

PHARMACEUTICAL STUDY OF TRIBHUVANKIRTI RASA: A HERBOMINERAL FORMULATION

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ABSTRACT

Tribhuvankirti means familiar in three *lokas* i.e. *Akash, Patal, Pruthvi*. The disease which persists at the time of birth and death is *Jwara*. *Tribhuvankirti Rasa* is the most efficacious herbomineral ayurvedic drug widely prescribed by physicians for the treatment of different types of *Jwara* especially *Sannipataj Jwara*. It is a *Kharaliya Rasayana* which contains *Hingula, Vatsanabha, Trikatu, Tankan, Pippalimoola* and *Bhavana* of *Tulsi Patra Swaras, Ardrak Swaras* and *Dhattur Patra Swaras*. In this paper, pharmaceutical aspects of *Tribhuvankirti Rasa* prepared by the reference of *Yogaratnakar* are discussed i.e. detailed pharmaceutical procedures adopted for the preparation of *Tribhuvankirti Rasa* have been discussed such as *Vatsanabha Shodhan, Hingul Shodhan*, etc. This study will serve as a guide for those who want to reproduce *Tribhuvankirti Rasa* in future that provide them with the details on what has to be done at each step of production.

Keywords: *Tribhuvankirti Rasa, Hingul, Tankan, Borax, herbomineral preparation.*

INTRODUCTION

The one of the oldest systems of medicine, Ayurveda is momentous in audience of worldwide on virtue of its holistic approach of life. Formulations of Ayurveda consist of substances of herbal, mineral/ metal and animal origin which are processed pharmaceutically to have therapeutic effects. This is attribute of processes of *Shodhan*, *Bhavana* and *Maran* of *Rasashastra* which acclimatize this toxic industrial matter to an effective remedy known as herbomineral formulations (*Rasaushadhis*) of Ayurveda. [1] *Tribhuvankirti Rasa* is one of the herbomineral formulation. *Tribhuvankirti* means familiar in three *lokas* i.e., *Akash*, *Patal*, *Pruthvi*. The disease which persists at the time of birth and death is *Jwara*. In Ayurveda-*Jwara* is given topmost importance because it is believed that *Jwara* is the first disease to trouble mankind and it becomes the basic for other diseases to exist. Many types of *Jwara* are explained by our Acharyas. *Tribhuvankirti Rasa* is the most efficacious herbomineral ayurvedic drug widely prescribed by physicians for the treatment of different types of *Jwa-*

ra especially *Sannipataj Jwara*. It is a *Kharaliya Rasayana* which contains *Hingula*, *Vatsanabha*, *Trikatu*, *Tankan*, *Pippalimoola* and *Bhavana* of *Tulsi Patra Swaras*, *Ardrak Swaras* and *Dhattur Patra Swaras*. [2] In this paper, pharmaceutical aspects of *Tribhuvankirti Rasa* prepared by the reference of *Yogaratanakar* are discussed i.e., detailed pharmaceutical procedures adopted for the preparation of *Tribhuvankirti Rasa* have been discussed such as *Vatsanabha Shodhan*, *Hingul Shodhan*, etc.

AIM:

- To study the procedure of *Shodhana* of *Hingula*, *Tankan* and *Vatsanabha*.
- Preparation of *Tribhuvankirti Rasa* according to *Yogaratanakar*.

MATERIAL AND METHODS:

This consists of:

Drug Review; *Hingul Shodhan*; *Tankan Shodhan*; *Vatsanabha Shodhan*; Preparation of *Tribhuvankirti Rasa* with the reference of *Yogaratanakar*.

1. Drug Review:

Table 1.1: Showing review of mineral drugs

Drug Name	<i>Hingula</i> [3]	<i>Tankan</i> [4]
Chemical Name	Red oxide of mercury	Borax
Chemical formula	HgS	Na ₂ B ₄ O ₇ , 10H ₂ O
<i>Rasa</i>	<i>Tikta</i> , <i>Kashay</i> , <i>Katu</i>	<i>Katu</i>
<i>Doshagnata</i>	<i>Tridosahar</i>	<i>Vatakaphaghna</i>
<i>Karya</i>	<i>Jwaraghna</i> , <i>Aampachan</i> , <i>Atirasayan</i> , <i>Vishanashak</i>	<i>Kaphavishleshak</i> , <i>Hridya</i> , <i>Sthavar</i> <i>vishanashak</i> , <i>Agnideepak</i>

Table 1.2: Showing review of herbal drugs

Sr.no	Ingrediens	Latin Name	Family	Part used	<i>Rasa</i>	<i>Vipaka</i>	<i>Virya</i>	<i>Karma</i>
1	<i>Vatsanabha</i> ⁵	<i>Aconitum chasmanthum</i>	Ranunculaceae	Root	Madhur	Madhur	<i>Ushna</i>	<i>Jwarahar</i> , <i>Swadajanan</i> , <i>Vatakaphahar</i>
2	<i>Suntha</i> ^[6]	<i>Zizimber officinaleas</i>	Zizimberaceae	Root	Katu	Madhur	<i>ushna</i>	<i>Aampachak</i> , <i>Kaphaghna</i> , <i>Vataghna</i>
3	<i>Marich</i> ^[7]	<i>Piper nigrum</i>	Piperaceae	Fruit	Katu	Katu	<i>Ushna</i>	<i>Agnideepak</i> , <i>Kaphavatahar</i> , <i>pittakararak</i>
4	<i>Pippali</i> ^[8]	<i>Piper longum</i>	Piperaceae	Fruit	Katu	Madhur	<i>Anushna</i>	<i>Rasayan</i> , <i>Deepak-Pachak</i> , <i>Vatakaphahar</i> , <i>Agnimandya</i>
5	<i>Pippalimoola</i> ^[9]	<i>Piper longum</i>	Piperaceae	Root	<i>Katu</i>	<i>Madhur</i>	<i>Ushna</i>	<i>Deepak</i> , <i>Pachak</i> .

Table 1.3: Showing Drug review of Bhavana Dravya

Sr. No	Drug name	Latin Name	Family	Part used	Rasa	Vipaka	Virya	Karma
1	Tulsi ^[10]	Ocimum sanctum	Lamiaceae	Leaf	Katu, Tikta	Katu	Ushna	Kaphavatashamak
2	Ardrak ^[6]	Zizimber officinale	Zizimberaceae	Rhizome	Katu	Katu	Ushna	Agnideepan, Kaphavata-shamak
3	Dhattur ^[11]	Dhatura metel	Solanaceae	Leaf	Kashay, Madhur, Tikta	Katu	Ushna	Kaphavatahar Prabhav-Madakari

2. Hingul Shodhan: ^[12]

- Ref- R.T. 9/12
- Apparatus: Khalva yantra, measuring jar
- **Ingredients:**
 - Ashuddha Hingula: 50gms
 - Ardrak swaras: Q.S.
- **Procedure:**
 - Ashuddha Hingula was taken in a Khalvayantra and made fine powder of it.
 - Required quantity of Ardrak swaras was added in it and mardan was done till it dried.
 - In this was way, 7 bhavanas were given.
 - Shuddha Hingula was stored in a glass bottle.

Result:

- Quantity taken- 50gms
- Quantity obtained- 55gms
- Gain in wt.- 5gms

3. Tankan Shodhan ^[13]

- Type of Shodhan – Utphullikaran
- Reference - R.T. 13-77,78
- Equipments: Pan, Spoon, Gas
- **Procedure:**

Fine powder of tankan was heated with continuous stirring; till it became white porous mass and crackling sound disappears.

Precaution:

Heating should be done on Mandagni.

➤

➤ Result:

- Quantity taken: 100gms
- Quantity obtained: 75gms
- Loss: 25gms due to evaporation of water molecules

4. Vatsanabha Shodhan: ^[14]

- **Ref:** R.T.24/19-22
- **Apparatus:** Mrittika patra, knife, measuring jar
- **Procedure:**
 - Vatsanabha was taken and cut it into small pieces equal to gram.
 - These pieces of Vatsanabha will put in a Mrittika patra, fill fresh cow urine in it.
 - Mrittika patra was kept in strong sunlight.
 - Every morning taken out the old cow urine and then at the same time fresh cow urine was added in it and was put in sunlight.
 - Same procedure was repeated for 7 days.
 - After 7 days, pieces of Vatsanabha were taken out of the urine and washed with warm water.
 - Then outer skin was separated by peeling it with a knife and it was dried in sunlight.
 - Then Swedan in Godugdha by Dolayantra method was done for 3hrs. And then washed with water.
 - Then dried in sunlight and fine powder was made.

Observations

Table 4.1: Showing observations regarding Vatsanabha Shodhan

Sr. No.	Organoleptic characters	Before shodhana	After shodhana
1	<i>Shabda</i>	-	-
2	<i>Sparsha</i>	<i>Khara, kathin</i>	<i>Mrudu,</i>
3	<i>Rupa</i>	Externally brown (Gostanakara)	Internally creamish
4	<i>Rasa</i>	-	-
5	<i>Gandha</i>	<i>Nirgandha</i>	Slight gomutragandhi

Result:

Table 4.2: Showing result of Vatsanabha Shodhan

Raw Vatsanabha Taken- 100 gm

Vatsanabha Churna Obtained- 38 gm

5. Preparation of Tribhuvankirti Rasa according to Yogaratnakar

➤ Apparatus:

Khalvayantra, Spoon, Cloth, Measuring jar.

➤ Ingredients:

1. Shuddha Hingula - 21.5gm
2. Shuddha Vatsanabha - 21.5gm
3. Shuddha Tankan - 21.5gm
4. Suntha - 21.5gm
5. Maricha - 21.5gm
6. Pippali - 21.5gm
7. Pippalimula - 21.5gm

Bhavana: 3-3 bhavana of Tulasipatra swaras, Ardrak swaras, Dhattur Patra swaras

➤ Procedure:

- Firstly, Shuddha hingula was taken in Khalvayantra (mortar and pestle) and mardana (trituration) was done.
- Then Shuddha Vatsanabha (purified aconite) was added in it and mardana was done.
- Then Suntha Churna, Maricha Churna, pippali Churna were added sequentially one by one, and trituration was done after adding each Churna till it get mixed properly.
- Then Tulasi Swaras was added in sufficient quantity such that the above mixture gets completely immersed and Mardan (trituration) was done till it gets completely dried.
- In this way, 3 Bhavana of Tulasi patra swaras, 3 Bhavana of Ardrak Swaras, 3 Bhavana of Dhattura Swaras were given.
- Then vatis were made of approximately 125mg each.
- Vatis (pills) were allowed to dry and then packed in airtight container.

OBSERVATIONS:

Table 5.1: Showing observations of each Bhavana

Sr.no.	Bhavana Dravya	Quantity	Rupa	Gandha	Sparsha
1	Tulsi patra swaras (Juice of holy basil)	200ml	reddish	Smell of tulasi patra	Mrudu(soft)
2	Tulsi patra swaras	190ml	Greenish red	-	-
3	Tulsi patra swaras	190ml	Greenish red	-	Mrudu, Shlakshna, Particle size became less and feel Sukshmatva on touch.
4	Ardrak swaras (Ginger juice)	190ml	Brick red	Smell of tulsi and Ardrak swaras	-
5	Ardrak swaras	180ml	Brick red	-	
6	Ardrak swaras	180ml	Brick red	-	Mrudu (soft), Shlakshna, Particle size decreases further and feel more Sukshmatva (fineness) on touch.

7	Dhattur Patra Swaras (juice of Dhatura metel)	170ml	Brownish	Smell of dhattur patra and ardrak	
8	Dhattur patra swaras	170ml	Brownish	-	
9	Dhattur patra swaras	170ml	Brownish	-	Mrudu, Shlakshna, Particle size became very very less and feel more Sukshmatva on touch.

Table 5.2: Showing organoleptic characters of finished product

Sr.no.	Organoleptic Characters	Observation
1	Shabda	-
2	Sparsha	Mrudu
3	Rupa	Brownish
4	Rasa	Katu, Tikta
5	Gandha	Mixed smell of Tulsi, ardrak and Dhattur.

RESULT:

Wt. of finished product – 177gms

Wt gain – 27gms

Reason for weight gain – due to extract of Bhavana Dravya

- **Dose-** 1 Gunja(125mg)
- **Anupan** – Ardrak swaras
- **Therapeutic Uses** – Sannipatik jwar, Romantika, Galaganda.

DISCUSSION

TKR (*Tribhuvankirti Rasa*) has been described in many texts. Composition of formulation mentioned as per reference of *Yogaratanakar* has been quoted by maximum texts, hence followed in current study. In preparation of TKR, *Shodhan* of 3 Dravyas have been done, *Hingula Shodhan* (purification of cinnabar), *Tankan Shodhan* (Purification of borax) and *Vatsanabha Shodhan* (purification of Aconite). *Hingula Shodhan* was done by giving 7 Bhavana of Ardrak Swaras (ginger juice). All ingredients of TKR are *Ushna* and *Ardrak Swaras* (ginger juice) is also *ushna Gunatmaka*, so to enhance *Ushna guna* of TKR by synergism, *hingula Shodhana* was done by *Ardrak Swaras*. *Gomutra* (cow's urine) is a better media than *Godugdha* (cow's milk) for *Vatsanabha Shodhan* as far as toxic alkaloids are concerned.^[15] In *Pathasanyojan kram* (sequence to prepare medicine) of *Kharaliya Kalpa*, it is mentioned that the drugs

should be added in the sequence- Mineral drug - *Vishadravya* (poisonous drug) if any- *Prativisha* (antidote) of that *Vishadravya* - other herbal ingredients- *Bhavana dravya*. So, while preparation of TKR, the sequence followed was: *Shuddha hingul- Shuddha vatsanabha- Shuddha Tankan- Suntha churna, pip-pali churna, Pippalimoola Churna- Tulasi Patra Swaras*.

For each *Bhavana*, about 6 hrs of *mardan* (trituration) was done. Total 56 hrs *mardan* (trituration) was done. Total duration needed was 1 month. Weight of final product was increased by 27 gms. Due to extract or starch present in *Bhavana dravya*, weight of final product was increased.

CONCLUSION

This study will serve as a guide for those who want to reproduce *Tribhuvankirti Rasa* in future that provide them with the details on what has to be done at each step of production.

REFERENCES

1. Chaudhary A, et al, herbomineral formulations (Rasasushadhis) of Ayurveda: an amazing inheritance of ayurvedic pharmaceuticals, *Anc Sci Life*. 2010 Jul.
2. *Yogaratanakar*
3. Sharma S, *Rasatarangini*, 11th Ed, Chapter 9, Verse 18-19, Delhi: Motilal Banarasidas, p.202.
4. Sharma S, *Rasatarangini*, 11th Ed, Chapter 13, Verse 79-81, Delhi: Motilal Banarasidas, p.319.

5. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2020, p. 106-109.
6. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2020, p. 331-334.
7. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2020, p. 362.
8. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2012, p. 278-279.
9. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2020, p. 289.
10. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2020, p.513-516.
11. Sharma P.V, Dravyagun Vigyan, Volume 2, Varanasi: Chaukhambha Bharati Academy, 2020, p. 500.
12. Sharma S, Rasatarangini, 11th Ed, Chapter 9, Verse12, Delhi: Motilal Banarasidas, p.201.
13. Ibid. Chapter 13, verse 77-78, p.318.
14. Ibid. Ch. 24, Verse 19-22, p.651-652.
15. Arya Neha, et. al. Comparative physico-chemical profile of Vatsanabha (*Aconitum ferox*, Ranunculaceae) Mula processed through cow's milk, IJRAP, Oct. 2017, 8(5): 217-222.

Images: Showing preparation of TKR



1.Ingredients



2.Bhavana of Tulsipatra swaras



3.Bhavana of Ardrak Swaras



Bhavana of Ardrak swaras



Preparation of vati



Packed finished drug

Source of Support: Nil

Conflict of Interest: None Declared

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