



Review Article

COMMENTATORS VIEW ON MEDICINAL PLANTS OF *SUSHRUTOKTA SALSARADI GANA*  
REGARDING THEIR CONTROVERSIAL BOTANICAL IDENTITY: A REVIEW

Patel Priyalkumari Pravinbhai<sup>1\*</sup>, Srivastava Rashmi<sup>2</sup>, Upadhyaya Ashwani<sup>2</sup>, Pandit Ram Deo<sup>1</sup>

\*1PG Scholar, <sup>2</sup>Faculty, Post Graduate Department of Dravyaguna, Rajiv Gandhi Government Postgraduate Ayurvedic College and Hospital, Paprola, Himachal Pradesh, India.

|   |  |
|---|--|
| <p><b>Article info</b></p> <p><b>Article History:</b><br/>Received: 28-11-2022<br/>Revised: 20-12-2022<br/>Accepted: 03-01-2023</p> <p><b>KEYWORDS:</b><br/><i>Salsaradigana</i>,<br/>Controversial<br/>medicinal<br/>plants, Kushtha,<br/>Prameha,<br/>Pandu, <i>Kapha-medo-<br/>vishoshana</i>.</p> | <p><b>ABSTRACT</b></p> <p><i>Sushruta Samhita</i> is one of the foundational literature included in the <i>Brihat traiye</i> literatures of Ayurveda. Out of 37 different <i>Ganas</i> mentioned in <i>Sutra Sthana</i> of <i>Sushruta Samhita</i>, <i>Dravya-sangrahaniya-adhyaya</i>; <i>Salsaradi-gana</i> is one of them in which 23 medicinal plants have been described. Classically <i>Salsaradi-gana</i> is clinically indicated for <i>Kushta</i> (skin diseases), <i>Prameha</i> (diabetes mellitus), <i>Pandu</i> (anemia), and <i>Kapha-medo-vishoshana</i> (anti-hyperlipidaemic) disease. For this study, a review of the original commentary of <i>Acharya Dalhana</i> and <i>Acharya Haranchandra</i> on <i>Sushruta Samhita</i> and the scientific research papers published on the medicinal plants listed in the <i>Salsaradi-gana</i> of <i>Sushruta Samhita</i> in indexed journals is done. Out of 23 medicinal plants mentioned 8 plants have controversial identification. The controversy in the identification of these medicinal plants is seen directly affecting the pharmacological action and clinical efficacy. Those 8 plants' controversial identity is cleared with the establishment of a genuine plant for each of the plants through scientific and classical justification.</p> |
|---|--|

INTRODUCTION

*Ayurveda* is the ancient system of medicine that contains many *Samhitas* and *Nighantus* such as *Charak Samhita*, *Sushruta Samhita*, *Astanghridaya*, *Kaideva nighantu*, *Priya nighantu*, etc. *Salsaradi Gana* of *Sushruta* is described in *Sushruta Samhita Sutra sthan*, *Dravyasangrahaniya Adhyay*, where 37 *Ganas* have been included in which *Salsaradi gana* is ranked in 5<sup>th</sup> place. Classically *Salsaradi-gana* is clinically indicated for *Kushta* (skin diseases), *Prameha* (diabetes mellitus), *Pandu* (anemia), and *Kapha-medo-vishoshana* (anti-hyperlipidaemic) disease.

During *Samhita-Kaal* identification of the plants in *Salsaradi-gana* was not an issue anymore. Geographical variations, lack of transportation facilities, expansion of citizenship, trade of medicinal plants, and ignorance of plant taxonomy are the main

reasons for controversy in the identification of classical medicinal plants in Ayurveda. In the due course of the commentator's period, the controversy in the identification of medicinal plants became apparent.

The commentaries have rendered plants differently than whatever it is originally depicted in *Samhita*. Diverse scholarly comments on the *Sushruta Samhita* or *Salsaradi-gana* initiated the controversy in the identification of medicinal plants of *Salsaradi-gana*. Due to controversy or lack of genuine identification of particular plants in the *Gana*, their individual, as well as collective pharmacological action and clinical efficacy, is in jeopardy. To address this existing gap by clearing the controversy in the identification of medicinal plants this study is made.

MATERIAL AND METHOD

Systematically reviewed the original commentary of *Acharya Dalhana* and *Acharya Haranchandra* on *Sushruta Samhita* and the scientific research papers published on the medicinal plants listed in the *Salsaradi-gana* of *Sushruta Samhita* in indexed journals.

| Access this article online   |   |
|--|---|
| Quick Response Code  |   |
|    | <a href="https://doi.org/10.47070/ijapr.v10i12.2629">https://doi.org/10.47070/ijapr.v10i12.2629</a> |
| Published by Mahadev Publications (Regd.)<br>publication licensed under a Creative<br>Commons Attribution-NonCommercial-<br>ShareAlike 4.0 International (CC BY-NC-SA 4.0) |   |

**RESULTS**

Following are the *Salsaradi-gana* medicinal plants: [1]

1. *Salsara* 2. *Ajakarna* 3. *Khadira* 4. *Kadara* 5. *Kalskandha* 6. *Kramuka* 7. *Bhurja* 8. *Meshshringa* 9. *Tinisha* 10. *Chandana* 11. *Kuchandana* 12. *Shimshapa*

**Table.1**

13. *Shirisha* 14. *Asana* 15. *Dhava* 16. *Arjuna* 17. *Tala* 18. *Shaka* 19. *Naktamala* 20. *Pootika* 21. *Ashwakarna* 22. *Aguru* 23. *Kaleeyaka*

Different opinions on medicinal plants of *Salsaradi-gana* according to different commentators:

| S. No. | Medicinal plant    | Commentary (Acharya Dalhana) <sup>[2]</sup>  | Commentary (Acharya Haranchandra) <sup>[3]</sup>  |
|--------|--------------------|--|---|
| 1      | <i>Salsara</i>     | <i>Salah shankuh, Tasyasarahsalsarah Shanku</i> , a variety of <i>Sarja</i> and its resinous exudation is <i>Salasar</i>   | <i>Salasyasarahsalsarah Sar</i> of <i>Sala</i> is known as <i>Salsara</i>   |
| 2      | <i>Ajakarna</i>    | <i>Ajakarna</i> is <i>Sarja</i> , which is <i>Salbheda</i>   | <i>Ajakarna</i> is <i>Salbheda</i>  |
| 3      | <i>Khadira</i>     | <i>Khadirogayatreeswanamkhyatah</i> Syn. <i>Gayatri</i> and well known   | No commentary   |
| 4      | <i>Kadara</i>      | <i>Kadarakhadirakarshwetrasah</i> A type of <i>Khadira</i> having yellowish-white heartwood  | <i>Kadarakhadira</i> "Vavala" <i>Etiprasiddhah</i> It is known by <i>Vavala</i>   |
| 5      | <i>Kalskandha</i>  | No commentary  | <i>Kalskandhastamalah</i> It is <i>Stamala</i>  |
| 6      | <i>Kramuka</i>     | <i>Kramukahpoogah, Kechitkamugaitipathanti, Atrapisaevarthah, Vriksharodhraitianyesaradhikarat</i> It is <i>Pooga</i> , others take it as ' <i>Rubuka</i> ' or ' <i>Vrikharodhra</i> ' (Because of the context of heartwood) | <i>Kramukah Poogah</i> <i>Kramuka</i> is <i>Pooga</i>   |
| 7      | <i>Bhurja</i>      | <i>Bhurjomriditwakswanamkhyatah</i> It is common having soft bark.   | No Commentary   |
| 8      | <i>Meshshringa</i> | <i>Meshshringahkarkatshringah, Sa cha putrajivaksadrishastaruviseshah</i> <i>Meshshringa</i> and <i>Karkatshringa</i> both trees similar to <i>Putrajivaka</i>   | No Commentary   |
| 9      | <i>Tinisha</i>     | <i>Tinishahsyandanah, 'Sadana' Itilokeprasiddhdah</i> <i>Syandan</i> , locally as ' <i>Sadana</i> '  | <i>Tinishonamaushadhimarthurapradeshe "Tinasha" Itikhyate</i> In <i>Marthura</i> it is well known as <i>Tinisha</i> .                             |
| 10     | <i>Chandana</i>    | <i>Chandanamshreechandanam 'Shreekhanda' Itiprasiddhdham</i> It is <i>Shreechandana</i> which is popularly known as <i>Shreekhanda</i>   | <i>Chandansabdanehaswetachandana mevagrihyatenaturaktamkuchanda netiprithagunadanat</i> It is <i>Swetachandan</i> , it is not <i>Raktachandan</i> |
| 11     | <i>Kuchandan</i>   | <i>Kuchandanamraktachandanam</i> It is <i>Raktachandan</i>   | No Commentary   |
| 12     | <i>Shimshapa</i>   | <i>Shimshapakrishnasara 'seesae' itiloke</i> A common tree having black heartwood  | <i>Shimshapa "shishu" Etilaukikah</i> Well known by <i>Shishu</i>   |
| 13     | <i>Shirisha</i>    | <i>Shirishovishghatee, 'Shirasa' Itiloke</i> Syn. <i>Vishghatee</i> , which is a common tree   | No commentary   |
| 14     | <i>Asana</i>       | <i>Asano Beejakahpurvadesheprasiddhdah</i> It is <i>Bijaka</i> , common in the eastern region  | <i>Asanahpeetasalah</i> It is <i>Peetasal</i>   |

|    |                   |   |  |
|----|-------------------|---|--|
| 15 | <i>Dhava</i>      | <i>Dhavahshakatakhyahswanamprasiddhah</i><br>Known by this name itself, synonym ' <i>Shakata</i> '  | No Commentary  |
| 16 | <i>Arjuna</i>     | <i>Arjunahkakubhah</i><br>A common tree, having ' <i>Kakubha</i> ' as synonym   | No Commentary  |
| 17 | <i>Tala</i>       | <i>Talahswanamkhyatah</i><br>Well known by this name itself   | No Commentary  |
| 18 | <i>Shaka</i>      | <i>Shakahpoorvadesheprasiddhomahakharpatrah</i><br>Famous in the eastern area, having big leaves smooth on one surface and rough on the other surface           | <i>Shakah "shegun" etiprasiddhah</i><br>It is well-known by shegun   |
| 19 | <i>Naktamala</i>  | <i>Naktamalobrihatkaranjah</i><br><i>Naktamal</i> is <i>Brihatkaranj</i> .  | No Commentary  |
| 20 | <i>Pootika</i>    | <i>Pootikahchirbilvah</i><br><i>Pootika</i> is <i>chirbilva</i>   | <i>Pooteekanaktamalokaranjbedha</i><br>It is <i>Karanjbedha</i>  |
| 21 | <i>Ashwakarna</i> | <i>Ashwakarnogandhamundoashwatthasadrishahpoorvadesheprasiddhah</i><br>A common tree in the eastern region like <i>Aswattha</i> and known as <i>Gandhamunda</i> | <i>Ashwakarna</i> is <i>salbedha</i><br>It is <i>Salbedha</i>  |
| 22 | <i>Aguru</i>      | <i>Aguruswanamkhyatah</i><br>Well-known by this name itself   | No Commentary  |
| 23 | <i>Kaleeyaka</i>  | <i>Kaleeyakam 'Malendichandanam' Etiprasiddham</i><br>It is known as <i>Malendrichandan</i>   | <i>Kaleeyakam "kaleeya" etiprasiddhamkrishnachandanam</i><br>It is known as <i>Kaleeya</i> which is <i>Krishnachandana</i> |

Table.2

| No | Drug               | Botanical source<br>(Sushruta Saptadhyayi) <sup>[4]</sup> | Botanical Source<br>(Acharya Priyavrat Sharma)   |
|----|--------------------|---|--|
| 1  | <i>Salsara</i>     | <i>Shorea robusta</i> Gaertn.                             | <i>Shorea robusta</i> Gaertn. <sup>[5]</sup>   |
| 2  | <i>Ajakarna</i>    | <i>Vateria indica</i> Linn.                               | <i>Vateria indica</i> Linn. <sup>[6]</sup>   |
| 3  | <i>Khadira</i>     | <i>Acacia catechu</i> Willd. <sup>3</sup>                 | <i>Acacia catechu</i> Willd. <sup>[7]</sup><br><b>New:</b> <i>Senegalia catechu</i> (L.f.) P.J.H. Hurter & Mabb*     |
| 4  | <i>Kadara</i>      | <i>Acacia suma</i> Buch.-Ham.                             | <i>Acacia suma</i> Buch.-Ham. <sup>[8]</sup><br><b>New:</b> <i>Senegalia polyacantha</i> (Willd.) Seigler & Ebinger* |
| 5  | <i>Kalskandha</i>  | <i>Diospyro smelanoxylon</i> Roxb.                        | <i>Diospyro speregrina</i> (Gaertn.) Gurke <sup>[9]</sup><br><b>New:</b> <i>Diospyros malabarica</i> (Desr.) Kostel* |
| 6  | <i>Kramuka</i>     | <i>Areca catechu</i> Linn.                                | <i>Lagerstroemia speciosa</i> (L.) Pers. <sup>[10]</sup>   |
| 7  | <i>Bhurja</i>      | <i>Betulautilis</i> D.Don.                                | <i>Betula utilis</i> D.Don. <sup>[11]</sup>  |
| 8  | <i>Meshshringa</i> | <i>Dolichandrone falcate</i> Seem                         | <i>Dolichandrone falcata</i> Seem. <sup>[12]</sup>   |
| 9  | <i>Tinisha</i>     | <i>Ougenia dalbergioides</i> Benth.                       | <i>Ougeinia oojeinensis</i> (Roxb.) Hochr. <sup>[13]</sup>   |
| 10 | <i>Chandana</i>    | <i>Santalum album</i> Linn.                               | <i>Santalum album</i> Linn. <sup>[14]</sup>  |
| 11 | <i>Kuchandana</i>  | <i>Caesalpinia sappan</i> Linn.                           | <i>Caesalpinia sappan</i> Linn. <sup>[15]</sup><br><b>New:</b> <i>Biancaea sappan</i> L.*                            |
| 12 | <i>Shimsapaa</i>   | <i>Dalbergia sissoo</i> Roxb.                             | <i>Dalbergia sissoo</i> Roxb. <sup>[16]</sup>  |
| 13 | <i>Shirisha</i>    | <i>Albizia lebbek</i> Benth.                              | <i>Albizia lebbek</i> Benth. <sup>[17]</sup>   |
| 14 | <i>Asana</i>       | <i>Pterocarpus marsupium</i> Roxb.                        | <i>Pterocarpus marsupium</i> Roxb. <sup>[18]</sup>   |

|    |                   |  |  |
|----|-------------------|--|--|
| 15 | <i>Dhava</i>      | <i>Anogeissus latifolia</i> Wall.              | <i>Anogeissus latifolia</i> (Roxb.ex Dc.) Wall. Ex Guill.& Perr. <sup>[19]</sup> |
| 16 | <i>Arjuna</i>     | <i>Terminalia arjuna</i> W. and A.             | <i>Terminalia arjuna</i> W. and A. <sup>[20]</sup>                               |
| 17 | <i>Tala</i>       | <i>Borassus flabellifer</i> Linn.              | <i>Borassus flabellifer</i> Linn <sup>[21]</sup>                                 |
| 18 | <i>Shaka</i>      | <i>Tectona grandis</i> Linn.                   | <i>Tectona grandis</i> Linn. <sup>[22]</sup>                                     |
| 19 | <i>Naktamala</i>  | <i>Pongamia pinnata</i> (Linn,) Merr.          | <i>Pongamia pinnata</i> (Linn,) Merr. <sup>[23]</sup>                            |
| 20 | <i>Pootika</i>    | <i>Holoptelia integrifolia</i> Planch.         | <i>Holoptelia integrifolia</i> Planch. <sup>[24]</sup>                           |
| 21 | <i>Ashwakarna</i> | <i>Diptero carpusalatus</i> Roxb.              | <i>Dipterocarpus turbunatus</i> Roxb. <sup>[25]</sup>                            |
| 22 | <i>Aguru</i>      | <i>Aquilaria agallocha</i> Roxb.               | <i>Aquilaria agallocha</i> Roxb. <sup>[26]</sup>                                 |
| 23 | <i>Kaleeyaka</i>  | <i>Coscinium fenestratum</i> (Gaertn.) Colebr. | <i>Pita chandana</i> <sup>[27]</sup> , Botanical source is not available.        |

\*Plants of world online

## DISCUSSION

*Salsaradi-gana* is one of the very important groups of medicinal plants that have been ascribed by *Sushruta Acharya* in *Sushruta Samhita*. *Salsaradi-gana* contains a total of 23 medicinal plants. In this study, the controversy on those 23 plants is indicated on the ground of commentaries on *Sushruta Samhita* by *Acharya Dalhana* and *Acharya Haranchandra*.

The pharmacological and clinical action of this particular *Gana* on *Kustha*, *Prameha*, *Pandu*, and *Kapha-medo-vishoshana karma* <sup>[28]</sup> is due to their inherent *Rasa*, *Guna*, *Virya*, *Vipaka*, and *Prabhava*. Parallely and equally the indications are validated scientifically on the basis of the chemical constituents present in them.

Controversy about medicinal plants started due to various reasons like the unspecific botanical source, geographical distribution, trade cum business, transport affairs, and unavailability of specific medicinal plants.

The controversial identity of medicinal plants fosters adulteration and substitution of raw drugs used in medicines which ultimately affects the efficacy.

Especially on the basis of the commentator's views and the scientific evidence available, here an approach has been made to establish a genuine identity for each controversial plant. This would check adulteration and substitution of drugs.

Controversial medicinal plants found in *Salsaradi-gana* are 8 which are *Kramuka*, *Meshshringa*, *Chandana*, *Kuchandana*, *Naktamala*, *Pootika*, *Aguru*, and *Kaleeyaka*. *Kaleeyaka* should be taken as *Pita Chandana* and further evolution for its botanical source should be done.

Further experimental and clinical studies on plants of *Salsaradi-gana* should be done for their evidence-based genuine identity and their detailed mode of pharmacological and clinical action on diseases like *Kustha*, *Prameha*, *Pandu*, and *Kapha-medo-vishoshan*.

## CONCLUSION

Only genuine drugs can impart expected and indicated clinical effectiveness. The controversial identity of medicinal plants fosters adulteration and substitution of raw drugs in the drug manufacturing process which ultimately affects the drug's overall clinical efficacy. Clinically important groups of medicinal plants *Salsaradi-gana* contain 8 plants with controversial identities. Their controversial identity is unloaded on the basis of available classical and scientific evidence.

## REFERENCES

1. Kaviraj Ambikadutta Shastri; "SushrutaSamhita edited with Ayurveda-Tattva-Sandipika" Part 1; Varanasi Chaukhambha Sanskrit Sansthan; Edition 2016 p.183
2. Vaidya Jadavji Trikamji Acharya and Narayana Ram Acharya (Editor); "Sushruta Samhita with the Nibandhasangraha Commentary of Shree Dalhanacharya"; Varanasi Chaukhambha Orientalia; Reprinted Fourth Edition 1980 p.164
3. Shree Chandrakanta Bhattacharya (Editor); "Sushruta Samhita with the commentary Sushrutartha Sandipana Bhasya by Kaviraj Haranachandra Chakravarti"; Varanasi Chaukhamba Surbharati Prakashan; Revised Edition 2000 p.374-375
4. Acharya P.V.Sharma and Vaidya S.R.Talmale; "Plants and other drugs of Sushruta Samhita Saptadhyayi"; New Delhi R.A.V. Publication 2002 p.19-22
5. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.671
6. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.674
7. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.159



8. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.160
9. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.190
10. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.128
11. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.88
12. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.17
13. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.676
14. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.142
15. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.142
16. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.806
17. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.773
18. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.682
19. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.675
20. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.195
21. 21.K.V.Billore, M.B.Yelne, T.J.Dennis, B.G.Chaudhari; "Database on medicinal plants used in Ayurveda" Vol 7; New Delhi Central Council for Research in Ayurveda and Siddha 2005 p.476
22. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.791
23. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.100
24. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.100
25. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 2; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.732
26. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.06
27. Prof. P. V. Sharma; "Dravyaguna vigyana" Vol 5; Varanasi Chaukhambha bharti Academy; Revised edition 2020 p.117
28. Kaviraj Ambika Dutta Shastri; " Sushruta Samhita edited with Ayurveda-Tattva-Sandipika" Part 1; Varanasi Chaukhambha Sanskrit Sansthan; Edition 2016 p.184

**Cite this article as:**

Patel Priyalkumari Pravinbhai, Srivastava Rashmi, Upadhyaya Ashwani, Pandit Ram De. Commentators View on Medicinal Plants of Sushrutokta Salsaradi Gana Regarding their Controversial Botanical Identity: A Review. International Journal of Ayurveda and Pharma Research. 2022;10(12):52-56.

<https://doi.org/10.47070/ijapr.v10i12.2629>

**Source of support: Nil, Conflict of interest: None Declared**

**\*Address for correspondence**

**Dr. Patel Priyalkumari Pravinbhai**

PG Scholar,  
Post Graduate Department of  
Dravyaguna,  
Rajiv Gandhi Government  
Postgraduate Ayurvedic College  
and Hospital, Paprola, Himachal  
Pradesh.

Ph: 9904750972

Email: [priyal3614@gmail.com](mailto:priyal3614@gmail.com)

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.