



# SIGNIFICANCE OF KANTHYA MAHAKASHAYA HERBS IN THE MANAGEMENT OF THROAT DISORDERS.

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**Abstract:** Ayurveda has mentioned Kantha as a vital organ under Dashapranayatana. Protection of throat or voice is essential as ignoring the disorders leads to noxious effect on the organ. Various throat and voice related disorders and its management has been described in Ayurveda. Charak Samhita has described a special group of 10 herbal drugs under the name of Kanthya Mahakashaya i.e. beneficial for Throat and voice which highlights its importance in Kantha disorders. These drugs can be used in various combinations for prophylaxis as well as treatment of Throat and voice related disorders. The aim of this study is to validate the significance and applicability of these 10 drugs and provide herbal options for throat and voice care. These 10 drugs are also evaluated for Anti-inflammatory, Anti-Pyretic, Anti-Bacterial, Anti-Viral, Anti-Oxidant, Anti-Tussive, Expectorant, Immunomodulatory activities and has proven to be effective. Therefore, these drugs have potential to be used in Kantha as well as Respiratory system disorders. This paper reveals the efficacy of 10 drugs included in Kanthya Mahakashaya for prevention and treatment of various throat disorders.

**Index Terms - Kantha (Throat), Kanthya Mahakashaya, Voice.**

## Introduction:

Throat and voice disorders like Tonsillitis, Laryngitis, Pharyngitis, etc are commonly found. Pollution, harmful chemicals, occupation, lifestyle, etc are main causative factors that affect the throat and produce related disorders.

Early intervention is necessary in case of throat disorders as these disorders have tendency to produce secondary diseases or also it would have hazardous effects on the organ.

Pharynx forms a path of respiratory system and contains organ of voice production, it forms plasma cells and lymphocytes. It acts as a warning to the body against infectious agents in air and food and helps to provide immunity and formation of antibodies. It protects the lower respiratory tract. <sup>[1]</sup>

According to Ayurveda Kantha or throat is a vital organ mentioned under Dashapranayatana and is mainly formed of Mansa dhatu, Rasa-Rakta dhatu and Kapha dosh and involves Pranavaha and Annavaha strotas. <sup>[2]</sup>

Functions of throat depend on normal state of Prana and Udana Vayu, Mansa and Rasa-Rakta Dhatu so any vitiation in these Doshas or Dhatus can cause Kantha or Swara related Disorders.

Following are the factors responsible for Kantha disorders-

Dosha – Vata and Kapha.

Dushya – Rasa, Rakta and Mansa.

Strotasa – Pranavaha and Annavaha.

Abhivyakti – Kantha Avayava.

Kanthy Mahakashaya is related to corporeal organ. Various commentators of Charak Samhita have described Kanthya as beneficial for Kantha and Swara and is Vag-Indriya Shodhak<sup>[3] [4]</sup>

Kanthy is described as that which is suitable for the Throat, and disorders like Hoarseness of voice, Cough, etc. and that which originates from the throat.<sup>[5]</sup>

Ten Dravyas namely Sariva, Ikshumoola, Madhuk, Pippali, Draksha, Vidari, Kaitarya, Hamsapadi, Bruhati, Kantakari are enumerated under Kanthya Mahakashaya.

Table 1: Properties and actions of Kanthya Mahakashaya Dravyas.<sup>[6] [7]</sup>

| Dravya & useful part            | Botanical Name              | Family             | Rasa           | Vipak  | Veerya | Guna           | Doshakarma       |
|---------------------------------|-----------------------------|--------------------|----------------|--------|--------|----------------|------------------|
| <b>Sariva</b><br>(Root)         | Hemidesmus indicus R.Br.    | Asclepiadaceae     | Madhur         | Madhur | Sheeta | Snigdha, Guru  | Tridoshaghna     |
| <b>Ikshumoola</b><br>(Root)     | Saccharum officinarum Linn. | Gramineae (poacee) | Madhur         | Madhur | Sheeta | Snigdha, Guru  | Kaphakara        |
| <b>Madhuk</b><br>(Root)         | Glycyrrhiza glabra Linn.    | Fabaceae           | Madhur         | Madhur | Sheeta | Snigdha, Guru  | Pittavata hara   |
| <b>Pippali</b><br>(Fruit)       | Piper longum Linn.          | Piperaceae         | Katu           | Katu   | Ushna  | Snigdha, Laghu | Vatakapha hara   |
| <b>Draksha</b><br>(Fruit)       | Vitis vinifera Linn.        | Vitaceae           | Madhur         | Madhur | Sheeta | Snigdha, Sara  | Vatapitta hara   |
| <b>Vidari</b><br>(Tuber)        | Pueraria tuberosa DC.       | Fabaceae           | Madhur         | Madhur | Sheeta | Snigdha, Guru  | Pittavata shamak |
| <b>Kaitarya</b><br>(Stem Bark)  | Myrica esculenta Buch-Ham.  | Myricaceae         | Kashaya, Tikta | Katu   | Ushna  | Laghu          | Vatakapha hara   |
| <b>Hamsapadi</b><br>(Panchanga) | Adiantum lunulatum Burm.    | Polypodiaceae      | Madhur         | Madhur | Sheeta | Guru           | Kaphaghna        |
| <b>Bruhati</b><br>(Root)        | Solanum indicum Linn.       | Solanaceae         | Katu, Tikta    | Katu   | Ushna  | Laghu, Ruksha  | Kaphavata hara   |
| <b>Kantakari</b><br>(Root)      | Solanum surattense Burm.F.  | Solanaceae         | Tikta, Katu    | Katu   | Ushna  | Laghu, Ruksha  | Kaphavata hara   |

### Probable mode of action of Kanthya Mahakashaya:

**Sariva:** Madhur-Kashaya Rasatmak, Madhur Vipaki, Sheeta Veerya, Snigdha-Guru Gunatmak and Tridosh shamak. It is also a Shreshtha Hitakar Dravya for Rakta and Pitta Shaman. It is Jwarahara and Daahprashaman so it can be used in Rakta and Pitta Dustijanya Kantha and Swara disorders and its associated symptoms like Daha and Jwar.

**Pharmacological activities of Sariva** - Anti-inflammatory, Anti-pyretic, Anti-diarrhoeal, Anti-nociceptive, Antioxidant, Antithrombotic, Antitumor and Hepatoprotective.<sup>[8]</sup>

**Ikshumool:** due to its Madhur Rasa, Snigdha Guna and Bruhaniya karma, it nourishes the Rasa Dhatu and is beneficial for Kantha and Swara. It can be used in Rakta and Pitta dustijanya Kantha or Swara vikar and associated symptoms like Daha. It is prescribed in Raktaj Swarabheda.

**Madhuk:** Madhuk is Madhur Rasatmak, Snigdha Gunatmak and Vata-Pittahara. It is a Shreshtha Hitakar dravya for Kanthya Karma. It acts by promoting the function of Rasa-Rakta Dhatu and useful in Rakta-Pitta

dushti janya Vikar of Kantha and Swara. It is a single Medhya Rasayana Drug which is mentioned as Swara Vardhan. Vidari and Madhuk siddha Ghrita is best to enhance the quality of Swara.

**Pharmacological activities of Madhuk** - Antimycobacterial, Antioxidant, Antiallergic, Anti-inflammatory, Anticancer, Antiviral, Antitussive, Immunostimulating and Antiulcer activities. <sup>[9]</sup>

**Pippali:** Because of Katu Rasa-Vipak and Ushna Veerya, it is Kaphaghna and Shirovirechak, hence it acts as Srotasa shodhan. It is mentioned in Kasahara and Hikka-Nigrahan mahakashay which highlights its action on Pranavaha Srotasa. Vardhaman Pippali Rasayan and Pippali Rasayana these two rasayana formulations act on Pranavaha Srotasa as preventive and curative. Pippali can be used in Kapha-Vata Pradhan and Avarodhjanya Kantha and Swara related disorders. Pippali - Haritaki churna yoga is prescribed in Kaphaj Swarabheda.

**Pharmacological activities of Pippali** - Immunomodulatory, Anti-Asthmatic, stimulant effect, Hepatoprotective, Hypocholesterolaemic activity, Anti-Inflammatory, Anti-Ameobic and Anti-Bacterial. <sup>[10]</sup>

**Draksha:** It is Madhur Rasa Vipaki, Sheeta Veerya, Snigdha Gunatmak and Vata-Pittaghna, so it can be used in Vata-Pitta pradhan Kanthagata Vyadhi. As it is mentioned in Kasahara and Jwarahara Mahakashaya it indicates its use in Kasa and Jwara which are associated symptoms in Kanthagata Vyadhi. Draksha Rasa is used in Raktaj Swarabheda. Mrudvikadi Churna is useful in Kaphaj Kantharoga and Galaroga.

**Pharmacological activities of Draksha** - Antioxidant, Anti-inflammatory, Antifungal, Antibacterial, Antidiabetic, Antihypertension, Antiviral, **Anti-MERS-CoV**, Antipyretic, Anticancer, Anti-asthmatic activities. <sup>[11]</sup>

**Vidari:** Madhur Rasatmak, Snigdha-Guru Gunatmak and Vata-Pittahara. It is mentioned in Bruhaniya Mahakashaya so by nourishing and enhancing the function of Mansa Dhatu it is beneficial for Kantha and Swara. It is useful in Rakta-Pitta dushti janya Kantha and Swara disorders. Vidari Swaras is used in Raktaj Swarabheda.

**Pharmacological activities of Vidari** - Immune booster, Anti-Infammatory, etc <sup>[12]</sup>

**Kaitarya:** Being Kashaya Rasatmak, Katu Vipak, Ushna Veeryatmak, Laghu and Vata-Kaphahara, it is useful in Vata-Kapha dushti and Srotorodh janya Kantha and Swara disorders. Khadiradi Gutika & Taila and Katphaladi Kwath are used in Vaiswarya, Galarog, Galashosh, Kantharog, Vata-kaphaj Kasa, and Shwas.

**Pharmacological activities of Kaitarya** - Analgesic, Anti-Asthmatic, Anti-cancer, Antioxidant, Anti-Inflammatory, Antiulcer, Anxiolytic, Hepatoprotective, Chemopreventive, Hypotensive and wound healing. <sup>[13]</sup>

**Hamsapadi:** It is Kashaya-madhur Rasatmak, Madhur Vipaki, Sheeta Veerya, Guru Gunatmak and Kapha-Pittashamak and therefore acts by pacifying Kanthagata Kapha Dosh. It is useful in Kapha-Pitta and Rakta dushti janya Kantha and Swara Vikar.

**Pharmacological activities of Hamsapadi** - Anti-Inflammatory, Anti-Viral, Analgesic, Anti-nociceptive and Antimicrobial. <sup>[14]</sup>

**Bruhati:** Katu Rasa-Vipaki, Ushna Veerya, Laghu-Ruksha Gunatmak and Kapha-Vatahara. It alleviates Kanthagata Kapha and Kleda and due to its Sthothaghna action, it can be used in Shothjanya Kantha and Swara Vikara. Bruhati is mentioned in Hikka-Nigrahan Mahakashaya which shows its action on Pranavaha Srotasa. It can be used in Kapha-Vata and Avrodhjanya Kantha and Swara disorders.

**Pharmacological activities of Bruhati** - Antioxidant, Anthelmintic, Antimicrobial, Anti-Inflammatory and Hepatoprotective. <sup>[15]</sup>

**Kantakari:** Kantakari is Tikta, Katu Rasatmak, Katu Vipaki, Ushna Veeryatmak, Laghu-Ruksha Gunatmak and Kaphavatahara. It eliminates the Srotorodh and normalizes the movement of Vata. It is mentioned in Kasahara, Shothahara and Hikka-Nigrahan Mahakashaya which indicates its action on Pranavaha Srotasa. It can be used in Kapha-Vata and Avrodhjanya Kantha and Swara disorders.

**Pharmacological activities of Kantakari** - Antibacterial, Antifungal, Antioxidant, Anti-asthmatic, Anti-cancer, Analgesic, Anti inflammatory and Antiulcer. <sup>[16]</sup>

**Discussion:**

Ayurveda has described 17 Throat and voice related disorders. These disorders have appeared as Hetu, Purvaroop, Upadrav, Lakshan and Arishta in different diseases. Jwara, Daah, Shool and Shoth are mentioned as associated symptoms of throat disorders.

Throat related disorders like Kanthashosh, Galasosh, Kanthadaah, Swarakshaya, Vaiswarya, Swarabhed, Vakgraha, etc have appeared as symptoms in various diseases like Shwas, Kasa, Hikka, Rajayakshma, Raktapitta, Chhardi, Trushna, Arsha, Grahani, Vataroga, etc.

Dravyas of Kanthya Mahakashaya can be attributed to Madhur Rasa Vipak, Sheeta Veerya and by pacifying the Vata-Pitta Dosh and enhancement of Rasa, Rakta and Mansa Dhatus. Whereas, Katu Rasa Vipak, Ushna Veerya Dravyas act by Pacifying the Kapha Dosh, clearing the Srotas and by increasing the Dhatvagni.

Kanthya herbs and their various combinations can be efficaciously used in Kapha and Vata predominant throat disorders like sore throat, pharyngitis, laryngitis, chronic or acute cold and cough, etc.

For effective treatment proper selection and utilization of these drugs according to dosha dushya is necessary.

According to predominance of Dosha- dushya and nature of disorders suitable dosage form like leha, kashaya, churna can be used.

To avoid the recurrence of throat disorders and prevention – Pippali, Sariva, Bruhati, Madhuk, Vidari these Rasayana drugs can be useful.

These 10 drugs can be prescribed as single or as a formulation for Throat/ voice disorders and associated symptoms as follows –

- Kapha-Vata pradhan Avrodhjanya Kantha/Swara disorders – Pippali, Kaitarya, Bruhati and Kantakari.
- Pitta Rakta dushti janya Kantha disorders – Sariva, Ikshumoola, Madhuk, Draksha, Vidari, and Hamsapadi.
- Ikshu Swaras, Draksha Rasa and Vidari Swaras - Raktaj Swarabheda.
- Pippali + Haritaki churna - Kaphaj Swarabheda.
- Katphaladi Kwath – Kantharoga.
- Mahamaayur Ghrita – Swarabheda.
- Vidari + Madhuk – To enhance the quality of Swara.
- Mrudvika - Swarabhedanashak.
- Mrudvikadi Churna – Kaphaj Kantharoga and Galaroga.
- Draksha, Ikshu, Vidari and Yashtimadhu - Kanthasosh, Kantha-daah, Vataj-Pittaj-Raktaj Swarabheda, Swarakshay, Kanthasushkata, Swara-daurbalya.
- Pippali, Kaitarya, Kantakari and Bruhati – Kantha Kandu, Vataj-Kaphaj Swarabheda.

Some other formulations which include Kanthya Mahakashaya Dravyas are Vrushya Ghrita, Amrutprash Ghrita, Mahamaayur Ghrita and Dwipanchamooladi Ghrita which are useful in Kantha and Swara disorders.

Most of the drugs of Kanthya Mahakashaya are scientifically evaluated for pharmacological activities like Anti-inflammatory, Anti-Pyretic, Anti-Bacterial, Anti-Viral, Anti-Oxidant, Anti-Tussive, Expectorant, Immunomodulatory and Immunostimulant which are related to Kanthya/ Swarya Karma and its associated symptoms. Specific chemical constituents like kaempferol, isoflavonoids, arabinogalactan, tannin, glycosides, B-sitosterol, etc are present in these drugs which have action on respiratory system.

**Conclusion:**

All these 10 Dravyas from Kanthya Mahakashaya are good combination of Madhur, Katu, Kashaya Rasa, Sheeta/Ushna Veerya properties and Rasayan Dravya so these dravyas can be used in management of Kantha/Swara related disorders directly or indirectly. These drugs are beneficial to maintain and enhance the quality of Kantha/ Swara in people with occupations having vocal load. Further clinical trials and experimentation in broader aspect is needed.



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