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Composition of *Kanakasava* and its medicinal properties

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ABSTRACT

Kanakasava is an Ayurvedic polyherbal formulation which comes under *Sandhana Kalpana*. It is explained in the context of *Hikkaswasa Rogadhikara* in *Bhaishajya Ratnavali*. *Datura* (*Datura metel* Linn.), *Vasa* (*Justicia adhathoda* L.), *Yashtimadhu* (*Glycyrrhiza glabra* L.), *Pippali* (*Piper longum* L.), *Kantakari* (*Solanum virginianum* L.), *Nagakesara* (*Mesua ferrea* L.), *Shunti* (*Zingiber officinalis* Rosc.), *Bharangi* (*Rotheca serrata* L.), and *Talisapatra* (*Abies spectabilis* D. don) are the ingredients of *Kanakasava*. *Dhataki Pushpa* (*Woodfordia fruticosa* Kurz) is used as the *Sandhana Dravya* and *Draksha* as *Kwatha Dravya*. This formulation is mainly indicated in *Kasa*, *Swasa*, *Rajayakshma*, *Kshataksheena*, *Jirna Jwara*, *Raktapitta* and *Urakshata*. The present review highlights on the method of preparation, Properties of each ingredient in the preparation and its mode of action.

Key words: *Kanakasava*, Polyherbal formulation, *Pranavaha Srotovikaras*

INTRODUCTION

Kalpana or the formulations are performed to potentiate properties of *Drava's*.^[1] *Asava* is the preparation which comes under *Sandhana Kalpana* and specifically under *Madhya Kalpana*, which is popular since *Vedic* as well as *Samhita* period. It is more popular and appreciated because of their palatability, quick action and high preserving qualities. Moreover it helps to increase the digestive capacity along with their specific action on different diseases.^[2]

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Basically, *Sandhana Kalpana* is a biochemical process of fermentation in a mildly self-generated alcohol medium in order to extract the active constituent of the drug.

Kanakasava is one of the polyherbal formulation that consists of *Datura* (*Datura metel* Linn.), *Vasa* (*Justicia adhathoda* L.), *Yashtimadhu* (*Glycyrrhiza glabra* L.), *Pippali* (*Piper longum* L.), *Kantakari* (*Solanum virginianum* L.), *Nagakesara* (*Mesua ferrea* L.), *Shunti* (*Zingiber officinalis* Rosc.), *Bharangi* (*Rotheca serrata* L.), and *Talisapatra* (*Abies spectabilis* D. don). It has been widely used in the treatment of *Swasa*, *Kasa*, *Rajayakshma*, *Kshataksheena*, *Jirna jwara*, *Raktapitta* and *Urakshata*.^[3] This article describes about brief introduction of *Asava*, Composition of *Kanakasava*, Method of preparation, Properties of each ingredient in the preparation and its mode of action.

Etymology and definitions of *Asava*

Etymology

The root word *Asava* means “*Asuya Nishpadyate*” suggestive of a process that introduces separated or

isolated source materials, indicates fermentation process.^[4]

Definitions

Table 1: Definition of Asava by various Acharya's

<i>Charaka</i>	Asava is those formulations which are prepared by "Asuta Prakriya"- Fermented products. ^[5]
<i>Susruta</i>	Asava is one type of <i>Madya</i> which includes different medicines like <i>Guda</i> , <i>Dhataki</i> . ^[6]
<i>Sharangdhara</i>	Asava is <i>Madya</i> which is prepared by "Apakwaushadha" i.e., without application of heat. ^[7]
<i>Bhaishajya-Ratnavali</i>	<i>Madya</i> containing medicine or medicinal properties is known as <i>Asava</i> . ^[8]
<i>Dalhana</i>	Asava is <i>Dravapradhana</i> . ^[9]

General Properties of Asava^[2]

According to Caraka

Asava provides *Manobala*, *Sareera Bala*, *Agnibala* and relieves *Aswapna*, *Shoka* and *Aruchi*.

According to Bhavamishra

The properties of *Asava* are to be understood as same as *Bijadravya* or the *Dravya* used for the preparation of particular *Asava*.

Composition of Kanakasava

The reference of *Kanakasava* is from compendium *Bhaishajya Ratnavali*, *Hikkaswasadhikara*; 98-101

Table 2: Composition of Kanakasava

SN	Common name	Botanical name	Part used	Qty(g)
1.	<i>Datura</i>	<i>Datura metel</i> Linn.	Whole plant	4 Pala (192g)
2.	<i>Vasaka</i>	<i>Justicia adhathoda</i> L.	Roots	4 Pala (192g)
3.	<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i> L.	Roots	2 Pala (96g)

4.	<i>Pippali phala</i>	<i>Piper longum</i> L.	Fruits	2 Pala (96g)
5.	<i>Kantakari</i>	<i>Solanum virginianum</i> L.	Whole plant	2 Pala (96g)
6.	<i>Nagakesara</i>	<i>Mesua ferrea</i> L.	Stamens	2 Pala (96g)
7.	<i>Shunthi</i>	<i>Zingiber officinalis</i> Rosc.	Rhizome	2 Pala (96g)
8.	<i>Bharangi</i>	<i>Rotheca serrata</i> (L.)	Roots	2 Pala (96g)
9.	<i>Talisapatra</i>	<i>Abies spectabilis</i> (D.don)	Leaves	2 Pala (96g)
10.	<i>Dhataki</i>	<i>Woodfordia fruticosa</i> Kurz	Flowers	1 Prastha (768g)
11.	<i>Draksha</i>	<i>Vitis vinifera</i> Linn.	Dry fruits	20 Pala (960g)
12.	Water	Distilled water	-	2 Drona (24.576 l)
13.	<i>Sarkara</i>	-	-	1 Tula (4.800kg)
14.	<i>Madhu</i>	-	-	½ Tula (2.400kg)

Method of Preparation^[10]

1. *Prakshepa Dravyas* and *Sandhana Dravya* are kept ready.
2. *Kwatha Dravya* - *Draksha*: 20 Pala (960g), Water for decoction 2 Drona (25 ltrs) reduced to 6.2 liters.
3. *Sarkara* is added into the filtered *Kashaya* and after the decoction cools down mentioned quantity of *Madhu* is added and stirred.
4. *Sandhana Patra* is selected and *Dhupana* is carried out using *Dhupana Dravya's* and kept in appropriate place (husk or dark room).
5. The *Sarkara* and *Madhu* dissolved decoction is poured into the *Sandhana Patra*.

6. The coarse powder of the ingredients along with *Sandhana Dravya (Dhataki Pushpa)* is added.
7. The mixture is cautiously stirred and the vessel is kept undisturbed by temporarily closing its mouth with a cloth and a lid.
8. The onset of fermentation is observed daily for 3 to 5 days.
9. Soon after fermentation, the *Sandhibandhana* of the vessel is done.
10. The vessel is kept undisturbed for 25 to 30 days.
11. After the confirmation of the fermentation, through all the classical guidelines, the preparation is siphoned out.
12. The end product will be dark reddish liquid with sweet and sharp taste and odor of self-generated alcohol.

Dose and Therapeutic Indications^[10]

Dose: 12 to 24 ml (AFI)

In doses of 10-20ml, mixed with equal quantity of water (Bhaishajya Ratnavali)

Therapeutic indications: *Kasa, Swasa, Rajayakshma, Kshataksheena, Jirna Jwara, Raktapitta* and *Urakshata*.

Properties of ingredients in Kanakasava

1. *Datura*^[11,12]

Botanical name - *Datura metel* L.

Family - Solanaceae

Rasa Panchaka^[13,14]

Rasa - Tikta, Katu

Guna - Laghu, Ruksha, Vyavayi, Vikasi

Veerya - Ushna

Vipaka - Katu

Prabhava - Madaka

Doshagnata

Kapha Vatahara, Pittavardhaka

Karma^[15]

Madakari, Swasahara, Kasahara, Vishamajvaragna, Shulahara, Agni Vrudhikara

Pharmacological action^[16]

Anti-asthmatic, Anti-spasmodic, Anti-tussive, Bronchodilator

2. *Vasa*^[17]

Botanical name - *Justicia adhatoda* L.

Family - Acanthaceae

Rasa Panchaka

Rasa - Tikta, Kashaya

Guna - Ruksha, Laghu,

Veerya - Sheeta

Vipaka - Katu

Doshagnata

Kapha Pitta Shamaka

Karma: *Swasahara, Kasahara, Swarya, Hridya, Raktapittahara, Jwaraghna*

Pharmacological action^[18]

Bronchodilator, Expectorant, Anti-tussive, Anti-asthmatic, Anti-tubercular.

3. *Yashtimadhu*^[19]

Botanical name - *Glycyrrhiza glabra* Linn.

Family - Papilionaceae

Rasa Panchaka

Rasa - Madhura

Guna - Guru, snigdha

Veerya - Sheeta

Vipaka - Madhura

Doshagnata

Vata Pitta Shamaka

Karma: *Balya, Swarya, Kasahara, Swasahara*

Pharmacological action^[20]

Expectorant, Immunomodulatory, Anti-asthmatic, Anti-allergic, Anti-spasmodic, Anti-inflammatory, Anti-tussive.

4. Pippali^[21]**Botanical name** - *Piper longum* Linn**Family** - Piperaceae**Rasa Panchaka***Rasa* - *Katu**Guna* - *Tikshna, Laghu, Snigdha**Veerya* - *Anushna**Vipaka* - *Madhura***Doshagnata***Kapha Vata Shamaka***Karma:** *Dipana, Rasayana, Vrshya, Swasahara, Kasahara, Jwarahara.***Pharmacological action**^[22]

Immunomodulatory, Anti-asthmatic, Anti-allergic, Anti-histamine

5. Kantakari^[23]**Botanical name** - *Solanum virginianum* L. (*Solanum xanthocarpum* Schrad.)**Family** - Solanaceae**Rasa Panchaka***Rasa* - *Tikta katu**Guna* - *Laghu ruksha**Vipaka* - *Katu**Viry* - *Ushna***Doshagnata***Kapha Vata Shamaka***Karma:** *Kanthy, Kasahara, Swasahara, Jwaraghna, Dipana, Pachana, Hridya.***Pharmacological action**^[24]

Expectorant, Demulcent, Immunomodulatory, Anti-asthmatic, Anti-allergic, Anti-histamine, Anti-tussive.

6. Nagakesara^[25]**Botanical name** - *Mesua ferrea* L.**Family** - Calophyllaceae**Rasa Panchaka***Rasa* - *kashaya, Tiktha**Guna* - *Ruksha, Laghu**Veerya* - *Ushna**Vipaka* - *Katu***Doshagnata***Kapha Pitta Shamaka***Karma:** *Pachana, Jwaragna, Vishagna***Pharmacological action**^[26]

Immunomodulatory, Anti-histamine, Anti-oxidant, Anti-inflammatory.

7. Shunti^[27]**Botanical name** - *Zingiber officinalis* Rosc.**Family** - Zingiberaceae**Rasa Panchaka***Rasa* - *Katu**Guna* - *Laghu, Snigdha**Veerya* - *Ushna**Vipaka* - *Madhura**Doshagna* - *Vata Kapha Hara***Karma:** *Dipana, Kasahara, Swasahara, Hridya, Swarya, Sulahara, Vrshya.***Pharmacological action**^[28]

Immunomodulatory action, Anti-tussive activity,

8. Bharangi^[29]**Botanical name** - *Rothea serrata* (L.)**Family** - Lamiaceae**Rasa Panchaka***Rasa* - *Katu, Tiktha, Kashaya**Guna* - *Ruksha, Laghu**Veerya* - *Ushna**Vipaka* - *Katu*

Doshagnata

Kapha Vata Samaka

Karma: Swasahara, Kasahara, Pachana, Dipana, Jwaraghna.

Pharmacological action^[30]

Immunomodulatory, Anti-asthmatic activity, Anti-histaminic activity, Bronchodilator.

9. Talisapatra^[31]

Botanical name - *Abies spectabilis* (D.don)

Family - Pinaceae

Rasa Panchaka

Rasa - *Katu*, *Tiktha*, *Madhura*

Guna - *Snigdha*, *Guru*

Veerya - *Ushna*

Vipaka - *Madhura*

Doshagnata

Tridosha Shamaka

Karma: Swasahara, Kasahara, Ruchikara, Dipana, Hikkanigrahana

Pharmacological action^[32]

Expectorant, Anti-spasmodic, Bronchodilator, Anti-tussive, Anti-platelet

10. Draksha^[33]

Botanical name - *Vitis vinifera* L.

Family - Vitaceae

Rasa Panchaka

Rasa - *Madhura*

Guna - *Snigdha*, *guru*

Veerya - *Sheeta*

Vipaka - *Madhura*

Doshagnata

Vatapittahara

Karma: *Brmhana*, *Vrishya*, *Swarya*, *Kandya*, *Balya*, *Pushti*, *Kshayahara*, *Kasahara*, *Swasahara*, *Kshatahara*, *Rakthapittahara*

Pharmacological action^[34]

Anti-inflammatory, Bronchodilator, Anti-asthmatic

11. Dhataki^[35]

Botanical name - *Woodfordia fruticosa* (L.) Kurz

Family - Lythraceae

Rasa Panchaka

Rasa - *Kashaya*, *Katu*

Guna - *Laghu*, *Ruksha*

Veerya - *Sheeta*

Vipaka - *Katu*

Prabhava - *Madakari*

Doshagnata

Kaphapittahara

Karma: *Madakrut*, *Trishnahara*, *Rakthapittahara*, *Stambhaka*, *Vishagna*, *Krimighna*, *Sandhaniya*

Pharmacological action^[36]

Anti-asthmatic, Anti-inflammatory, Broncho-protection, Immunomodulatory activity

Research works on Kanakasava

1. Investigation of anti-asthmatic potential of *Kanakasava* in ovalbumin-induced bronchial asthma and airway inflammation in rats. (Poonam Arora et.al)
2. Preliminary study of the immunostimulating activity of an Ayurvedic preparation, *Kanakasava*, on the splenic cells of BALB/c mice in vitro. (Md. Moklesur Rahman Sarker et al.)

Research works on composition of Kanakasava

1. **Datura** - *Datura metel* Linn ameliorates Asthma symptoms in BALB/c mice (Muhaimin Rifa et al.)
2. **Vasa** - A clinical review of different formulations of *Vasa* (*Adhatoda vasica*) on *Tamaka Shwasa*; Asthma (Ankit Gupta et al.)
3. **Yashtimadhu** - In vitro and in vivo antiallergic effects of *Glycyrrhiza glabra* and its components. (Yong-Wook Shin et al.)

4. **Pippali** - In vivo and in vitro Anti-asthmatic studies of Plant *Piper longum* Linn. (Dhirender Kaushik et al.)
5. **Kantakari** - In vivo antitussive activity of a pectic arabinogalactan isolated from *Solanum virginianum* L. in Guinea pigs. (Washim Raja et al.)
6. **Nagakesara** - *Mesua ferrea* L.: A review of the medical evidence for its phytochemistry and pharmacological actions. (Manoj Kumar Chahar et al.)
7. **Shunti** - Structural elements and cough suppressing activity of polysaccharides from *Zingiber officinale* L. rhizome (K Bera et al.)
8. **Bharangi** - Anti-histaminic, mast cell stabilizing and bronchodilator effect of hydroalcoholic extract of polyherbal compound- *Bharangyadi* (Divya Kajaria et al.)
9. **Talisapatra** - Pharmacological Studies on the Antispasmodic, Bronchodilator and Anti-Platelet Activities of *Abies webbiana* (Mamoona Yasin et al.)
10. **Draksha** - Investigation of anti-asthmatic potential of dried fruits of *Vitis vinifera* L. in animal model of bronchial asthma (Poonam Arora et al.)
11. **Dhataki** - Pharmacological evaluation for anti-asthmatic and anti-inflammatory potential of *Woodfordia fruticosa* Kurz. Flower extracts. (Mahavir Hiralal Ghante et al.)

DISCUSSION AND CONCLUSION

Kanakasava is a polyherbal Ayurvedic preparation mainly used for the treatment of respiratory tract diseases, such as *Swasa*, *Kasa* etc. According to Ayurveda, *Kanakasava* helps to balance *Kapha* and remove excess mucus from the lungs, providing relief from the symptoms of *Swasa* and *Kasa*. It also helps to remove dryness and release sputum out of respiratory tract due to its *Vata* and *Kapha* balancing properties. *Kanakasava* is also helpful in reducing the *Jwara* due to its *Dipana* and *Pachana* properties, which aid in digestion and absorption of food. The mode of action of each ingredient in the preparation is enlisted below:



***Datura metel* L.**

Difficulty in breathing or shortness in breath is due to *Vata* and *Kapha Doshas*. *Datura* due to its *Ushna Virya* does *Vata-Kapha Hara* action removes obstruction and relieves bronchial spasm.



***Justicia adhatoda* L.**

It expectorates phlegm and dilates bronchi; stops breathlessness in *Swasa*. Useful in *Kasa* and stops bleeding with the sputum. Pacifies *Tikshna* and *Ushna Gunas* of *Pitta* and purifies *Raktha* by its *Tiktha Kashaya Rasas* and *Sheetha Virya*. Useful in *Kshaya* as it eliminates the *Kapha* and improves the formation of *Dhatu*s by causing *Deepana* of *Dhatvagnis*.



***Glycyrrhiza glabra* L.**

Being *Snigdha* and *Madhura* it acts as expectorant and gives strength to the laryngopharynx (In *vatanubandha Kasa*, *Swasa* and *Swarabheda*). In

Rajayakshma it promotes *Balya* to the *Pranavaha Srotas* and acts as expectorant. It pacifies *Raktha Pitta* due to its *Madhura Rasa* and *Sheeta Virya*.



***Piper longum* L.**

The *Katu rasa* and *Madhura Vipaka* of *Pippali Phala* helps in the *Vata* and *Kapha Shamaka* action in *Kasa* and *Shwasa*. *Tikshna Guna* of *pippali* causes *Bhedana* of *Kapha* which is stucked into the *Srotas*.



***Solanum virginianum* L.**

The *Katu Rasa* and *Ushna Virya* of *Kantakari* acts as *Kanthy* by liquifying the *Kapha*. It also removes obstructions of *Kapha* in the *Pranavaha Srotas* and thereby acts as *Kasahara* and *Swasahara*.



***Mesua ferrea* L.**

Nagakesara acts as *Raktha Sthambaka* due to its *Kashaya rasa*, hence indicated in *Raktha Pitta*.



***Zingiber officinale* L.**

Being *Katu*, *Ushna* and *Laghu*, *Shunti* acts as *Kaphagna*. *Vataghna* being *Snigdha* and *Madhura Vipaki*.



***Rotheca serrata* (L.)**

Bharangi liquifies *Kapha* accumulated in the chest and thereby carries out *Anulomana* of *Prana*, thus indicated in *Shwasa*, *Kasa* and *Rajayakshma*.



***Abies spectabilis* (D. don)**

Being *Kaphaghna* and *Swasahara*, *Talisapatra* is indicated in *Kasa*, *Shwasa*, *Swarabheda* and *Rajayakshma*. Due to its *Dhatvagni Deepana* property it is indicated in *Kshaya* and *Samanya Dourbalya*.

**Vitis vinifera L.**

Draksha is *Balya* to the lungs and acts as expectorant, Thus indicated in diseases like *Urakshata, Kshaya, Kasa, Swasa, Swara Bheda*.

**Woodfordia fruticosa Kurz.**

Dhataki contain substantially high concentration of tannins. These polyphenolic compounds are susceptible to enzymatic conversion to simple phenols and alcohol during anaerobic fermentation of *Asavarishta* preparations. The endogenous invertase *fructofuranosidase* in *Dhataki pushpa* helps sucrose hydrolysis to alcohol.

On the basis of the actions of drug in the formulation it can be suggested that *Kanakasava* has the potential to cure the diseases of *Pranavahasrotas* as well as in *Rakthapitta* and *Vishama Jvara*. Moreover, we can conclude that the preparation will be useful in regulating the immune responses too.

REFERENCES

1. Chaudhary A, Singh N, Dalvi M, Wele A. A progressive review of Sandhana kalpana (Biomedical fermentation): An advanced innovative dosage form of Ayurveda. *Ayu*. 2011 Jul;32(3):408.
2. Poonam Arora; Standardization and Pharmacological Studies on Anti-Asthmatic Ayurvedic Formulation "Kanakasava"
3. Shastri AD, Shastri R. Bhaishajya ratnavali. Vidhyotini Hindi Commentary, 13th edition, Reprint. 1999:633-4.
4. Singh VK, Narwaria A, Katiyar CK. Asava-Arishta: A Multi-Advantageous Fermented Product in Ayurveda. *High Value Fermentation Products: Human Welfare*. 2019 May 24;2:89-108.
5. Charak. Charak Samhita by Agnivesha (Hindi Trans. by Pandey K, Chaturvedi GN.). Sutra Sthan, Verse 25-49, Varanasi: Chowkhamba Sanskrit series; 1962.
6. Sushrut. Sushrut Samhita (Hindi Trans. by Kaviraj Ambikadutt Shastri, with Ayurveda tattvasandipika commentary). Sutra Sthan, Verse 17/16, Varanasi: Chaukhambha Sanskrit series; 2003.
7. Sastry PP. Sharanghadhar Samhita with commentary of Adhmalla's Dipika and Kashiram's Gudartha Dipika. Madhyama Khanda, Verse 10/01-12, 232-5, Verse 10/39-43, 237, Varanasi: Chaukhambha Orientalia; 2002;5.
8. Chaudhary A, Singh N, Dalvi M, Wele A. A progressive review of Sandhana kalpana (Biomedical fermentation): An advanced innovative dosage form of Ayurveda. *Ayu*. 2011 Jul;32(3):408.
9. Poonam Arora; Standardization and Pharmacological Studies on Anti-Asthmatic Ayurvedic Formulation "Kanakasava"
10. The ayurvedic formulary of India.1978, Govt. of India, Ministry of Health and Family Planning, Dept. of Health in English - 1st ed.
11. Rasatarangini.: Edited by Badarinatha Jha.1961, Mithila Institute of Post-Graduate Studies and Research in Sanskrit Learning in Sanskrit.
12. Charak. Charak Samhita by Agnivesha (Hindi Trans. by Pandey K, Chaturvedi GN.). Sutra Sthan, Varanasi: Chowkhamba Sanskrit series; 1962.
13. Sushrut. Sushrut Samhita (Hindi Trans. by Kaviraj Ambikadutt Shastri, with Ayurveda tattvasandipika commentary). Sutra Sthan, Verse 17/16, Varanasi: Chaukhambha Sanskrit series; 2003.
14. Sastry PP. Sharanghadhar Samhita with commentary of Adhmalla's Dipika and Kashiram's Gudartha Dipika. Madhyama Khanda, Verse 10/01-12, 232-5, Verse 10/39-43, 237, Varanasi: Chaukhambha Orientalia; 2002;5.
15. Kadam SD, Chavhan SA, Shinde SA, Sapkal PN. Pharmacognostic review on Datura. *Int J Pharmacogn Chin Med*. 2018 Oct 31;2:1-9.
16. Parveen A. Medicinal values of Datura: A synoptic review. *International Journal of Green Pharmacy (IJGP)*. 2016 Jun 27;10(2).
17. Hegde Prakash L, Harini A. A textbook of Dravyaguna Vijnana. Delhi: Chaukhambha publication. 2016

18. Claeson UP, Malmfors T, Wikman G, Bruhn JG. Adhatoda vasica: a critical review of ethnopharmacological and toxicological data. *Journal of ethnopharmacology*. 2000 Sep 1;72(1-2):1-20.
19. Prajapati SM, Patel BR. Phyto Pharmacological Perspective of Yashtimadhu Glycyrrhiza Glabra LINN A Review. *Int J Pharm Biol Arch*. 2013;4(5):833-41.
20. Kaur R, Kaur H, Dhindsa AS. Glycyrrhiza glabra: a phytopharmacological review. *International journal of pharmaceutical Sciences and Research*. 2013 Jul 1;4(7):2470.
21. Pathak M, Vyas H, Vyas MK. A clinical trial of Pippali (Piper longum Linn.) with special reference to Abheshaja. *Ayu*. 2010 Oct;31(4):442.
22. Khushbu C, Roshni S, Anar P, Carol M, Mayuree P. Phytochemical and therapeutic potential of Piper longum Linn a review. *International journal of research in Ayurveda and pharmacy*. 2011 Jan;2(1):157-61.
23. Deshpande DA. Textbook of Dravyaguna Vijnyana, Medicinal Herbs, Edited by Dr. Subhash Ranade Pune, Anmol Prakashan. 2007
24. Chhajed M, Jain A, Gupta S, Dubey I, Shrivastava AK. Phytochemical investigation and pharmacological evaluation of Solanum xanthocarpum Endowed with their potential Activity. *Journal of Pharmaceutical Technology, Research and Management*. 2018 May 2;6(1):55-65.
25. Sharma PV. Textbook of Dravyaguna Vijnana. Varanasi: Choukamba Barati publication, 2005.
26. Asif M, Jafari SF, Iqbal Z, Revadigar V, Oon CE, Majid AS, Majid AM. Ethnobotanical and Phytopharmacological attributes of Mesua ferrea: a mini review. *Journal of Applied Pharmaceutical Science*. 2017 Apr 30;7:242-51.
27. Sharma AP. Dravyaguna vijnana. Part II Chaukhamba Vidya Bhavan Chowk, Banaras. 1956.
28. Kumar G, Karthik L, Rao KB. A review on pharmacological and phytochemical properties of Zingiber officinale Roscoe (Zingiberaceae). *Journal of Pharmacy Research*. 2011 Sep;4(9):2963-6.
29. Hegde PL, Harini A. A text book of Dravya guna vijnana. Vol. 2. New Delhi: Chaukhambha Publications. 2014.
30. Patel JJ, Acharya SR, Acharya NS. Clerodendrum serratum (L.) Moon.–A review on traditional uses, phytochemistry and pharmacological activities. *Journal of ethnopharmacology*. 2014 Jun 11;154(2):268-85.
31. <https://www.planetayurveda.com/library/talisa-patra-abies-webbiana/>
32. Yasin M, Hussain Janbaz K, Imran I, Gilani AU, Bashir S. Pharmacological studies on the antispasmodic, bronchodilator and anti-platelet activities of Abies webbiana. *Phytotherapy Research*. 2014 Aug;28(8):1182-7.
33. <http://ayurveda.alandiashram.org/ayurvedic-diet/draksha-an-ayurvedic-perspective-on-grapes>
34. Nassiri-Asl M, Hosseinzadeh H. Review of the pharmacological effects of Vitis vinifera (Grape) and its bioactive constituents: an update. *Phytotherapy research*. 2016 Sep;30(9):1392-403.
35. <https://www.easyayurveda.com/2013/01/17/dhataki-woodfordia-fruticosa-uses-dose-side-effects-ayurveda/>
36. Kumar D, Sharma M, Sorout A, Saroha K, Verma S. Woodfordia fruticosa Kurz.: a review on its botany, chemistry and biological activities. *Journal of pharmacognosy and phytochemistry*. 2016 May 1;5(3):293.

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