Ancient Science of Life, Vol No. XI No.1 & 2, July & October 1991, Pages 62 - 65

STANDARDISATION OF SOMARAJEE TAILA

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Received: 28 March, 1990 **Accepted: 12 April, 1991**

ABSTRACT: *This paper describes the standardization of Somarajee taila, an important ayurvedic formulation indicated in scabies, pruritus, acne, fistula, gout, leprosy and ring worm.*

INTRODUCTION

Curing a variety of human ailments by the use of **tails** has received a lot of consideration during recent years. So, it is necessary that working standards should be evolved to judge the quality of the **tail.**

Somarajee tail is an ayurvedic formulation under the group or **tails.** The present paper deals with the preparation and standardization of **Somarajee tail.**

MATERIALS AND METHODS

The plant ingredients of **Somarajee tail** were brought from the drug traders. Botanically and pharmacognostically, identified authentic drugs and Agmark mustard oil were used in its preparation.

(A) **Preparation of the tail :** The **tail** was prepared in accordance with the method described in Ayurvedic Formulary of India Part – I (Amonymous). Items from 1 to 8 in (Table 1) made into coarse powder. This powder was then boiled with 5.120 Lit. of water to prepare the **Kashaya** which was then filtered with a double folded cloth. The filtered **Kashya** was then mixed tihe 1.536 Lit. of **Sarasapa tail** (mustard oil) and heated to gradual dehydration till complete removal of water was achieved. It was then again filtered with a double folded cloth and prepared formulation was packed in a glass container.

(B) **Ingredients Used :** Allyl isothiocynate was estimated according to the procedure detailed by Pearson (1962) and Garrat (1964).

Chromatography

The ascending technique of thin layer chromatrogrphy was adopted. **Katu** (Sarsapa) **tail** and **Somarajee tail** were used as such for this separation (Stahl 1969). Different solvents and spray reagents were used for the identification of the spots.

TABLE – 1

Ingredients and preparation of Somarajee tail

S. No.	Ingredients	Botanical Name	Part Used	Quantity
1	Bakuchi	*Psoralea corylifolia* Linn	Seed	48 gm.
2	Haridra	*Curcuma longa* Linn	Rhizome	48 gm.
3	Daruharidra	*Berberis aristata* D. C.	Heartwood	48 gm.
4	Pita- sashapa	*Brassica compestris* Linn.	Seed	48 gm.
5	Kustha	*Saussurea lappa* C. B. Clarke	Root	48 gm.
6	Karanj	*Pangamia pinnata* (Linn) Merr.	Seed	48 gm.
7	Chakramarda	*Cassia tora* Linn.	Seed	48 gm.
8	Argvadha	*Cassia fistula* Linn.	Leaf	48 gm.
9	Water	--	--	5.120 Lit.
10	Sarshap tail	*Brassica compestris* Linn.	--	1.536 Lit.
		Yield	--	1.440 Lit.

TABLE – 2

Analytical values of Katu (Sarson) tail and Somarajee tail

S. No.	Parameters	*Katu (Sarson) tail*	*Somarajee tail*
1	Colour	Dark yellow	Yellow
2	Smell	Characteristic smell of katu tail	Not characteristic
3	Appearance	Viscous	Viscous
4	Touch	Oily	Oily
5	Taste	Slightly bitter	Bitter
6	Opalescence	Transulcent	Transulcent

7	Clarity	Clear	Clear
8	Specific gravity 24^{o}C	0.9433	0.9501
9	Refractive index 24^{o}C	1.4726	1.4737
10	Acid value mg|gm.	3.9144	10.7129
11	Iodine value gm|100	100.75	115.41
12	Saponification number mg|gm	175.44	207.56
13	Unsaponificable matter	0.8 %	0.8%
14	Observed – conductance	0.21 x 10^{-5} mhos	0.79 x 10^{-5} mhos
15	Allylisothiocayanate	0.42	0.26
16	Volatile oil content (by stem distillation % v|v)	0.64	0.9
17	Loss on drying at 110^{o}C	0.30	Nil
18	Ash value % w|w	Nil	Nil

RESULTS

The values like colour, smell, touch, loss on drying ash value and volatile oil content, etc. were determined both in **somarajee tail** and **katu tail** (Table 2). Both the **tail** showed no ash content which indicated an absence of inorganic material. The analytical values of **Somarajee-tail** are comparable to the raw **katu tail** used in the preparation. The iodine value, acid value, and saponification value of the finished product suggested that the compounds from the **kashayam** were a small quantity. The T. L. C., R. F. values over silica gel are represented in Table.3. The best solvent system out of those tested was Benzene, ethyl acetate (4:1) in which the drug resolved four positive spots (Rf. 0.94, 0.88, 0.57 & 0.08) with iodine and sulphuric acid. One of the spots of Rf value 0.19 was also developed with sulphuric acid in **Somarajee tail,** but it did not develop any colour with iodine vapours. This sport showed the presence of fat scluble active fraction of **kashyam** in **Somarajee tail.**

TABLE – 3

Thin layer chromatography, Rf values of Katu (Sarson) tail and Somarajee tail

Sl. No.	Solvent System	Developer				Inference
		Iodine vapour		50% Sulphuric acid		
		Katu (Sarson) tail	Somarajee tail	Katu tail	Somarajee tail	
		Rf	Rf	Rf	Rf	
1	Ethyl-acetate:	0.96/y	0.96/y	0.96/Br	0.96/Br	May be mustard oil.
	Butanol : Water	0.90/y	0.90/y	0.90/Br	0.90/Br	May be mustard oil.
	100 : 16 : 13	0.78/y	0.78/y	0.78/Br	0.78/Br	May be mustard oil.
			0.75/y		0.52/L.Br.	Not identified.
2	Benzene:	0.94/y	0.94/y	0.94/Br	0.94/Br	May be mustard oil.
	Ethyl-acetate	0.88/y	0.88/y	0.88/Br	0.88/Br	May be mustard oil.
	4 : 1	0.57/y	0.57/y	0.57/L.V.	0.57/L.V.	May be mustard oil.
		0.08/y	0.08/y	0.08/L.Br.	0.08/L.Br	Not identified.
					0.19/L.Br	

Abbreviation : Br = Brown; L. V. = Light violet, L. Br. Light Brown, Y = Yellow.

DISCUSSION

The loss in solid content in the preparation of **Kashyam** may be partially due to destruction by prolonged heating of drugs. It may be also due to insolubility of the compounds in the present solution (Volume) as some solid material was observed on the side of the vessel.

The finished product contained no ash indicating the absence of inorganic materials. The allyl isothiocynate in the mustard oil was 0.42% where as in **Somarajee tail** it was 0.26%.

The sap values, iodine value and acid value of the finished drug indicate that the compound extracted from the **Kashayam** were in small quantities.

The chromatographic resolution of the components have shown positive data by T.

L. C. methods for the identification of **Somarajee tail.**

ACKNOWLEDGEMENT

The authors are thankful to Dr. V. N. Pandey, Director, C. C. R. A. S., New Delhi for his encouragement and for providing the facilities required.

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