WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.074
Volume 7, Issue 16, 593-610. Review Article ISSN 2277– 7105

# A REVIEW ON VASADI SYRUP AND SATYADI SYRUP AND ITS CONTENTS

**Dr. Ankita Thakur*[1] and Dr. Kulvinder Sandhu[2]**

[1]MD Scholar 2nd Year, Deptt. of Rog Nidan, RGGPGAC Paprola HP.

[2]MD Scholar 3rd Year, Deptt. of BAL Rog, RGGPGAC Paprola HP.

Article Received on
16 July 2018,

Revised on 06 August 2018,
Accepted on 26 August 2018

DOI: 10.20959/wjpr201816-13278

***Corresponding Author**
**Dr. Ankita Thakur**
MD Scholar 2nd Year, Deptt. of Rog Nidan, RGGPGAC Paprola HP.

## ABSTRACT

*Syrup* is the most palpable form of drug for childrens in the *Ayurvedic* system of medicine. The intake of *Ayurvedic* medicines is often unpleasant for childrens due to their bitter and astringent taste. *Syrup* is the palatable form of *Ayurvedic* medicines, which are pleasing for the taste buds thus allowing the patients, especially children, to consume them without having to bear the unpleasant taste. This form of medication is widely accepted in present clinical practice because of its accuracy in dosage, longer shelf life & palatability and use in childrens is one formulation mentioned in classics which is widely used in present day clinical practice. These syrups are having effective result in *Tamak Swash*. These *Yoga* (formulation) *Vasayadi* syrup is taken from *Bala tantra* and *Satyadi* syrup is taken from *Astanga hridaya Chiktsa sthana*. This paper is an attempt to make a review on the formulation "*Vasayadi* syrup" and "*Satyadi Syrup*" from various literatures of *Ayurveda*.

**KEYWORDS:** *Tamak Swash, Yoga, Vasayadi, Bala tantra, Satayadi, Astanga hridaya.*

## INTRODUCTION

Health is the supreme foundation of virtue wealth, enjoyment and salvation. So when fight against disease and premature death drugs have been the weapon used by man. In Ayurveda, drug is defined in broader perspective means, which a physician uses for restoring the equilibrium of *Doshas* i.e. relieving the disease is known as drug. Acharya Charaka gives its importance by considering it as one among the '*Trisutra*'of Ayurveda.[1]

Also considers *Oushadha* as one of the four essential components for maintaining health.[2] The drug which is rich in pharmacological activities, which could be made into various forms

of medicaments, having specific therapeutic action and available in plenty are praised by the legendries of science. Ample of references are available in the classics regarding the wonders a good drug can produce as well as the ill effects an improper drug can create. The combinations of medicines described in the textbooks of Ayurveda are the products of thorough analysis and clinical trials. Many of them indicated in the context of various disorders are able to work both in the curative as well as preventive perspective.

Acharya Kashyapa in *Vishesha Nirdesheeya Adhyaya,* advises the importance of rational use of appropriate medicine in treatment of diseases.[3]

Drugs and congenial food, how so ever good in its own qualities, if used irrationally will not work. Over and above, it will create adverse results in the patients. The same when used appropriately will save the life like a panacea.[4] Hence the most important factor to be remembered while selecting a drug is the appropriateness of choosing the specific drug for the specific condition. As many systemic and local therapeutic applications have been in *Ayurvedic* texts. "vasayadi syrup" and "*Satyadi Syrup"* is one of those formulations which is described here in detail.

**Preparation of drug**

The mentioned drugs were taken in a given quantity and cleaned properly. The drugs made into *Yavakuta* form and prepared according to the instructions given in *Sharangdhara Samhita*. The drugs in *Yavakuta* form were boiled with 16 times of water under low heat and reduced to 1/8th and filtered properly. 63% *Khand Sarkara* by weight was added to the decoction and again boiled.[5] The process was continued until the syrup becomes one –Tari (Thread). Again it was filtered in a fine fresh cotton cloth and preservative -- methyl paraben sodium 0.02% (w/w) as well as sodium benzoate 0.002% (w/w) are added. Finally prepared syrup filled in clean, sterilized 200 ml bottles for dispersing.

**Drugs which are used for study are described as follow**

***Vasadi Syrup***

**Table No.:- 1**

| Name | Botanical name | Family | Part used |
|---|---|---|---|
| Vasa | *Adhatoda vasica* Nees. | Acanthaceae | Leaves |
| Shunti | *Zingiber officinalis* Rose. | Zingiberaceae | Rhizome |
| Kantkari | *Solaunum surattense* Burm. F. | Solanaceae | Whole plant |
| Guduchi | *Tinospora cordifolia* Wild. | Menispermaceae | Stem |

**Drug reference:** Bala tantra 13/53.

***Satyadi Syrup***

**Table No.:- 2**

| Name | Botanical name | Family | Part used |
|---|---|---|---|
| Sati | *Hedychium spicatium* Buchhlam | Zinzebraceae | Rhizome |
| Tamalki | *Phyllanthus urinaria* Hook. F. non Linn. | Euphorbiaceae | Whole Plant |
| Sugandhbala | *Valeriana jatamansi* D.C. | Valerianaceae | Root |
| Bharngi | *Cleroderum seratum* Linn. | Verbenaceae | Root |
| Choraka (Chanda) | *Angelica glauca* Linn. | Umblliferae | Root |
| Puskarmoola | *Inula racemosa* Hook. F. | Compositae | Root |
| Sharkra | *Saccharum officinarum* | *Graminae* | - |

**Drug Reference:** Astanga hridaya chiktsa sthana 4/46.

***Rasa panchaka of Vasadi Syrup***

**Table No.:- 3**

| Drug | *Rasa* | *Guna* | *Virya* | *Vipaka* | *Karma* |
|---|---|---|---|---|---|
| *Vasa* | *Madhura* | *Snigdha, Guru, Mridu* | *Sheeta* | *Madhura* | *VP*↓ |
| *Shunti* | *Pancharasa* | *Laghu, Ruksha* | *Ushna* | *Madhura* | *VPK*↓ |
| *Kantkari* | *Katu Tikta* | *Laghu, Sara* | *Sheeta* | *Madhura* | *KVP*↓ |
| *Guduchi* | *Tikta, Kashaya* | *Guru, Snigdha* | *Ushna* | *Madhura* | *Kaphaghna Tridosha* ↓ |

***Ras panchaka of Satyadi Syrup[6]***

**Table No.:- 4**

| Drug | *Rasa* | *Guna* | *Virya* | *Vipaka* | *Karma* |
|---|---|---|---|---|---|
| *Sati* | *Katu, Madhura* | *Laghu, Snigdha,* | | *Madhura* | *VK*↓ |
| *Tamalaki* | *Katu* | *Laghu, Ruksa* | *Ushana* | *Katu* | *VK*↓ |
| *Sugan dhabala* | *Katu* | *Laghu, Snigdha* | *Ushana* | *Madhura* | *VK*↓ |
| *Bharangi* | *Katu, tikta* | *laghu, ruksha* | *ushna* | *katu* | *VK*↓ |
| *Chanda* | *Katu, tikta* | *laghu, tikshana* | *ushana* | *Katu* | *VK*↓ |
| *Puskar moola* | *Katu, Tikta* | *Laghu, Teekshna* | *Ushana* | *Katu* | *KV*↓ |
| *Sarkra* | | | | | |

**Description of each drug-**

***Vasa***

- ***Kula*:** *Vasa kula*
- **Botanical name:** *Adhatoda vasica Nees.*
- **Family:** Acanthacae
- **English name:** Malabar nut
- **Sanskrit name:** *Vasak, Vasika, Vajidant, Matruka, Simhasaya, Bhishakmata, Panchamukhee*

**Habitat**

All over India, Singapore (white). Black adusa grows mostly in the Himalayas at a height of 1.5 thousand metres.

**Properties**

- ***Rasa*: *Tikta, Kashaya***
- ***Guna*: *Laghu, Ruksha***
- ***Virya*: *Sheeta***
- ***Vipaka*: *Katu.***
- ***Karma*: *Kafa-pitta shamaka & vatavardhak***

***Rogaghnata***

*Swasa, kasa, jwara, chardi, meha, kustha, kshaya, krimi, raktapitta.*

***Srotogamitva***

- *Dosha: Vitiates vata, kaphapittashamaka*
- *Dhatu: Rakta (raktapitta, kustha, meda (meha), rasa (jwara, manas, kshayanashak)*
- *Mala: Pittasaraka.*
- *Organs: Pranavaha srotus, respiratory system*

**Chemical constituents**

Vasicine, Vasicinine, Arachidic acid, Cerotic acid, Lignoceric acid, Linoleic acid, Vasicol, Adhatodine, Vasicinone, Vasicinol, Vasicinolone.

**Action and uses**

Sedative, antispasmodic, bronchodilator, respiratory stimulant, anti viral, anti-insect, expectorant, anti-bacterial, antiseptic.

**Shunti**

- **Gana:** *Triptighna, Deepaniya, Shoolapra- shamana, Trishnanigrahana, Arshoghna (Cha.) Pipplyadi, Trikatu (Su.) Panchakola, Shadushana, Haritakyadi (Bh.ni)*
- **Kula:** Ardaraka kula
- **Botanical name:** *Zingiber officinale Rose.*
- **Family:** Zingiberaceae.
- **Sanskrit name:** *Ausadha, Muhaaushadha, Nagara, Visva, Visvabhesaja, sringavera, Visva, Visvausaadha*

**Habitat**

The common cooking ginger originated in tropical Asia, but is now grown as a commercial crop for the ginger root in Latin America and Africa as well as South East Asia. Fifty percent of worldwide ginger production is in India.

**Properties**

- ***Rasa*: *Katu.***
- ***Guna*: *Laghu, Snigdha***
- ***Virya*: *Ushna***
- ***Vipaka*: *Madhura***
- ***Karma* : *Kaphavatahara, swasahara***

***Rogaghnata***

*Deepana, Rochana, Pachana, Shothahara, Triptighna, Vatanulomana, Swasahara, Shleshmahara, Vrishna, Jwarghna, vivandhara etc.*

***Chemical constituents***

Oil of Ginger contains Zingiberene, Zingeberol, Gingerin. The essential oil is found to have ar-curcumene (22.1%), zingiberene (11.7%), [beta]-bisabolene (11.2%) and cadina-1,4-diene(12.5%). Aldehydes and alcohols are also present. Gingerol and its analogs found in rhizome extracts are responsible for many pharmacological activities.

**Action and uses**

Dry ginger is acrid, thermogenic, emollient, appetizer, laxative, stomachic, stimulent, rubifacient, anodyne, aphrodisiac, expectorant, anti helminthic and carminative. Useful in dropsy, cephalalgia, otalgia, Asthma, Cough, colic, anorexia, inflammations etc.

***Kantkari***

- **Gana:** Kasahara, Kanthya, Hikkanigrahana, Sothahara, Sitapittaprasamana, Angamar Daprasamana (Cha.) Brihatyadi, Varunadi, Laghupanchamoola (Su.)
- **Kula:** Kantkari kula
- **Botanical name:** *Solanum surattense Burm f.*
- **Family:** Solanaceae
- **Sanskrit name:** *Kantkari, Dusparsha, Vyaghri, Vartaki, Bahugudakuli*

- **Habitat:** Found throughout India, mostly in dry places as a weed along roadsides and waste lands.

**Properties**

- ***Rasa:*** *Tikta, Katu*
- ***Guna:*** *Laghu, Ruksha, Tikshana*
- ***Virya:*** *Ushana*
- ***Vipaka:*** *Katu*
- ***Karma:*** *Kafavatashamaka*
- ***Rogaghnata*****:** Kasa, Shwasa, Jwara, Peensa, Krimi, Kandu.

***Srotogamitva***

- *Dosha***:** *Pittavardaka, Kafhavatashamaka*
- *Dhatu***:** *Shukrakara, Meda Hara, Garbhakarini*
- *Mala***:** Purisha (purgative), Bhedana (in renal calculi & dysuria), diaphoretic
- *Organs***:** Lungs

**Chemical constituents**

Glucoalkaloids, sterols.

**Action and uses**

Roots are thermogenic, aromatic, stimulant, antiseptic, alexipharmic, anodyne, anti-inflammatory, antihistamine, digestive, carminative, stomachic, expectorant, broncho-dialator, uterine stimulant, emmenagogue, resolvent, febrifuge and tonic.

Useful in many conditions including inflammations, cough, cardiac and bronchial Asthma, Bronchitis, strangury, emaciation, anaemia and general debility. Charaka indicates this drug as the drug of choice in *hikka*, shwasa and *parshwa soola*. It has anti histaminic and a broncho-dilatory action that makes it work in Shwasa roga.

***Guduchi***

- **Gana:** *Vayasthapana, Dahaprasamana, Trushananigrahan,Truptighana, Stanyashodhan (Cha.) Guduchyadi, Patoladi, Aragwadhadi, Kakolyadi, Vallipanchmoola* (Su.)
- **Kula:** *Guduchi kula*
- **Botanical name:** *Tinospora cordifollia Willd Miers.*

- **Family:** Menispermaceae
- **Sanskrit name:** Madhuparnika, Amruta, Vishalya, Chakralakshana, Tandrika
- **Habitat:** All over India

**Properties**

- ***Rasa*****:** *Tikta, Kashaya*
- ***Guna*****:** *Laghu, snigdha*
- ***Virya*****:** Ushana
- ***Vipaka:*** *Madhura*
- ***Karma:*** *Tridoshasamaka & pittasaraka*

***Rogaghnata***

*Kasa, Swasa, Meha, Pandu, Kamala, Kushta, Vatarakta, Jawara, Krimi*.

**Chemical constituents**

**Alkaloids:** Berberine, Palmatine, Tembetarine (0.012%), Magnoflorine (0.075%), Choline, Tinosporin, Isocolumbin, Palmatine, Tetrahydropalmatine, Magnoflorine.

***Srotogamitva***

- *Dosha***:** Tridoshashamaka
- *Dhatu***:** *Rakta, meda, dravadhatu, sukra(aphrodisiac), rasayani.*
- *Mala***:** *Mutra, constipative*
- Organs**:** Liver, Kidney, Spleen

**Action and uses**

Thermo genic, anodyne, anthelminthic, antispasmodic, anti-inflammatory, antipyretic, antiemetic, digestive, carminative, cardio tonic, expectorant, depurative, haematinic, galactopurifier, rejuvenating and aphrodisiac.

Useful in inflammations, intermittent and chronic fevers, stomachalgia, flatulence, dyspepsia, gout, vomiting, Asthma, helminthiasis, cardiac debility, cough, skin diseases, leprosy, erysipelas, anaemia, jaundice, general debility, seminal weakness, uropathy and splenopathy.

***Shati***

- **Gana:** *Swasahara, Hikkanigrahana*
- **Kula:** *Ardraka*

- **Botanical name:** *Hedychium spicatum Buch Ham.*
- **Family:** Zingiberaceae
- **English name**: Long Zedoary
- **Sanskrit name:** *Kachur, Gandhamul, Dravida, Gandhasar, Jatil, Sthoolkanda*

**Habitat**

It is a perennial rhizomatous herb, growing in the parts of Western and Central Himalayas at altitudes of 3500-7500 ft.

**Properties**

- ***Rasa*: *Katu, Tikta, Kshaya***
- ***Guna*:** Laghu, Tikshna
- ***Virya*:** *Ushana*
- ***Vipaka:*** *Katu*.
- ***Karma:*** *Kafha Vata Nasahaka*

***Rogaghnata***

*Shotha, Kasa, Varana, Swasa Shoola, Hikka, Jwara, Graha Roga.*

***Srotogamitva***

- *Dosha*: Vataghana, Kaphaghana *Dhatu*: *Rakta(purifier), Rasa(fever), Meda(ligaments, fumigationin (hiccups)*
- *Mala*: *Purisha (ama digestive, astrigent), hair (alopecia)*
- *Organs*: Very useful in cleansing of mouth.

**Chemical constituents:** Essential oils.

**Action and uses**

The powdered rhizome in divided doses is used in conditions like bronchial asthma, cough, chest heaviness, sleeplessness, loss of appetite and pulmonary eosinophilia. The rhizomes are also used in dyspepsia, diarrhea, liver complaints, ulcers, skin diseases and rheumatoid arthritis. It is used in conditions like poor circulation due to thickening of blood vessels. It has mild tranquilizing activity.

***Tamalaki***

- **Gana:** Kasahara, Swasahara
- **Kula:** Erand kula

- **Botanical name**: *Phyllanthus urinaria Linn*.
- **Family**: Euphorbiaceae
- **Sanskrit name**: Vrushya, Bhudhatri, Bhumyamalaki, Bindupatri, Shiva
- **Habitat:** All over India, Assam, Bihar, South India

**Properties**

- ***Rasa***: Tikta, Ksahya, Madhura
- ***Guna*****:** Laghu, Ruksha
- ***Virya***: Sheeta
- ***Vipaka*****:** Madhura.
- ***Karma***: *Kaphapittashamaka*
- ***Rogaghnata***: *Kasa, Trishana, Daha, Hikka, Ksahta- Ksheena*

***Srotogamitva***

- *Dosha***:** Kaphapittaghana
- *Dhatu***:** Asthi (fracture), Rasa (appetizer), Rakta (stimulates liver), cough, Asthma
- *Mala***:** Purisha (constipative), urine(dysuria), pyuria

**Chemical constituents:** Contains phyllenthin.

**Action and uses**

It is an appetizer, digestive, liver stimulant, laxative, carminative and allevaties thrist therefore useful in diarrhoea and dysentry.

Nasya of the juice of roots mixed with sugar is used for hiccups. Seed & rice wateris useful in menorrahgia, leuccorehoea, dysuria, diabeties, skin diseases, fever and hepatospleenomegaly.

***Sugandhabala***

- **Gana:** S*heeetaprasamana, Tiktaskanda, Eladi gana*
- **Kula:** Mamsi kula
- **Botanical name**: *Valerian wallachi Dc.*
- **Family**: Valerianaceae
- **Sanskrit name**: Tagara, Nata, Vakara, Kutila

**Habitat**

India (Kashmir to Butan) at the height of 1.5 to 3 thousand meters. France, Italy, Africa, Persia.

**Properties**

- ***Rasa***: *Tikta, Katu, Kasaya*
- ***Guna*****:** *Laghu, Snigdha*
- ***Virya***: *Ushana*
- ***Vipaka*****:** *Katu*
- ***Karma*****:** *Kphavata Shamaka*
- ***Rogaghnata*****:** *Madahara, Apasmarnashaka, Shirovikara, Bhutaghana.*
- ***Prajojyanga****: Moola*

**Chemial composition**

Root contains volatile oil, yellow and bitter substances and a sweet chemical.

**Action and uses**

It acts as anti-spasmodic, cardiostimulant, hepatostimulant, appetizer, digestive, laxative.

It is useful in cough, Asthma, retention of urine and dysmenorrhoea.

It is also useful in loss of appetite, colic, hepato- spleenomegaly, jaundice.

It reduces pain, convulsions and nourishes the central nervous system.

***Bharangi***

- **Gana:** Pippalyadi (Su.)
- **Kula:** Nirgundi
- **Botanical name:** *Cleroderum seratum Linn.*
- **Family:** Verbenaceae
- **Sanskrit name:** Brahmanyashtika, Padama, Kasaghani, bhangura

**Habitat**

Tarai region of Himalaya, specially Nepal, Bengal, Bihar, Western and southern India.

**Properties**

1. ***Rasa*****:** *Katu, Tikta, Kasaya*
2. ***Guna*****:** *Laghu, Ruksha*
3. ***Virya*****:** *Ushna*
4. ***Vipaka*****:** *Katu.*
5. ***Karma*****:** *Ushana, Kaphavatashamaka*
6. ***Rogaghnata*****:** *Kasa, Swasa, Shotha, Vrana, Krimihagana, Daha, Jwara*

***Srotogamitva***

**7.** *Dosha***:** *Kaphavatahara Dhatu***:** *Rasa* (mensturation), *Rakta* (gulma)

**8.** *Mala***:** Anti-helmenthic

**9.** *Organs***:** *Respiratory system*

**Chemical Constituents**

Alcoholic extract and Saponin isolated from root bark caused release of histamine from lung tissue (J. Pharm. Pharmacol. 1968). Serratagenic acid, queretaroic acid, some phytosterols, saponins, twoiridiod glycosides, feralic acid, arabinose, scutellarein, baicalein are some important chemical constituents reported.

**Action and uses**

Anti histaminic, Anti allergic, Anti asthmatic, Anti biotic, CNS depressant, Hypotensive, Bronchoconstrictor, Stomachic.

The roots are bitter, acrid, thermogenic, anti-inflammatory, digestive carminative, stomachic, anthelmintic, depurative, expectorant, sudorific, antispasmodic, stimulant and febrifuge, useful in inflammations, dyspepsia, anorexia, colic, flatulence, helminthiasis, cough, asthma, bronchitis, chronic inflammation of the nose, skin diseases, leucoderma, leprosy and fever.

**Choraka**

**10. Gana:** *Sangyasthapana Eladi gana, Sugandhi gana*

**11. Kula:** *Satpuspha*

**12. Botanical name:** *Angelica glauca Linn.*

**13. Family:** Umblliferae

**14. Sanskrit name:** *Dushpatra, Ripu, Ganahas, Kopanak, Nishachar, Shankit*

**Habitat**

Kashmir, Nepal**.** According to Acharaya Dahlana, this plant resembles Granthi Parni but according to others it is Sthaunak.

**Properties**

**15. *Rasa*:** *Katu, tikta*

**16. *Guna*:** *laghu, tikshan*

**17. *Virya*:** *ushan*

**18. *Vipaka*:** *Katu.*

**19. *Karma*:** *vatakaphaghana*

**20. *Rogaghnata*:** *Kustha, kandu, vranahara*

***Srotogamitva***

**21.** *Dosha*: *Vataghna-kaphghna Dhatu*: *Rakta*

**22.** *Mala*: *Purisha* (laxative)

**23.** *Organs*: Digestive system, respiratory system and nervous system

**Chemical constiuents**

Oxypeucedanin, 3-butylidine phthalide, 3-butylidine dihydroph thalide, dimers of butyl phthalide.

**Action and uses**

It is a fragrant appetizer, digestive, stimulant, and laxative. Therfore it is useful in indigestion, constipation and debility.

It is also useful in Dyspnoea, rhinitis, hiccups and epilepsy.

**Chanda* has same properties has *Choraka*.

***Pooskarmoola***

**24. *Gana*:** *Shwasahara, Hikkanigrahana*

**25. *Kula*:** *Bhrungraja kula*

**26. Botanical name:** *Inula racemosa Hook f.*

**27. Family:** Compositeae

**28. Sanskrit name:** *Poushkara, Haimavati, shwetavacha, Kusthabheda, Shwasari*

**Habitat**

It grows at the height of 2.25 thousand metre in Kashmir.

**Properties**

**29. *Rasa*:** Tikta, katu

**30. *Guna*:** Laghu, Tikshna

**31. *Virya*:** Ushana

**32. *Vipaka*:** Katu

**33. *Karma*:** *Vatakaphanashak*

**34. *Rogaghnata*:** *Hikka, Swasa, Kasa, Parsvasoola, Jwara, Aruchi, Shofa, Pandu*

***Srotogamitva***

**35.** *Dosha***:** *Vata-Kaphghana*

**36.** *Dhatu***:** *Rasa (Fever, Lateral Chest Pain), Rakta, Meda (Anaemia).*

**37.** *Mala***:** Diuretic

**38.** *Organs***:** *lateral chest pain (analgesic)*

**Chemical constituents**

Inulin (10%), Aromatic oil (1.3%), Main alkaloid in oil is Alantolactone. ($C_{15}H_{20}O_2$; M.P-76º). Roots of Inula racemosa gave β-sitosterol, dancosterol, and iso-alantolactone.

It contains the volatile oil, bitter principle and benzoic acid

**Action and uses**

Roots are bitter, acrid, thermogenic, aromatic, stimulant, antiseptic, alexipharmic, anti-inflammatory, digestive, carminative, stomachic, expectorant, broncho-dialator, emmenagogue, resolvent, febrifuge and tonic. Useful in many conditions including inflammations, anorexia, hiccough, cough, cardiac and bronchial Asthma, Bronchitis, anaemia and general debility. Charaka indicates this drug as the drug of choice in *hikka.*

**Sarkra (SITA)**

- Latin name: *Saccharum officinarum.*
- Family: *Graminae.*

**Ayurvedic properties**

- *Rasa: Madhura*
- *Guna: Snigdha, Guru*
- *Vipaka: Madhura*
- *Veerya: Sheeta.*
- *Doshaghnata: Vata-Pitta Shamaka*

**Sugar**

Raw sugar manufacture consists of the following steps; expression of juice from canes; clarification, i.e., heating of juice with lime and removing the precipitates by sedimentation, evaporation of the clarified juice in multiple effect evaporators; crystallization of the sugar in single effect vacuum pans and separation of the crystals and molasses by centrifugal force.

Refined sugar can be made from it by affixation, melting, chemical treatment, filtration, discoloration & subsequent recrystallization in vacuum pans.

## DISCUSSION

The drug is totally made of *Ushna Veerya Dravyas* and this *Ushna Veerya* will pacify the increased Vata and also liquefies the Kapha, facilitating its flow back to its *Ashraya Kthana* in *Amashaya*. The *Kapha Vata Shamaka* property of the drugs, will help to do cure of both Vata and Kapha, once they are returned to Swasthana, thereby avoiding the necessity of Shodhana.

**A stepwise action of drugs on *Samprapti* can be viewed like this.**

- **Action I-** The *Deepana* property of *Shunthi* and *Guduchi* acts on *Agni*, alleviating the *Āma*. This will also clears up the *rasa Dhatu Dushti*, and excessive production of *Malabuta Kapha*. The *Ushna Veerya* and *Kaphahara Prabhava* of the drug will neutralise the left over *Dushti* of *Kapha*, which will no more create *Sanga* in *Pranavaha Srotas* to the *Vata*. The drug has *Vata Anulomana* property which helps the *Prakupita vata* to return to normalcy. *Thus*, the balance state of *Dosha* is regained. The balance of *madhura* and *katu vipaka* of the drug pacifies both D*oshas* without agitating the other with its '*Vipareetha Gunas'*.
- **Action II-** Rasa acts at the first stage of *Aharapaka,* where there is metabolism of *Madhura rasa*, and formation of Kapha take place.[7] The drug is predominant in *tikta* and *Katu rasa*, which will control the *Kapha* vitiation in the initial stage. Now, theU*shna* Veerya of the drug, controls the Vata *Prakopa*, enhances *Kapha Vilayana*.

The *Tikshna Guna* of the drug helps in penetrating through the *Sanga* created by the *kapha*, and carrying out its function. The *Kapha* that is liquefied regains its *Snigdha*, *Mardava* and *Picchila gunas* and flow back to *Amashaya.* The Prakopa of *Vayu* is controlled by the *Ushnaveerya* and *Vatashamaka karma* of the drugs. It also allows its penetration through the blocked and narrowed airways and work on bronchial muscle dialation. Once the *Samprapti* is under control and the *Doshas* return to *Swasthana*, the *Shamana* action is performed well by the *Dosha karma* of the drug, which is completely made of *Vata-Kapha Hara* drugs.

As per the modern concept, anti asthmatic drugs should have anti-inflammatory property to control airway inflammation and anti allergic property to reduce airway hyper-responsiveness. The broncho dilatory action expands the constricted airway.

*Guduchi* is a well-known anti-inflammatory drug and has significant anti allergic properties as cited in above experimental studies.

Kantakari is also having anti-inflammatory properties and has shown to have significant effects in broncho-dialatation.

Various studies on different species of Pushkara mula- has shown highly significant anti allergic activity along with anti- inflammatory and bronchodilator effect.

*Shunthi* is also known as an expectorant and has mild anti inflammatory action.[6]

Thus, the drug has the scope for bringing about the actions of a combination of Long-acting β2-agonists, which are given along with anti inflammatory drugs and Glucocorticosteroids, without the possible side effects. But more researches are required to obtain more valid data in larger samples for establishing the claim. The drugs were administered in the form of Syrup, no medicine in other form than syrup is easily accepted by pediatric patients. In routine practice, children often reject even *Avaleha*, which is considered as the best in therapeutic forms for pediatric patients due to its palatability and acceptability. The decoction of the drugs was prepared, according to instructions given in *Sharangadhara Samhita* and was converted into syrup form by adding 63% of *Khand Sharka.*

It is really very interesting for a scholar that the two combinations having almost opposite *Ayurvedic* pharmacological properties produce similar effect on a particular problem. The only probable explanation to this problem is that irrespective of *Rasa, Guna, Virya, Vipaka;* it is the active principle of a drug or a combination that work. In this regard the concept postulated by *Acharya Charaka* as drug can't be do any action without potency or all action caused by potency.

*Chakrapani* the commentator of *Charak Samhita* states that, apart from *Rasa, Guna, Vipaka; Virya* is pre-eminently responsible for therapeutic action of a drug.

*Acharya Vagbhata* explains in this way the drug may act by virtue of its *Rasa*, any of its *Guna, Vipaka, Virya or Prabhava*. When this parameter also fails to explain the pharmacodynamics of a drug, then they tried to explain it in term of extra ordinary combination of five elements (*Mahabhutas*) in the drug i.e. "*Vichitrapratyayarabdha".*

Here *Acharya Charaka* introduce the concept of *Prabhava* i.e. when the two drugs differ with regard to their action, the distinctive feature responsible for distinctive effects not supported by their *Rasa, Vipaka* and potency is regarded as *Prabhava* or specific action.

Again *Acharya Charaka* introduces the concept of *Avayava Prabhava* and *Samudaya Prabhava*. i.e. because of the variation in the curative effect of drug, it affect action of one property of the drug by another and method of their preparation which leads to perversion or irregularity in combination, it is not possible to determine the attributes of a substance having many *Rasa,* simply by taking into account the attributes of individual *Rasa.*

From all these it could be concluded that the ancient *Acharya*`s realized a factor or group of factors in a drug or a combination which is solely responsible for the potency of the same.

***Vasadi Syrup*[7]**

- It contains *Vasa, Shunti, Kantkari, Guduchi* and *Sharkara*. Majority of the ingredients having *Tikta, Kashaya* and *Katu Rasa*.
- *Katu* and *Tikta* Rasa drugs are known for its *Deepana* and *Pachana* properties. Due to *Pachana* properties drug makes Pachana of Ama along with its Deepana property. These both properties breaks the root cause of disease *Tamaka swasa* i.e. *Mandagni*.
- *Katu* and *Kashaya* Rasa due to its *Shodhana* property purify the body.
- In the other hand *Tikta Rasa* of the drug due to their *Vishaghna* and *Krimighna* property reduces the incidence and manifestation of allergy and infection of microorganism.
- *Kapha Vata Shamaka* property of the drug acts against the *Tamaka Swasa* by *Hetupratyanika*.
- They also have *Rasayana* property of drug also revitalizes and establishes good quality of *Sharira Dhatu.*
- According to modern pharmacology majority of drugs having an antimicrobial, antiviral and respiratory stimulant property which helps in the protection of individual against the pathogens.
- By these means the overall immunity is increased and in this way the capability of body to fight against pathogens gets naturally increased.

***Satyadi syrup*[8]**

- In *Satyadi syrup* majority of drug having direct effect on *Pranavaha Srotas*. The impairment of *Pranavaha Srotas* i.e. produced by chronic and recurrent respiratory

infection could effectively be ruled out by the drug which are expectorant, mucolytic and bronchodilator.

- The *Katu, Tikta Rasa Pradhana* drugs like *Maricha, Mishreya* etc. known for its Deepana, Pachana Karma. Due to Pachana properties drug makes Pachana of Ama along with its Deepana property. These both properties breaks the root cause of disease Pratishyaya i.e. Mandagni.
- *Katu and Kashaya Rasa* due to its *Shodhana* property purify the body.
- In the other hand Tikta Rasa of the drug due to their *Vishaghna* and *Krimighna* property reduces the incidence and manifestation of allergy and infection of microorganism.
- *Kapha Vata Shamaka* property of the drug acts against the *Pratishyaya* by *Hetupratyanika*.
- A good numbers of ingredients are having *Balya, Brimhana* and *Rasayana* properties. *Acharya Charaka* says that the drug having *Rasayana* property is able to cure the disease. Also revitalizes and establishes good quality of *Sharira Dhatu*.
- By these means the overall immunity is increased and in this way the capability of body to fight against pathogens gets naturally increased.

## CONCLUSION

Detailed description of ingredients of both the drug (Vasadi syrup and Satyadi syrup) are described here. The drug has been selected from the classical text of “Bala tantra” and “Ashthang Hridya Chiktsa sathan”. According to Ayurvedic pharmacology majority of ingredients of test drug shows dominancy of *Tikta, Kashaya* and *Katu Rasa*; *Laghu, Ruksha Guna; Sheeta Virya*; *Madhura Vipaka* and *Kapha-vatahara* properties. These drugs also possess *Kasahara, Swasahara, Deepana, Pachana* and *Rasayana* properties.

So, it is very good combination of respiratory stimulant, antiviral, expectorant, digestive, antibacterial, immune-modulator, anthelmintic drugs. These properties help the drug in the breakdown of the pathogenesis of *Tamaka swasa*.

## REFERENCES

1. Pt.Kashinathshastri and Dr.Gorakhanathchaturvedi, Charaka Samhita of charaka with Vidyostini Hindi Commentary, Sutrasthana, Reprint edition; 2009 chapter 1, Varanasi: Chaukhambha bharati academy, Pg. 08.

2. Pt.Kashinathshastri and Dr.Gorakhanathchaturvedi, Charaka Samhita of charaka with Vidyostini Hindi Commentary, Sutrasthana, Reprint edition; 2009 chapter 9, Varanasi: Chaukhambha bharati academy, Pg. 193.
3. Kashyapa Samhita, Vridjivakey Tantra, By Pandit Hemraj, Reprint- 2013, Chaukhambha Sanskrit Sansthan, khill Sthana, chapter 2 Pg.354.
4. *Chakraborty, Chennai, Nati Med J India, 2002; 15: 260-3 Sudhir P Prasad CE, Hyderabad. J Trop Pediatr, 2003 Apr; 49(2): 104-8.*
5. Dr. shrimati shailza srivastva, sarangdhar samhita, chaukhamba auriental, Varanasi, chapter no.2, madhayam khand, page no. 135.
6. *DRAVYAGUNA VIJNANA Vol-2 (Audbhidda Ausadha-Dravya) Acharya Priyavat Sharma Chaukhambha Bharti Academy, Varanasi. P. No. Serial wise. 242, 313,281, 359, 292,640,372, 56, 63, 296.*
7. Ashtanga Hridaya of Vaghbhatta – Sarvanga Sundari Comm. Arunadatta, Edited by Pt. hari Sadasiva sastri paradakara, Chaukhambha Surbharati Prakashan Varanasi, reprint 2014; Sharirasthana, chapter 4 versus 28, Pg. 392.
8. Ravankrit baltantra, Chaukhambha Surbharati Prakashan Varanasi, reprinted 2012, chapter no. 13 versus 56.