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# **Review Article**

# A CRITICAL ANALYSIS OF KUSHTHAGHNA DRAVYAS MENTIONED IN SUSHRUTOKTA GANA WITH COMMENTATOR'S VIEW ON CONTROVERSIAL DRUGS AND THEIR CONCEPT BASED APPLICATION

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Article info	ABSTRACT
Article History:	Ayurveda is one of the oldest medical systems with a holistic approach to health and
Received: 12-11-2023	individualize medicine. All the skin diseases in Ayurveda have been discussed under the
Accepted: 03-12-2023	broad heading of <i>Kushtha</i> . The literal meaning of <i>Kustha</i> is " <i>Kushnati tad vapuhu</i> " which
Published: 31-12-2023	means the <i>Roga</i> which causes discoloration, disfiguration. Acharya Charaka, Sushruta, and
<b>KEYWORDS</b> :	Vaghbhata mentioned Kushthghna Dravyas (drugs acting on skin diseases) in their books
Sushrutokta Gana,	respectively. Sushruta Samhita is one of prime compendium of Ayurveda where various
Kushthaghna	categorization (Gana) of drugs acting according to different ailments is mentioned in
Dravyas,	Sutrasthana 38 <sup>th</sup> chapter named <i>Dravyasangrehniya-adhyaya</i> . The objective of the present
Pharmacological	article is to study the drugs which are mentioned in the category of the drugs which acts on
actions, Ayurveda.	Kushtha (Kushthghna), with their chemical constituents, and pharmacological actions with
	special reference to Sushruta Samhita and other related books. Rasa-panchaka, botanical
	names with family, contraversial identification according to commentator's views are also
	discussed for better understanding of <i>Dravyas</i> . The review concluded that herbs mentioned
	in Ayurveda (Sushrutokta Gana) are beneficial in skin diseases and cosmetics in one or
	another way and also this article will help Ayurvedic UG/PG students, PhD scholars and
	Ayurveda physicians in both academics and clinical aspect.

#### **INTRODUCTION**

If we go through ancient literature, it is found that all types of the skin diseases come under term *Kushtha*. Various categorization (*Gana*) of drugs acting according to different ailments is mentioned in *Sushruta Samhita Sutrasthana* 38<sup>th</sup> Chapter named *Dravyasangrehniya-adhyaya*. *Charaka, Sushruta* and *Vaghbhata,* mentioned *Kushthghna Dravyas* in their books respectively and the concept of using *Dravyas* (herbs) for skin care as well as to get rid off from skin disorders is well described in Ayurvedic classics.

Ayurveda is a science that has been trusted and relied upon for ages. *Sushrutokt Kushthaghna Gana Dravyas* have been described for their medicinal and cosmetic properties.



Acharya Sushruta mentioned various Dravyas in particular Gana incorporating different diseases. So here attempt has been made to include all the herbs which are mentioned by Acharya Sushruta for skin care and skin diseases also.

Therefore, the present article emphasizes the drugs that have therapeutic applications in various dermatological conditions (*Twakavikara*) and to keep the skin healthy and youthful. The drugs which are described here will be helpful for Ayurvedic UG/PG students, PhD students and physicians for the selection of the particular drug for the various condions of skin disorders (*Kushtha*).

#### **MATERIAL AND METHOD**

The literature of the present study has been reviewed from *Sushruta Samhita*. Other Ayurvedic textbooks like *Bhavprakash-nighantu* (Indian Materia Medica), plants and other drugs of Sushruta samhita Saptadhyayi, Dalhana and his comments on drugs, *Charaka Samhita*, are also referred. In addition to this, relevant articles, journals, and websites are searched and other textual resources have been scientifically

analyzed in the present article. Electronic databases like PubMed, Google Scholar, and Scopus were searched for relevant information.

#### RESULT

# Pathogenesis or *Samprapti* of *Kushtha* (Skin problems)

All the *Acharya* of Ayurveda have given more or less the same *Samprapti* of *Kushtha. Kushtha* is produced invariably by the vitiation of the seven *Salsaradi Gana*  factors i.e., three *Doshas* and four *Dushyas*. According to *Acharya Charaka*, *Kushtha* is of innumerable types but for well-organized study, they are classified into two major groups, seven *Mahakushtha* and eleven *Kshudrakushtha*.

Following are the drugs mentioned in *Sushruta's Gana* (*Su.su.38*) which possess *Kushthaghna* properties:

S.no.	Plant	Botanical Name <sup>a</sup>	Family	Rasa	Guna	Veerya	Vipaka	Dosha- Karma	Projya- anga
1.	Salsara	<i>Shorea</i> <i>robusta</i> Gaertn.	Dipterocarpeae	Kshaya Madhura	Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Niryasa
2.	Ajakarna	Vateria indica L.	Dipterocarpeae	Kshaya Madhura	Ruksha	Shita	Katu	Kapha Pitta- shamaka	Taila Niryasa
3.	Khadira	<i>Acacia catechu</i> (L.f.)Willd	Fabaceae	Tikta Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Khadira- sara
4.	Kadara (shwetkhadira)	<i>Acacia suma</i> BuchHam.	Fabaceae	Tikta Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Khadir-sara
5.	Kalskandha	<i>Diospyros Peregrina</i> (Gaertn.)	Ebenaceae	Kshaya	Ruksha Laghu	Shita	Katu	Kapha Pitta- shamaka	Twaka Phala Beeja Bheeja-taila
6.	Kramuka	Areca catechu L.	Arecaceae	Kshaya Madhura	Guru Ruksha	Shita	Katu	Kapha Pitta shamaka	Phala
7.	Bhurja (Bhojpatra)	<i>Betula utilis</i> D. Don	Betulaceae	Kshaya	Laghu	Ushna	Katu	Tridosha- shamaka	Twaka
8.	Meshshringa	<i>Gymnema Sylvestre</i> R.Br.	Apocynaceae	Kshaya Tikta	Laghu Ruksha	Ushna	Katu	Kapha Vata- shamaka	Patra Moola
9.	Tinisha	<i>Ougeinia oojeinensis</i> (Roxb.) Hochr.	Fabaceae	Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Kand-sara Twaka
10.	Chandana	Santalum album L.	Santalaceae	Tikta Madhura	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Kand-sara Taila
11.	Kuchandana	Caesalpinia sappan L.	Fabaceae	Kshaya Tikta Madhura	Ruksha	Shita	Katu	Kapha Pitta- shamaka	Sara
12.	Shishimpa	Dalbergia sissoo Roxb	Fabaceae	Kshaya Katu Tikta	Laghu Ruksha	Ushna	Katu	Tridosh - shamaka	Patra Sara Twaka Moola

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13.	Shirisha	<i>Albizia lebbeck</i> (L.) Benth.	Fabaceae	Kshaya Tikta Madhura	Laghu Ruksha Tikshna	Ishad Ushna	Katu	Tridosha- shamaka	Twaka Beeja Patra
14.	Asana	Pterocarpus marsupium (Roxb.)	Fabaceae	Kshaya Tikta	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Kand-sara Niryasa
15.	Dhava	Anogeissus Latifolia Wall.	Combretaceae	Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Kand-sara Niryasa
16.	Arjuna	Terminalia arjuna (Roxb.)	Combretaceae	Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka
17.	Tala	Borassus flabellifer L.	Arecaceae	Katu	Laghu Snigdha Tikshna	Anusha na- Shita	Madhur a	Kapha Vata – shamaka	Phala Moola
18.	Shaka	Tectona grandis L.f.	Lamiaceae	Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Sara
19.	Naktmala	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Tikta Katu Kshaya	Laghu Tikshna	Ushna	Katu	Kapha Vata- shamaka	Twaka Patra Beeja
20.	Putika	Holoptelea integrifolia Planch.	Ulmaceae	Tikta Kshaya	Laghu Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Twaka
21.	Ashwakarana	Dipterocarp us turbinatus	Dipterocarpace ae	Katu Tikta	Laghu Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Taila
22.	Aguru	Aquilaria Agallocha Roxb.	Thymelaeceae	Katu <sub>APR</sub> Tikta	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Vata- shamaka	Kand-sara Taila
23.	Kaleeyaka	<i>Coscinium fenestratum</i> (Gaertn.) Colebr.	Menispermacea e	Tikta	Laghu Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Moola

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aPatel Priyalkumari Pravinbhai, Srivastava Rashmi, Upadhyaya Ashwani and Pandit Ram Deo (2023) "Commentators View on Medicinal Plants of Sushrutokta Salsaradi Gana Regarding their Controversial Botanical Identity: A Review", International Journal of Ayurveda and Pharma Research, 10(12), pp. 52-26. doi: 10.47070/ijapr.v10i12.2629.

#### Commentator's view on Controversial Drugs of Salasaradigana

- a. Ajakarna: Saraaj: shalbhed ev (Dalhan and its comments on drugs) p-215 Vateria indica L
- **b.** *Kadar: Khadirakar: shwetsara:* khadir bhed by dalhan; (Dalhana and its comments on drugs) p -225 *Acacia suma*Buch.-Ham
- **c.** *Tala*: *Tadi* (Dalhana and its comments on drugs) p-240; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-21 and by P.V. Sharma *Borassus flabellifer* L
- **d.** *Kaleeyaka: Malendrichandanam iti prasidham; Daruharidra* (Dalhana and its comments on drugs) p-229; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-22 and by P.V. Sharma; *Cosnium fenestratum* (Gaertn.) Colebr

Arka	di Gana								
S.no	Plant	Botanical	Family	Rasa	Guna	Veerya	Vipaka	Dosh-	Projya-anga
		Name						Karma	
1.	Arka	Calotropis Procera	Apocynace ae	Katu Tikta	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Vata- shamaka	Moola-twaka Ksheera Pushpa Patra
2.	Alarka	Calotropis gigantea L.	Menisperm aceae	Katu Tikta	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Vata- shamaka	Moola-twaka Ksheer Pushpa Patra
3.	Naktmala(K aranj dwey)	Pongamia pinnata L.	Fabaceae	Tikta Katu Kshaya	Laghu Tikshna	Ushna	Katu	Vata- shamana	Beeja, Twaka, Patra
4.	Putika (karanj dwey)	Holoptelea integrifolia Planch	Ulmaceae	Tikta Kshaya	Lahgu Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Twaka
5.	Nagdanti (Jmalgota)	Croton tiglium L.	Euphorbia ceae	Katu Tikta	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Pitta- shamaka	Beeja Bheej-taila
6.	Mayuraka (Apamarga)	Achyranthes aspera L.	Amarantha ceae	Katu Tikta	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Vata- shamaka	Moola Tandul Patra Panchanga
7.	Bhargi (Bharangi)	Clerodendru m serratum L.	Lamiaceae	Tikta Katu	Laghu Ruksha	Ushna	Katu	Vata Kapha- shamaka	Moola
8.	Rasna	<i>Pluchea lanceolata</i> (DC.) C.B. Clarke	Asteraceae	Tikta	Guru	Ushna	Katu	Kapha Vata- shamaka	Patra
9.	Indrapushpi (Langali)	Gloriosa superba L.	Colchicace ae	Katu Tikta	Laghu Tikshna	Ushna	Katu	Kapha Vata- shamaka	Kanda
10.	Shudra- shweta	<i>Albizia procera</i> Benth.	Fabaceae	Kshaya Tikta Madhura	Laghu Ruksha Tikshna	Ishad Ushna	Katu	Tridosha- shamana	Twaka Patrabeeja Pushpa
11.	Mahashwet a (katabhi)	<i>Albizia lucida</i> Benth.	Fabaceae	Kshaya Tikta Madhura	Laghu Ruksha Tikshna	Ishad Ushna	Katu	Tridosha- shamana	Twaka Patrabeeja Pushpa
12.	Vrishchikali	<i>Pergularia extensa</i> N. E. Br.	Apocynace ae	Tikta Katu	Laghu Ruksha	Ushna	Katu	Kapha- nisaraka	Patra Moola
13.	Alavana (Jyotishmati)	Celastrus paniculatus Willd.	Celastrace ae	Katu Tikta	Tikshna	Ushna	Katu	Vata Kapha- shamaka	Beeja, Taila
14.	Tapas vriksha (Ingudi)	Balanites aegyptiaca (L.) Delile	Zygophylla ceae	Katu Tikta	Laghu Snigdha	Ushna	Katu	Kapha Vata- shamaka	Twaka, Phala, Beeja, Taila, Patra

#### Commentator's view on controversial drugs of Arkadi Gana:

- a. *Indrapushpi: Indra-pushpaai langalaki* (Dalhana and its comments on drugs) p-221; (plants and other drugs of Sushrut samhita Saptadhyayi) p-32 and by P.V. Sharma; *Gloriosa superb* L
- b. Kshudrashweta: Shwetsyanda shwet-pushpaa 'sefand' iti loke (Dalhana and its comments on drugs) p-234; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-32 and by P.V. Sharma Albizia procera (Roxb.) Benth.
- c. *Mahashweta: Neel-pushpaa: sefand: (Katabhi)* (Dalhana and its comments on drugs) p-234; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-32 and by P.V. Sharma *Albizia lucida* Benth.
- d. *Vrishchikali: Meshshringi-bhed* (Dalhana and its comments on drugs) p-268; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-33 and by P.V. Sharma (*Ras panchak* based on *karam*) *Balanites aegyptiaca* (L.) Delile
- e. *Alavana: Jyotishmati vartulpakvraktPhalaa peet-Tailaa kaakmardantika iti loke prasidha* (Dalhana and its comments on drugs) p-218; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-33 and by P.V. Sharma *Celastrus paniculatus* Willd
- f. **Putika: Kantaki vitapkaranj itieke; Kantakikaranj** (Dalhana and its comments on drugs) p-252; (plants and other drugs of Sushrutsamhita Saptadhyayi) p-31and by P.V. Sharma *Holoptelea integrifolia* Planch **Araawadhadi Gana**

S.no	Plant	Botanical	Family	Rasa	Guna	Veer	Vipaka	Dosh-	Projya-
		Name				ya		karama	anga
1.	Aragwadha	Cassia fistula L.	Fabaceae	Madhura	Guru Mridu Snigdha	Shita	Madhura	Vata Pitta- shamaka	Phala Majja Moola-twaka Pushpa Patra
2.	(Madana)M enphala	Randia spinosa Poir.	Rubiaceae	Kshaya Madhura <mark>T</mark> ikta, Katu	Laghu Ruksha	Ushna	Katu	Kapha Vata- shamaka	Phala
3.	Gopghonta	Zizyphus xylopyra Willd.	Rhamnac eae	Madhura Amla Kshaya	Laghu	Shita	Madhura	Vata sanshaman a	Phala Patra
4.	Kantaki	Flacourtia indica Merr.	Flacourta ceae	Tikta, JAPR Madhura, Amla, Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Phala
5.	Kutaja	Holarrhena Antidysenteric a (G.Don) Wall.ex A.DC.	Apocyna ceae	Tikta Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Beeja
6.	Patha	Cissampelos pareira L.	Menisper maceae	Tikta	Laghu Tikshna	Ushna	Katu	Kapha Pitta- shamaka	Moola Bhomik Kanda
7.	Patla	Stereospermu m suaveolens (Roxb.) DC.	Bignonia ceae	Tikta Kshaya	Laghu Ruksha	Ushna	Katu	Tridosha- shamaka	Moola-twaka Pushpa Beeja Patra
8.	Murva	Marsdenia tenacissima (Roxb.)Moon	Apocyna ceae	Tikta Kshaya	Guru Ruksha	Ushna	Katu	Tridosha- shamaka	Moola
9.	Indryava (Kutaj- beeja)	Holarrhena antidysenterica (G.Don) Wall.ex A.DC.	Apocyna ceae	Tikta Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Beeja

10.	Saptparna	Alstonia scholaris (L.)R.Br.	Apocyna ceae	Tikta Kshaya	Laghu Snigdha	Ushna	Katu	Kapha Pitta- shamaka	Twaka
11.	Nimba	Azadirachta indica A. Juss	Meliaceae	Tikta Kshaya	Laghu	Shita	Katu	Kapha Pitta shamana	Pushpa Patra,Twaka Beeja, Taila
12.	Kurantaka	Barleria prionitis L.	Acanthac eae	Tikta Madhura	Laghu	Ushna	Katu	Kapha Vata- shamaka	Panchanga
13.	Dasi Kurantak a (Neel sairiyaka)	Barleria prionitis L.	Acanthac eae	Tikta Madhura	Laghu	Ushna	Katu	Kapha Vata shamaka	Panchanga Visheshat Patra
14.	Guduchi	<i>Tinospora</i> <i>cordifolia</i> (Willd.)Hook.f . & Thomson	Menisper maceae	Tikta Kshaya	Guru Snigdha	Ushna	Madhura	Tridosha- shamaka	Kanda
15.	Chitraka	Plumbago zeylanica L.	Plumbagi naceae	Katu	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Vata- shamaka Pitta- prakopaka	Moola-twaka
16.	Sharangash ta	<i>Dregia</i> volubilis Benth.	Asclepia daceae	Tikta Kshaya	Guru Ruksha	Ushna	Katu	Kapha Vata- shamaka	Moola
17.	Naktmala (Karanj dwey)	Pongamia pinnata L.	Fabaceae	Tikta, Katu Kshaya	Laghu, Tikshna	Ushna	Katu	Vata- shamana	Beeja, Twaka Patra
18.	Putika (karanj dwey)	<i>Holoptelea</i> <i>integrifolia</i> Planch	Ulmaceae	Tikta, Kshaya	Lahgu, Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Twaka
19.	Patola	<i>Trichosanthes dioica</i> Roxb.	Cucurbit aceae	Tikta	Laghu Ruksha	Ushna	Katu	Tridosha- shamaka	Patra
20.	Kirattikta	Swertia chirayita (Roxb.) H.Karst	Gentiana ceae	Tikta	Laghu Ruksha	Ushna	Katu	Tridosha- shamaka	Panchanga
21.	Karela	Momordica charantia L.	Cucurbit aceae	Tikta Katu	Laghu Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Panchanga Phala-twaka

Commentator's view on controversial drugs of Aragwadhadi Gana

a. *Sharangasta: Dregia volubilis* Benth. *Murva* (Dalhana and its comments on drugs); p-166

b. *Gopghonta: Zizyphus xylopyra* Willd. (plants and other drugs of Sushruta Samhita Saptadhyayi) p-14; by P.V. Sharma; *karkotaki* by dalhan; badar bhed.

- c. *Kantaki: Flacourtia indica* Merr. (plants and other drugs of Sushruta Samhita Saptadhyayi) p-14; by P.V.Sharma; *vikankat* by dalhan
- d. *Kurantaka: Barleria prionitis* L (plants and other drugs of Sushruta Samhita Saptadhyayi) p-17; by P.V.Sharma
- e. *Dasi Kurantaka: Barleria strigosa* L.( plants and other drugs of Sushruta Samhita Saptadhyayi) p-17; by P.V.Sharma

Laksha	ıdi Gana								
S.no	Plant	Botanical Name	Family	Rasa	Guna	Veerya	Vipaka	Dosh- Karama	Projya- anga
1.	Laksha	Laccifera lacca	Lacciferidae	Madhu ra	Ruksha	Shita	Katu	Rakta- pitta Ghana	Niryasa
2.	Arevata	Cassia fistula L.	Fabaceae	Madhu ra	Guru Mridu Snigdha	Shita	Madhura	Vata Pitta- shamaka	Phala- majja Moola- twaka Pushpa Patra
3.	Kutaja	Holarrhena Antidysenteric a (G.Don) Wall.ex A.DC.	Apocynaceae	Tikta Kshaya	Laghu Ruksha	Shita	Katu	Kapha Pitta- shamaka	Twaka Beeja
4.	Ashwmara (Kanera)	Nerium Indicum Mill.	Apocynaceae	Katu Tikta	Laghu Ruksha Tikshna	Ushna	Katu	Kapha Pitta- shamaka	Moola Moola- twaka
5.	Katphala	<i>Myrica</i> <i>esculenta</i> Buch-Ham. ex D.Don	Myriaceae	Kshaya Tikta Katu	Laghu Tikshna	Ushna	Katu	Kapha Vata shamaka	Twaka
6.	Haridra(H aridra dwey)	Curcuma longa L.	Zingiberaceae	Tikta Katu	Ruksha La <mark>g</mark> hu	Ushna	Katu	Tridosha- shamaka	Kanda
7.	Daruharid ra(Haridr a dwey)	Berberis aristata Sims	Berberidaceae	Tikta Kshaya	Laghu Ruksha	Ushna	Katu	Kapha Pitta- shamaka	Moola Kanda Phala
8.	Nimba	Azadirachta indica A. Juss	Meliaceae	Tikta PK Kshaya	Laghu	Shita	Katu	Kapha Pitta -shamana	Pushpa Patra Twaka Beeja Taila
9.	Saptchha da(Saptpa rna)	Alstonia scholaris (L.) R.Br.	Apocynaceae	Tikta Kshaya	Laghu Snigdha	Ushna	Katu	Kapha Pitta - shamana	Twaka
10.	Malati (Chameli)	Jasminum officinale L.	Oleaceae	Tikta Kshaya	Laghu Snigdha Mridu	Ushna	Katu	Tridosha- shamaka	Patra Moola Pushpa
11.	Traymana	<i>Gentiana kurroo</i> Royle	Gentianaceae	Tikta	Laghu Ruksha	Ushna	Katu	Kapha Vata- shamaka	Moola

# Triphala

S.no	Plant	Botanical	Family	Rasa	Guna	Veerya	Vipaka	Dosh-	Projya-anga
		Name						Karama	
1.	Haritki	Terminalia Chebula Retz.	Combreta ceae	Pachrasa (lavanvar jit)	Laghu Ruksha	Ushna	Madhura	Tridosha- shamaka	Phala
2.	Amlaki	Phyllanthus	Phyllanth	Pachrasa	Guru	Shita	Madhura	Tridosha-	Phala

		emblica L.	aceae	(lavanvar	Ruksha			shamaka	
				JILJ	Shita				
3.	Bibhitaka	Terminalia	Combreta	Kshaya	Laghu	Ushna	Madhura	Tridosha-	Phala
		Bellerica	ceae		Ruksha			shamaka	
		Roxb.							

#### Triushna

S.no	Plant	Botanical Name	Family	Rasa	Guna	Veerya	Vipaka	Dosha-karama	Projya - anga
1.	Pippali	Piper longum L.	Piperaceae	Katu	Laghu Snigdha Tikshna	Anushan- shita	Madhura	Kapha Vata- shamaka	Phala Moola
2.	Maricha	Piper nigrum L.	Piperaceae	Katu	Laghu Tikshna	Ushna	Katu	Kapha Vata-shamaka	Phala
3.	Shringver (Shunthi)	Zingiber officinale Rose.	Zingiberace ae	Katu	Laghu Snigdha	Ushna	Madhura	Kapha Vata- shamaka	Kanda

Every single drug has an active chemical constituent which acts on different ailments. Here different chemical constituents are described as acting on the skin.

#### Salsaradi Gana

S.no.	Plant	Botanical Name	Chemical constituent	Pharmacological actions and uses
1.	Salsara	Shorea robusta Gaertn.	Ursolic acid (UA) <sup>[1]</sup>	Anti-oxidant, anti-inflammatory hence, UA showed a considerable inhibitory effect of cytokine levels, immunomodulatory mediators, anti- carcinogenic, anti-tumoral, anti-viral, free radical scavenging activity, anti- proliferative properties <sup>[2]</sup>
2.	Ajakarna	Vateria indica L.	Tannins <sup>[3]</sup>	Antioxidant, free radical scavenging, antimicrobial, antiviral, anti-carcinogen an inhibitor of the harmful pro- oxidative enzyme, shows astringent and antiseptic properties happened by binding, precipitating, or shrinking with different protein molecules <sup>[4]</sup>
3.	Khadira	Acacia catechu (L.f.)Willd	Catechin <sup>[5]</sup>	Antibacterial, anti-cancer, anti- inflammatory, anti-viral, possess significant oxidative stress-modulating activity, antifungal activity, antioxidant power, effective against the growth of cancer cell lines (antiproliferative activity) <sup>[5]</sup>
4.	Kadar (shwetkhadir)	Acacia suma BuchHam.	Cyanogenic glycosides, flavonoids, alkaloids, seed oils, cyclitols, fluoroacetate, gums, non- protein amino acids, diterpenes, terpenes <sup>[6]</sup>	Anti-inflammatory, antioxidant, anticancer, antiviral, liver protective effects <sup>[6]</sup>
5.	Kalskandha	Diospyros Peregrina (Gaertn.)	Triterpenes <sup>[7]</sup>	Helpful in wound healing <sup>[8]</sup>

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6.	Kramuka	Areca catechu L.	Alkaloids, tannins, flavones triterpenes, steroids, and fatty acids, arecoline <sup>[9]</sup>	Antioxidant effects, anti-bacterial and antifungal effects, anti-inflammatory, anti-allergic effects <sup>[9]</sup>
7.	Bhojpatra	Betula utilis D.Don	Betulin <sup>[10]</sup>	Betulin inhibits the formation of reactive oxygen species (ROS), therefore vehicles containing these compounds look promising as antioxidant delivery systems and as an ingredient in cosmetics and pharmaceutics applied to the skin <sup>[11]</sup>
8.	Meshshringa	Gymnema Sylvestre R.Br.	Saponin <sup>[12]</sup>	Anti-inflammatory, Anti-oxidant, wound healing (promotes re- epithelialization of the wound), healing the burn wound (saponin increased the expression of factors relevant to proliferation, and consequently, promoted the proliferation of epidermal cells.) <sup>[13]</sup>
9.	Tinisha	Ougeinia oojeinensis (Roxb.)Hochr.	Tannins <sup>[14]</sup>	Previously mentioned
10.	Shirisha	Albizia lebbeck	Tannins <sup>[15]</sup>	Previously mentioned
11.	Dhava	Anogeissus Latifolia Wall.	Tannins[16].ave	Previously mentioned
12.	Chandana	Santalum album L.	Santalol <sup>[17]</sup>	Anti-inflammatory and anti-oxidant activity Anti-proliferative and anti-cancerous activity Anti-microbial and anti-viral activity Useful in clinical trials for the treatment of acne, psoriasis, eczema, common warts, and <i>molluscum</i> <i>contagiosum</i> .etc <sup>[18]</sup>
13.	Kuchandana	Caesalpinia sappan L.	Brazilin <sup>[19]</sup>	Useful in skin infections, anti- inflammatory and antioxidant activities, represent potential treatments for oxidative stress-induced photoaging of skin <sup>[20]</sup>
14.	Arjuna	Termanilia arjuna (Roxb.)	Phytosterol, lactones, flavonoids, phenolic compounds, and tannins and glycosides <sup>[21]</sup>	The antimicrobial activity of the extract showed that greater inhibition zone against Gram-negative bacteria than Gram-positive bacteria. (The concentration of the compound was tested against two Gram-positive <i>S.</i> <i>aureus, S. mutans</i> and two Gram- negative <i>E. coli and K. pneumoniae,</i> human pathogenic bacteria). The zone of inhibition of <i>T. arjuna</i> bark extract was compared with standards like chloramphenicol for antibacterial activity. The results showed that the remarkable inhibition of the bacterial growth was against the tested organisms).

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				The methanolic extract showed promising antioxidant activity, as absorption of DPPH radicals decreased in the DPPH free radical scavenging assay.Flavonoid components have antioxidant properties present in the methanol extract.
15.	(Tala) Tadvriksha	Borassus flabellifer L.	Saponins Alkaloids Flavinoids <sup>[22]</sup>	Antimicrobial activity <sup>[23]</sup>
16.	Asana	Pterocarpus marsupium (Roxb.)	Tannic acid <sup>[24]</sup>	Inflammation caused by external irritation is protected by tannic acid (TA). TA acts as a barrier against external stimulants such as TPA and artificial sweat on the stratum corneum (SC) surface. <sup>[25]</sup>
17.	Shaka	Tectona grandis L.f.	Triterpenoids <sup>[26]</sup> Lignans <sup>[26]</sup>	Helpful in wound healing <sup>[27]</sup> Antioxidant (antioxidant properties of lignans are mainly related to the regulation of radical scavenging enzymes, e.g., SOD and CAT.) Anti-inflammatory (downregulation of pro-inflammatory cytokines, such as TNF- $\alpha$ , IL-6, IL-8, and IL-1 $\beta$ , etc.) Anti-cancer effects (by suppressing the NF- $\kappa$ B pathway and modulating apoptotic pathways). <sup>[28]</sup>
18.	Naktmala	Pongamia pinnata (L.) Pierre	Karanjin and pongapin (furanoflavones) <sup>[16]</sup>	Antilipidperoxidase effect, antifungal, antiviral activity, anti-inflammatory activity, anti-filarial potential. <sup>[16]</sup> Prevention and treatment of psoriasis antipsoriatic activity (scavenging activity against nitric oxide). Docking scores of Karanjin and Pongapin with different studied receptors were found to be comparable to that of Methotrexate, a known drug for treating Psoriasis <sup>[16]</sup>
19.	Putika	Holoptelean integrifolia Planch.	Tannins <sup>[3]</sup>	Previously mentioned
20.	Ashwakarana	Dipterocarpus turbinatus	Glycosides, Steroids Tannins, Terpenoids, Alkaloids, Flavinoids <sup>[17]</sup>	Antibacterial activity against Staphylococcus aureus and Klebsiella pneumonia <sup>[17]</sup>
21.	Aguru	Aquilaria agallocha Roxb.	Sesqueterepene alcohol <sup>[18]</sup>	Anti-oxidant activity <sup>[18]</sup>
22.	Kaleeyaka	<i>Coscinium fenestratum</i> (Gaertn.) Colebr.	Berberine <sup>[19]</sup>	Antimicrobial, antiviral, anti- inflammatory, antioxidative, anticancer effects. Berberine possesses a skin-darkening potential and could be used as a safe

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		melanog hypopig vitiligo <sup>[1</sup>	enic agent fo mentation	r the treatmen disorders	nt of or	

# Arkadi Gana

S.no.	Plant	Botanical Name	Chemical constituent	Pharmacological actions and uses
1.	Arka	Calotropis Procera	Calo-protein <sup>[20]</sup>	Useful in treating skin infection and wound healing, antimicrobial activity, anti-inflammatory potential, anti-fungal activity. The milky latex wet with a clean cloth was applied mainly on affected areas of cut wounds, thorn injuries, and inflamed swellings <sup>[20]</sup>
2.	Alarka	Calotropis gigantea L.	Madrine, Sitosterol Cardenolides Benzoylinesolone Calotropons <sup>[21]</sup>	Useful in edema, syphilis, leprosy, eczema, eruptive skin, scorpion and bug bites. Anti-inflammatory, antimicrobial, wound healing, anticancer activity. <sup>[21]</sup>
3.	Karanj dwey (Naktmala, Putika)	Pongamia pinnata L. Holoptelea integrifolia Planch.	Karanjin and pongapin (furanoflavones) <sup>[16]</sup>	Previously mentioned
4.	Nagdanti (Jmalgota)	Croton tiglium L.	Terpenes <sup>[22]</sup>	Terpenes have antiseptic, anti-fungal, or anti-inflammatory actions and are useful in wound healing <sup>[22]</sup>
5.	Apamarga (Mayurak)	Achyranthes aspera L.	Tannins, Alkaloids Flavanoids <sup>[23]</sup>	Anti-inflammatory, anti-cancer, antiviral, and antibacterial activity <sup>[23]</sup>
6.	Bharangi	Clerodendrum serratum L.	Saponin JAPR Vote	Previously mentioned
7.	Rasna	<i>Pluchea lanceolata</i> (DC.) C.B. Clarke	Quercetin Isorhamnetin	Quercetin has a skin protective effect against damage caused by a variety of insects, including UV radiation, histamine, or contact with toxic chemical compounds. Indeed, quercetin can reduce redness, itching, and inflammation of damaged skin increasing hydration, and reducing water loss. Anti-inflammatory (inhibited the COX-2, TNF- $\alpha$ , and IL-6 production.)
8.	Langali (Indrapushpi)	Gloriosa superba L.	Colchicine	It has beneficial effects on cutaneous conditions, including leukocytoclastic vasculitis, and psoriasis.
9.	Vidarikanda (Shudrashweta)	Plueraria tuberose (Roxb.) ex Willd.	Puerarin, Daidzein Genistein, Irisolidone	Anticancer, anti-inflammatory, anti- oxidant, wound healing properties
10.	Jyotishmati (Alwana)	Celastrus paniculatus Willd.	Sesquiterpene	Previously mentioned
11.	Ingudi (Tapas vriksha)	Balanites aegyptiaca (L.) Delile	Saponin	Previously mentioned

12.	Mahashweta (katabhi)	<i>Albizia lucida</i> Benth.	Triterpenoids, saponins, flavonoids, phenolic glycosides	Antitumour, inflammatory	antimicrobial,	anti-
13.	Vrishchikali (Meshshringi Bhed)	Gymnema Sylvestre R.Br.	Saponin	Previously menti	oned	

# Aragwadhadi Gana

S.no	Plant	Botanical Name	Chemical Constituent	Pharmacological action and uses
1.	Aragwadha	Cassia fistula L.	Tannin	Previously mentioned
2.	Menphala	Randia spinosa Poir.	Saponin	Previously mentioned
3.	Gopghonta	Zizyphus xylopyra Willd.	Quercetin, quecitrin	Leaf paste applied on pimples boils
4.	Kantaki	<i>Flacourtia indica</i> Merr.	Steroids, terpenoids, phlabatannins, phenol	Antimicrobial activity, antioxidant activity
5.	Kutaja	<i>Holarrhena, Anti- dysenterica</i> (G.Don) Wall.ex A.DC.	Tannins	Previously mentioned
6.	Patha	Cissampelos pareira L.	Tannins	Previously mentioned
7.	Patla	<i>Stereospermum suavcolens</i> (Roxb.) DC.	Cycloolivil (lignin derivative)	Wound healing, antimicrobial, anti- inflammatory properties.
8.	Murva	<i>Marsdenia tenacissima</i> (Roxb.) Moon	Triterpenes	Wound healing (modulates the production of ROS in the wound microenvironment, accelerating the process of tissue repair. Triterpenes may also induce cell migration, cell proliferation, and collagen deposition.)
9.	Indryava (Kutajbeeja)	Holarrhena antidysenterica (G.Don) Wall.ex A.DC.	Tannins	Previously mentioned
10.	Satvana (Saptparna)	<i>Alstonia Scholaris</i> (L.) R.Br.	Saponins, and tannins, flavonoids	Previously mentioned
11.	Nimba	<i>Azadirachta indica</i> A. Juss	Nimbin (triterpene), flavonoids, and saponins, tannins and alkaloids	The fungicidal, anti-inflammatory, and antioxidant properties of nimbin help to reduce damage by lowering the generation of reactive oxygen species
12.	Kurantak	Barleria prionitis L.	Alkaloids, terpenoids, tannins, quinones, and flavonoids	Antimicrobial, antioxidant, anti- inflammatory, and antiviral, antibacterial
13.	Guduchi	<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thomson	Berberine	Berberine has been reported to inhibit mast cell degranulation in a rat model of allergic contact dermatitis, inhibit the expression of MMP-9 and IL-6 in normal human keratinocytes, and to induce an anti- inflammatory response in mice with oxazolone-induced contact dermatitis

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				i i cvention of skin cancer.
			(naphthoquinone)	inhibition of ultraviolet radiation (UVR)-induced development of squamous cell carcinomas (SCC)
15.	Patola	<i>Trichosanthes dioica</i> Roxb.	Flavonoids, tannins	Previously mentioned
16.	Kirattikta	<i>Swertia chirayita</i> (Roxb.) H.Karst	Gentianine (monoterpene alkaloid)	Anti-inflammatory (inhibits IL-1 $\beta$ - induced inflammatory responses in rats) Inhibit the release of matrix metalloproteinases (MMPs) induced by IL-1 $\beta$ .
17.	Karela	Momordica charantia L.	Saponins, flavonoids, triterpenes	Previously mentioned
18.	Sharangashta	Physalis minima L.	Gallic acid, steroid alkaloids, ellagic acid, catechol, catechins	Anti-inflammatory, antioxidant, antibacterial actions
19.	Karanj dewy (Naktmala, Putika)	Pongamia pinnata L. Holoptelea integrifolia Planch.	Previously mentioned	Previously mentioned
20.	Dasi Kurantak	Barleria prionitis L.	Barlerinoside, iridoid glycosides	Anti-inflammatory, free radical scavenging properties

# Lakshadi Gana

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S.no.	Plant	Botanical Name	Chemical Constituent	Pharmacological actions and uses
1.	Laksha	Laccifera lacca	Sugars, proteins, soluble salts, insect bodies	Injuries, fungal infections, eczema, scabies, herpes, wounds and other skin diseases
2.	Katphala	<i>Myrica esculenta</i> Buch-Ham. ex D.Don	Myricetin (MYR), a natural flavonoid compound; Tannins	Significantly inhibited UV-induced keratinocyte damage
3.	Kutaja	Holarrhena antidysenterica (G.Don) Wall.ex A.DC.	Previously mentioned	Previously mentioned
4.	Kanera	Nerium Indicum Mill.	Terpenoids, Saponins, Tannins	Previously mentioned
5.	Haridra	Curcuma longa L.	Curcumin	Curcumin protects the skin by quenching free radicals and reducing inflammation through nuclear factor- KB inhibition. Curcumin treatment also reduced wound-healing time, improved collagen deposition, and increased fibroblast and vascular density in wounds thereby enhancing both normal and impaired wound healing
6.	Daruharidra	Berberis aristata Sims	Berberine	Previously mentioned
7.	Nimba	<i>Azadirachta indica</i> A. Juss	Nimbin (triterpene), flavonoids, and saponins, tannins	Previously mentioned

			and alkaloids	
8.	Saptparna	<i>Alstonia scholaris</i> (L.) R.Br.	Previously mentioned	Previously mentioned
9.	Chameli	Jasminum officinale L.	Salicylic acid	Treat various skin disorders; its ability to exfoliate the stratum corneum; comedolytic property
10.	Traymana	<i>Gentiana kurroo</i> Royle	Pectin	Anti-oxidant activity (decrease in the absorbance of a radical-containing solution).
11.	Arevata	Cassia fistula L.	Tannins	Previously mentioned

## Triphala

S.no.	Plant	Botanical Name	Chemical Constituent	Pharmacological actions and uses
1.	Haritki	Terminalia Chebula Retz.	Chebulagic acid Chebulinic acid (an ellagitannin) Corilagin (a gallotannin)	Anti-inflammatory Anti-oxidant activity As it can scavenge free radicals that cause inflammation and oxidative stress Anti-inflammatory Anti-oxidant Anti-inflammatory Anti-oxidant
2.	Bibhitaka	Terminalia Bellerica Roxb.	Beta-Sitosterol	It soothes irritated skin and is effective in skin conditions like atopic dermatitis. This phytosterol speeds up wound healing, skin recovery
3.	Amlaki	Phyllanthus emblica L.	Tannic acid Vitamin C	Previously mentioned Anti-oxidant (Vit. C protects the skin from oxidative stress by sequentially donating electrons to neutralize the free radicals.)

### Triushna

S.no.	Plant	Botanical Name	Chemical Constituent	Pharmacological actions and uses
1.	Pippali	Piper longum L.	Piperine Piplartine Sesamin	It promotes the absorption of nutrients and helps reduce anaphylaxis on the skin, repigmentation of depigmented skin, and enhancement of skin colouration. Anti-inflammatory It can reduce UVB-induced inflammation
2.	Maricha	Piper nigrum L.	Piperine	Previously mentioned
3.	Shunthi	Zingiber officinale Rose.	Zingiberol	Inhibit free radicals and oxidative stress. It reduces UVB-induced intracellular reactive oxygen species level, inhibits induction of COX-2 mRNA and protein as well as NF-kappaB translocation
			Zingiberene Shogaol	<ul> <li>Anti-oxidant, Anti-inflammatory activities</li> <li>Anti-inflammatory</li> <li>6-Shagaol protects human melanocytes against</li> <li>Oxidative stress through activation of the Nrf2-</li> <li>Antioxidant response Element Signaling Pathway.</li> <li>Inhibit the development of factors like Inflammatory</li> <li>cytokines, TNF-α, etc in Allergic dermatitis.</li> </ul>

#### DISCUSSION

All the skin diseases in Ayurveda have been discussed under the broad headings of *Kushtha*. There are two types of *Kushtha* described in Ayurvedic classics, *Mahakushtha* and *Kshudrakushta*.

In Ayurveda, *Roga* can be considered as the imbalance of *Dosha* (functional unit of the body) and health as their balanced state so, *Sushruta* has clearly said that decreased *Doshas* in the body should be increased and increased *Dosha* should be decreased by means of use of *Dravyas* externally and internally.

*Kushtha* is always *Tridoshaja* in origin and the dominance of a particular *Dosha* leads to a specific symptom complex. It is produced invariably by the vitiation of the seven factors viz., three *Dosha* and four *Dushya*. Different types of pain, colors, etc are found in *Kushtha* because of *Anshanshakalpana* of the *Dosha* and *Sankhyavikalpa*. Any single *Dosha* is not the cause **According to** *Acharya Charaka* 

of *Kushtha*. All three *Dosha* are involved in *kushtha*. Though the provocative morbid *Dosha* are the same in all the varieties yet they are differentiated by the different dose of morbidity, sequel, and location which produce the difference in their characteristic pain, colour, seat, effect, name, and treatment.

Sushruta in Su. Ni. 5/6 **"SaraavaniKusgthanisa-vatanisa-Pittanisa-shleshmanisa-**

#### kriminichabhavanti,

*uttasanastudoshgrehenambhibhavat"* quotation states that all types of *kushtha* are *Vata* endowed, *Pitta* endowed, and *Kapha* endowed also microorganisms (ex. Bacteria) endowed. But the categorization of *kushtha* is because of the dominance of any particular *Dosha* over another. That's why symptoms related to that particular *Dosha* (dominant) reflect in a particular type.

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Туре	Vata	Pitta	Kapha	Vata-Pitta	Pitta-Kapha	Vata-Kapha	Tridosha
Dosha	Kapala	Udumbarakushtha	Mandala	Rishyajeebha	Pundarika	Sidhama	Kakanaka
	kushta		Kushtha,	Kushtha	Kushtha,	Kushtha,	Kushtha
			Vicharchika		Dadru,	Ekkushtha,	
			of	Ayurveda	Charamdala,	Charamkushtha,	
			mal		Pama,	Kitima,	
			3		Visphota,	Vipadika,	
					Shtaru	Alsaka	

A total of 6 *Gana* are mentioned in *Sushrutoktgana* which has direct reference of *'Kushthghna'* in the *Shloka* these *Gana* are 1. *Salsaradi* (23), 2. *Arkadi* (14), 3. *Aragwadhadi* (21), 4. *Lakshadi* (11), 5.*Triphla* (3) and 6.*Triushna* (3).

In which total 75 drugs are mentioned in Sushrut samhita Sutrasthan chapter 38 out of which 29 drugs are Kapha-Pitta shamaka- ex. Salsara, Ajakarn, Kadar, Tinish, Nagdanti etc.

21 drugs are *Vata-Kapha-shamaka-* ex. *Shunthi, Marich, Pippali, Traymana, Katphala* etc.

14 drugs are *Tridosha-shamaka-* ex. *Mahashweta, Patla, Murva, Patol, Kiratikt, Guduchi* etc.

Acharya Sushruta has mentioned in Shlok Su.38/81 that Vaidya can use these Dravyas as per need in the form of Lepa, Kshayam, Tail, Ghrit, or in the form of Panak.

**Skincare:** Before the application of these miraculous herbs for skin care, assessment of the type of skin is very important as some peculiar symptoms are mentioned in classical texts for three types of *Prakriti* ex. a person with *Vatik* skin (dry, rough, loose and wrinkled) and *Pittaj* skin (pigment disorders, rashes,

acne, and pimples) by judiciously using *Madhura Rasa Dravyas* can get rid of above symptoms and attain more lustrous, shiny, and glowing skin. *Madhura Rasa Dravyas* enhances the growth of all seven *Dhatu* thus leading to increase in the *Oja*, which in turn leads to increase *Prabha* of skin.

People with *Vatik* skin should also use *Amla Rasa Dravyas* for attaining healthy and youthful skin by their antioxidant property, MMPs inhibitory properties. A person with *Kaphaj* skin can use *Kshaya*, *Tikta*, and *Katu Rasa Dravyas* from above mentioned list of *Dravyas*. Some *Katu Rasa Dravyas* acts on propionibacterium acne and is helpful in the reduction of inflammation.

*Kshaya Rasa Dravyas* of the list can be selected for acne, wound healing, protection from UV rays and to protect skin from premature aging.

Thus, a person with *Kaphaj* skin (pores, excessively oily skin, and blackheads), as well as *Pittaj* skin (pigment disorders, rashes, acne, and pimples), can use *Kshaya Dravyas* to achieve healthy and lustrous skin.



**Modern view:** All skin diseases have one thing in common i.e. inflammation, excessive production of free radicals, superoxides, inflammatory cytokines, Interleukins, TNF, etc. and their manifestation according to the different skin conditions.

*V-K - Traymana* etc.

Vrishchikali etc.

etc.

*Dravyas* which are mentioned in list, has antioxidant properties, tyrosinase inhibitory activity, free radical scavenging property, etc which is beneficial for skin disease and is also useful for skin care.



#### CONCLUSION

etc.

In a nutshell, after detailed interpretation of *Kushthaghna Dravyas* of *Sushrutokt Gana*, among 75 *Dravyas*, there are 15 *Dravyas* which are controversial in above list but after critical analysis with respect to commentator's view, we are now able to describe their botanical sources and explored much more than that. So that a Physician can choose and use more efficiently, frequently and clearly these *Dravyas* in their clinical practice with full scientific concepts, along with their probable mode of action as far as skin diseases are concerned. Also this critical review will be helpful for AYUSH students, PG scholars, PhD scholars etc. More

research and findings should be encouraged on this topic.

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