Saponins			
With NaHCO <sub>3</sub>	Stable froth	No stable froth	l
Triterpenoids			
Tin and thionyl chloride	Pink	Brown color	
test			
Coumarins			
With 2 N NaOH	Yellow	Dark red color	
Phenols			
With alcoholic ferric	Blue to blue black	Brown color	
chloride			
Carboxylic acid			
With water and NaHCO <sub>3</sub>	Brisk effervescence	No effervescen	lce
Amino acid			
With ninhydrine reagent	Purple colour	Brown color	
Resin		DIOWII COIOI	
	Turbidity	Turbidity	
With aqueous acetone	Turolulty	ruiblaity	
Quinone	Dista / assessible / as d	D	
Conc. sulphuric acid	Pink/purple/red	Brick red color	ſ



Short UV

After derivatisation Figure 1 HPTLC photo documentation of ethanol extract of VishaghanaGanaChoornaChakrika Track 1-VishaghanaGanaChoornaChakrika-3µl

Track 2-VishaghanaGanaChoornaChakrika-6µl

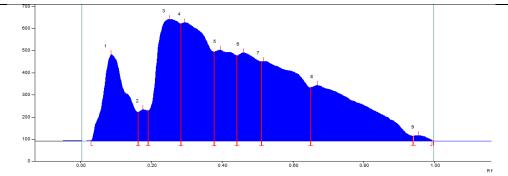
Track 3-VishaghanaGanaChoornaChakrika-9µl

#### Solvent system – Toluene: Ethyl acetate (9.0: 1.0)

**Table 5** R<sub>f</sub> values of ample of *VishaghanaGanaChoornaChakrika*:

) (D	UV	Long UV							Post	derivatisation
	D. green)									
5 (D	D. green)			-					-	
				-					0.17	(D. purple)
				-					0.22	(D. purple)
5 (D	D. green)			0.2	6 (F. bl	ue)			-	-
				0.3	0 (F. bl	ue)			0.30	(D. purple)
3 (D	D. green)			-					-	* `
	D. green)			-					0.35	(D. purple)
	<u> </u>			0.3	8 (F. re	d)			-	• • • /
					0 (F. bl	,			0.40	(D. purple)
3 (L	. green)			-		/			-	× 1 1 /
	6)			0.4	6 (F. bl	ue)			0.46	(L. purple)
				-	( . 51	- /				(D. purple)
3 (E	D. green)			-					-	( <b>rr</b> )
				0.5	6 (F. re	d)			-	
					51 (F. re	,			-	
				-	- (1.10	/				(D. purple)
				_						(D. purple)
3 (Г	D. green)			-					-	(D. purple)
<u>, (n</u>				_					0.85	(D. purple)
00	1		2						0.95	(D. purple)
200 -	1		2	3	5	*	8	9		<u>(D. purple)</u>
	0.50		2 0 2 0 20	3 4 0'4	5	0.00	8	9		
0				3 0.4	5	0,60	8	9 1 0.80	10	(D. purple)
•-	, ID: Vishah	ara churna		3 	5 5 0	0.80	8 	9 	10	
»		ara churna Start Height		°.4 0.4 0.4 Max Height	o Max %	obo End Position	End Height	9 0.80 Area	10	
°	, ID: Vishah Start Position	Start	chakrika Max Position	Max	Max %	End Position	Height		10 10 100 <b>Area</b> %	
	, ID: Vishah Start Position	Start Height	Max Position 0.04 Rf	Max Height	Max % 21.31 %	End Position 0.11 Rf	Height 0.2 AU	Area	10 1,00 Area % 21.72 %	
 	, ID: Vishah Start Position 0.02 Rf	Start Height 160.8 AU	Max Position 0.04 Rf 0.20 Rf	Max Height 201.2 AU 137.5 AU	Max % 21.31 % 14.57 %	End Position 0.11 Rf 0.25 Rf	Height 0.2 AU 4.5 AU	Area 6459.6 AU	10 1,00 Area % 21.72 % 19.05 %	
 	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf	Start Height 160.8 AU 1.2 AU	Max Position 0.04 Rf 0.20 Rf 0.31 Rf	Max Height 201.2 AU 137.5 AU	Max % 21.31 % 14.57 % 5.43 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf	Height 0.2 AU 4.5 AU 35.0 AU	<b>Area</b> 6459.6 AU 5665.9 AU	10 1.00 Area % 21.72 % 19.05 % 4.21 %	
∞- ₀	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf	Start Height 160.8 AU 1.2 AU 0.4 AU	Max Position 0.04 Rf 0.20 Rf 0.31 Rf 0.38 Rf	Max Height 201.2 AU 137.5 AU 51.3 AU	Max % 21.31 % 14.57 % 5.43 % 12.62 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf	Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU	Area 6459.6 AU 5665.9 AU 1252.6 AU	10 1.00 Area % 21.72 % 19.05 % 4.21 % 15.05 %	
	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf 0.34 Rf	Start Height           160.8 AU           1.2 AU           0.4 AU           34.4 AU	Max Position 0.04 Rf 0.20 Rf 0.31 Rf 0.38 Rf	Max Height 201.2 AU 137.5 AU 51.3 AU 119.2 AU	Max % 21.31 % 14.57 % 5.43 % 12.62 % 5.48 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf 0.54 Rf	Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU	Area 6459.6 AU 5665.9 AU 1252.6 AU 4474.9 AU 1265.8 AU	10 10 100 <b>Area</b> % 21.72 % 19.05 % 4.21 % 15.05 % 4.26 %	
ck 3, eak 1 2 3 4 5 6	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf 0.34 Rf 0.46 Rf 0.55 Rf	Start Height           160.8 AU           1.2 AU           0.4 AU           34.4 AU           0.6 AU           6.4 AU	Max           Position           0.04 Rf           0.20 Rf           0.31 Rf           0.38 Rf           0.50 Rf           0.56 Rf	Max Height 201.2 AU 137.5 AU 51.3 AU 119.2 AU 51.8 AU	Max % 21.31 % 14.57 % 5.43 % 12.62 % 5.48 % 1.69 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf 0.54 Rf 0.57 Rf	Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU 2.0 AU 11.3 AU	Area 6459.6 AU 5665.9 AU 1252.6 AU 1252.6 AU 1265.8 AU 138.1 AU	10 10 100 <b>Area</b> % 21.72 % 19.05 % 4.21 % 15.05 % 4.26 % 0.46 %	
100- 0 ck 3, ck 3, 1 2 3 4 5 6 7	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf 0.34 Rf 0.46 Rf 0.55 Rf 0.57 Rf	Start Height           160.8 AU           1.2 AU           0.4 AU           34.4 AU           0.6 AU           6.4 AU           11.7 AU	Max Position 0.04 Rf 0.20 Rf 0.31 Rf 0.38 Rf 0.50 Rf 0.56 Rf 0.61 Rf	Max Height 201.2 AU 137.5 AU 51.3 AU 119.2 AU 51.8 AU 16.0 AU 122.1 AU	Max % 21.31 % 14.57 % 5.43 % 12.62 % 5.48 % 1.69 % 12.93 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf 0.54 Rf 0.57 Rf 0.66 Rf	Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU 2.0 AU 11.3 AU 7.3 AU	Area 6459.6 AU 5665.9 AU 1252.6 AU 1252.6 AU 1265.8 AU 138.1 AU 2912.1 AU	10 10 10 10 10 10 10 10 10 10	
<ul> <li>ck 3,</li> <li>ck 4,</li> <lic< td=""><td>ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf 0.34 Rf 0.34 Rf 0.55 Rf 0.57 Rf 0.74 Rf</td><td>Start Height           160.8 AU           1.2 AU           0.4 AU           34.4 AU           0.6 AU           6.4 AU           11.7 AU           2.9 AU</td><td>Max Position 0.04 Rf 0.20 Rf 0.31 Rf 0.38 Rf 0.50 Rf 0.56 Rf 0.61 Rf 0.78 Rf</td><td>Max Height 201.2 AU 137.5 AU 51.3 AU 119.2 AU 51.8 AU 16.0 AU 122.1 AU 19.4 AU</td><td>Max % 21.31 % 14.57 % 5.43 % 12.62 % 5.48 % 1.69 % 12.93 % 2.06 %</td><td>End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf 0.54 Rf 0.57 Rf 0.66 Rf 0.78 Rf</td><td>Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU 2.0 AU 11.3 AU</td><td>Area 6459.6 AU 5665.9 AU 1252.6 AU 1252.6 AU 1265.8 AU 138.1 AU 2912.1 AU 301.8 AU</td><td>10 1.00 Area % 21.72 % 19.05 % 4.21 % 15.05 % 4.26 % 0.46 % 9.79 % 1.02 %</td><td></td></lic<></ul>	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf 0.34 Rf 0.34 Rf 0.55 Rf 0.57 Rf 0.74 Rf	Start Height           160.8 AU           1.2 AU           0.4 AU           34.4 AU           0.6 AU           6.4 AU           11.7 AU           2.9 AU	Max Position 0.04 Rf 0.20 Rf 0.31 Rf 0.38 Rf 0.50 Rf 0.56 Rf 0.61 Rf 0.78 Rf	Max Height 201.2 AU 137.5 AU 51.3 AU 119.2 AU 51.8 AU 16.0 AU 122.1 AU 19.4 AU	Max % 21.31 % 14.57 % 5.43 % 12.62 % 5.48 % 1.69 % 12.93 % 2.06 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf 0.54 Rf 0.57 Rf 0.66 Rf 0.78 Rf	Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU 2.0 AU 11.3 AU	Area 6459.6 AU 5665.9 AU 1252.6 AU 1252.6 AU 1265.8 AU 138.1 AU 2912.1 AU 301.8 AU	10 1.00 Area % 21.72 % 19.05 % 4.21 % 15.05 % 4.26 % 0.46 % 9.79 % 1.02 %	
100- 0 ck 3, ck 3, 1 2 3 4 5 6 7	ID: Vishah Start Position 0.02 Rf 0.13 Rf 0.27 Rf 0.34 Rf 0.46 Rf 0.55 Rf 0.57 Rf	Start Height           160.8 AU           1.2 AU           0.4 AU           34.4 AU           0.6 AU           6.4 AU           11.7 AU	Max           Position           0.04 Rf           0.20 Rf           0.31 Rf           0.38 Rf           0.50 Rf           0.56 Rf           0.61 Rf           0.78 Rf           0.79 Rf	Max Height 201.2 AU 137.5 AU 51.3 AU 119.2 AU 51.8 AU 16.0 AU 122.1 AU	Max % 21.31 % 14.57 % 5.43 % 12.62 % 5.48 % 1.69 % 12.93 % 2.06 % 2.57 %	End Position 0.11 Rf 0.25 Rf 0.33 Rf 0.45 Rf 0.54 Rf 0.57 Rf 0.66 Rf 0.78 Rf 0.81 Rf	Height 0.2 AU 4.5 AU 35.0 AU 6.1 AU 2.0 AU 11.3 AU 7.3 AU 16.5 AU 2.7 AU	Area 6459.6 AU 5665.9 AU 1252.6 AU 1252.6 AU 1265.8 AU 138.1 AU 2912.1 AU 301.8 AU	10 1.00 <b>Area</b> % 21.72 % 19.05 % 4.21 % 15.05 % 4.26 % 0.46 % 9.79 % 1.02 % 0.91 %	

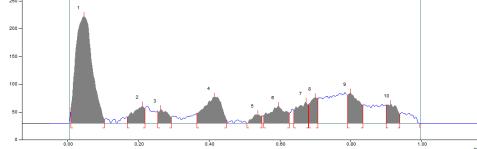




Track 3, ID: Vishahara churna chakrika

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.03 Rf	2.7 AU	0.09 Rf	389.6 AU	12.72 %	0.16 Rf	30.2 AU	18171.5 AU	11.16 %
2	0.16 Rf	130.9 AU	0.18 Rf	142.1 AU	4.64 %	0.19 Rf	37.2 AU	2348.5 AU	1.44 %
3	0.19 Rf	137.5 AU	0.25 Rf	549.1 AU	17.93 %	0.28 Rf	29.9 AU	25296.3 AU	15.53 %
4	0.29 Rf	530.2 AU	0.30 Rf	534.7 AU	17.46 %	0.38 Rf	03.0 AU	28343.6 AU	17.40 %
5	0.38 Rf	403.0 AU	0.40 Rf	411.0 AU	13.42 %	0.44 Rf	86.6 AU	16066.6 AU	9.86 %
6	0.44 Rf	386.7 AU	0.46 Rf	399.5 AU	13.04 %	0.51 Rf	58.7 AU	16458.6 AU	10.10 %
7	0.51 Rf	359.0 AU	0.52 Rf	360.3 AU	11.76 %	0.65 Rf	41.6 AU	27241.3 AU	16.72 %
8	0.65 Rf	242.2 AU	0.67 Rf	251.3 AU	8.20 %	0.94 Rf	23.1 AU	28327.2 AU	17.39 %
9	0.94 Rf	23.3 AU	0.95 Rf	25.1 AU	0.82 %	0.99 Rf	4.6 AU	625.8 AU	0.38 %

Fig 2b. At 366nm



Track 3, ID: Vishahara churna chakrika

Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %
1	0.01 Rf	25.2 AU	0.05 Rf	192.6 AU	37.40 %	0.10 Rf	5.9 AU	6465.5 AU	45.61 %
2	0.17 Rf	11.5 AU	0.21 Rf	31.1 AU	6.04 %	0.22 Rf	26.1 AU	725.9 AU	5.12 %
3	0.25 Rf	22.0 AU	0.26 Rf	24.8 AU	4.82 %	0.29 Rf	11.3 AU	488.7 AU	3.45 %
4	0.37 Rf	18.2 AU	0.41 Rf	47.5 AU	9.22 %	0.45 Rf	6.2 AU	1686.7 AU	11.90 %
5	0.51 Rf	0.0 AU	0.54 Rf	15.9 AU	3.09 %	0.55 Rf	14.0 AU	284.0 AU	2.00 %
6	0.55 Rf	13.8 AU	0.60 Rf	30.6 AU	5.94 %	0.63 Rf	19.0 AU	1010.8 AU	7.13 %
7	0.64 Rf	23.7 AU	0.67 Rf	38.1 AU	7.41 %	0.68 Rf	33.4 AU	812.6 AU	5.73 %
8	0.68 Rf	34.0 AU	0.70 Rf	46.4 AU	9.00 %	0.71 Rf	44.4 AU	719.1 AU	5.07 %
9	0.79 Rf	50.1 AU	0.80 Rf	54.2 AU	10.53 %	0.84 Rf	33.0 AU	1253.4 AU	8.84 %
10	0.90 Rf	32.8 AU	0.91 Rf	33.8 AU	6.56 %	0.94 Rf	16.7 AU	727.8 AU	5.13 %

Fig 2c. At 620nm

Figure 2 Densitometric scan of VishaghanaGanaChoornaChakrika HPTI C

HPTLC	Report	Discussion	detected equal inRf value 0.67 in both
ofVishaghna	aGanaChakrik	a	366nm (8.20%) and 620nm (7.41%).
Total 28 pea	aksdetected in	254nm, 366nm	Peaks detected in HPTLC we can consider
and 620nm	lifferent RfVal	ue. Same peak	total 27 number of active component

where detected from *VishaghnaGanaCharika*. Maximum % of active component area where occupied inRf value 0.05 (37.40%), 0.94 (21.33%), 0.04 (21.31%).Hence it can be considered that these 3 active components may be responsible for anti-microbial activity.

*VishaghanaGana*isone the among Ganasmentioned in CharakaSamhitawhich includes 10 drugs as anti-toxic drugs. Vishaghna Ghana has Rasa: Madhura, Tiktha. Katu, KashayaRasa;Guna: Ruksha, Laghu, Guru, Tikshna, Vishada, Snigdha, *PichilaGunas;Virya:* Ushna. Sheeta, AnushnaVirya; Vipaka: Katu, MadhuraVipaka; Karma: Vata-Pitta Shamaka, Kapha-Vatashamaka, Kapha-Pitta Shamaka. Vatahara, TridoshaShamakaproperties.

Phytochemical test results have revealed the presence of alkaloid, steroid, carbohydrate, tannin. resin, quinine. HPTLC photo documentation, densitometric scan, R<sub>f</sub>values are presented in respective tables and figures. The Chakrika of VishaghnaGanais proven to safe. Because of presence of alkaloids, steroids, carbohydrates, tannin, resin and quinine it acts as anti-microbial. This helps reducing airborne microorganisms in which are results in diseases.

#### CONCLUSION

VishaghnaGanaChakrika been has standardized as per standard testing protocol. Organoleptic, Phyto-chemical evaluation of VishaghnaGanaChakrikaillustrated the specific characters of all ingredients which were used in the preparation. On the basis of observations and experimental results, this study may be used as reference standard in the further quality control researches. Further studies may be carried out on VishaghnaGanaDravyasbased on identification and separation of active ingredients with the help of various biomarkers.



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