



A CRITICAL REVIEW OF AHARIYA DRAVYA (DIETARY SUBSTANCES) AS VARNYA IN NIGHANTU

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ABSTRACT Ayurveda is Holistic science and it has well known traditional sacred values. The Nighantus- Dhanvantari, Madanpala, Kaiyadeva, Raj and Bhavprakash are like Kosa (compendium), containing the synonyms, properties, actions and their uses of Dravya (Drugs).²⁷ Dravya related to improve varna (complexion) of skin is known as Varnya. Varna means colour, "Ya" suffix indicates "wholesomeness".¹ This study concludes Ahariya dravya as varnya among various Nighantus which may help in internal and external use.

KEYWORDS : Varnya, Complexion, Ahariya Dravya

INTRODUCTION

Ayurveda as holistic system of medicine, considers Ahar (diet) not only as a means of survival but as a foundation for health, disease prevention, and aesthetics. Among the three upastambhas (Ahar, Nidra, Brahmacharyas), Ahar holds special importance because of its direct influence on Dosha, Dhatu, Mala and ultimately on Varna (complexion) and prabha (radiance). Healthy skin and natural glow are reflections of balanced nutrition and proper metabolism (Ahar parinama).²

While the Brihatrayi and Laghutrayi Samhitas establish the principles of varnya dravyas and diet, the Nighantus represent the evolutionary phase of Ayurvedic pharmacology, where systematic classification and elaboration of dravyas- both Aushadhi and Ahar are given.²

Varnya is Sanskrit word with- varna means colour "Ya" means health associated with the concept of the body. Varnya is overall presentation of health according to Ayurveda. A drug that improves the appearance of the skin is known as Varnya. People all around the world is getting more curious about skin and its health. In Nighantus like Dhanvantari, Kaiyadeva, Bhavprakash etc. various ahariya dravya which have Varnya karma have describe. They can be used externally as well as internally in different ways.²

OBJECTIVE

Table 1 Ras, Vipak, Veerya of Ahariya Dravyas which have Varnya Karma.

S.N	Dravya name	Rasa	Veerya	Vipak	Guna	Doshakarma
1	Raktashali ^{16,33,55,62}	Madhura, Kashaya ⁵⁵	Shita ⁵⁵	Madhura ⁵⁵	Laghu, Snigdha ⁵⁵	Pittahara ⁵⁵
2	Kukutand	-	-	-	-	-
3	Yava ^{7,35,63}	Kashaya, Madhura ³⁵	Shita ³⁵	Madhura ³⁵	Ruksha, Laghu ³⁵	Kaphapittahara ³⁵
4	Godhum ^{8,34,64}	Madhura ³⁴	Shita ³⁴	Madhura ³⁴	Snigdha, Guru ³⁴	Vatapittahara, Kaphavardhaka ³⁴
5	Mudga ^{9,36}	Kashaya, Madhura ³⁶	Shita ³⁶	Madhura ³⁶	Laghu, Ruksha ³⁶	Pitta-kaphanashana ³⁶
6	Masoor ¹⁰	Madhura, Kashaya ¹⁰	Shita ¹⁰	Madhura ¹⁰	Laghu, Ruksha ¹⁰	Kaphapittanashaka, Vatala ¹⁰
7	Tuvari (Adhaki) ^{11,65}	Kashaya, Madhura ⁶⁵	Shita ⁶⁵	Madhura ⁶⁵	Ruksha, Laghu, Shita ⁶⁵	Pitta-kaphahara, Vatakara ⁶⁵
8	Tila ^{12,41,53,66,37}	Madhura, Kashaya, Tikta ⁵³	Ushna ⁵³	Madhura ⁵³	Guru, Snigdha ⁵³	Tridoshashamaka ⁵³
9	Dugdha ⁵¹	Madhura ⁵¹	Shita ⁵¹	Madhura ⁵¹	Guru, Snigdha, Mrudu, Picchila, Shlakshna ⁵¹	Vata-Pittaghna, Kaphakara ⁵¹
10	Sadya skanavnita (Navanit) ¹³	Madhura, Kashaya ¹³	Shita ¹³	Madhura ¹³	Snigdha, Laghu, sukumar ¹³	Vata- Pittaghna ¹³
11	Ghruta ^{13,42,52,67}	Madhura ⁵²	Shita ⁵²	Madhura ⁵²	Snigdha, Mrudu, Guru, Sukshma ⁵²	Vatapittaghna ⁵²
12	Puran ghruta ¹⁴	Tikta, Katu ¹⁴	Ushna ¹⁴	Katu ¹⁴	Laghu, Tikshna, Sara, Chedan, Lekhan ¹⁴	Tridoshaghna ¹⁴
13	Ghruta manda ¹⁵	Madhura ¹⁵	Shita ¹⁵	Madhura ¹⁵	Laghu, Snigdha, Mrudu ¹⁵	Vata pitta shamak ¹⁵
14	Mahisha ghruta ⁵²	Madhura ⁵²	Shita ⁵²	Madhura ⁵²	Guru, Snigdha ⁵²	Vatapittashamak, Kaphakar ⁵²
15	Eranda taila ¹⁶	Madhura, Katu, Kashaya ¹⁶	Ushna ¹⁶	Madhura ¹⁶	Guru, Snigdha, Tikshna, Sukshma ¹⁶	Pittashamaka (tail) ¹⁶
16	Tila tail ^{53,17,31}	Madhura, Kashaya, Tikta ⁵³	Ushna ⁵³	Madhura ⁵³	Guru, Snigdha ⁵³	Tridoshashamaka ⁵³
17	Madhu ^{18,32}	Madhura, Kashaya ³²	Shita ³²	Katu ³²	Laghu, Ruksha, shita ³²	Kaphapittaghna ³²
18	Haridra ^{19,23,38,44,58}	Tikta, Katu ⁴⁴	Ushna ⁴⁴	Katu ⁴⁴	Ruksha, Laghu ⁴⁴	Kaphavataashamaka, Pittarechaka-shamaka ⁴⁴

To critically evaluate the ahariya dravya (dietary substances) which have varnya karma (complexion enhancement).

MATERIALS AND METHODS

As this study is critical review the material used in this study are as follows;

1. Dhanvantari Nighantu
2. Bhavprakash Nighantu
3. Kaiyadeva Nighantu
4. Raj Nighantu
5. Madanpal Nighantu
6. Nighantu Adarsh
7. Dravyaguna Vijnana- Ayurvedic Materia Medica
8. Research articles and databases of different health sciences.

METHODOLOGY

Critical literary study of all the possible literature for varnya and complexion promoting herbs.

Review And Observation From Different Nighantus

A thorough review of different Nighantus was done.

^{3,4,5} All the Ahariya dravya which have varnya karma was studied for their rasa, veerya, vipak, guna and doshaghna from different Nighantus are mentioned in the following table.

19	Rasona ^{20,39,45,59}	Katu, Madhura, lavana, tikta, Kashaya ⁴⁵	Ushna ⁴⁵	Katu ⁴⁵	Snigdha, Tikshna, Picchil, Guru, Sara ⁴⁵	Vatakaphashamaka ⁴⁵
20	Kumkuma (Kesar) ^{21,24,28,50,60}	Katu, Tikta ⁴⁰	Ushna ⁵⁰	Katu ⁵⁰	Snigdha ⁵⁰	Tridosahara ⁵⁰
21	Jatipatra ²²	Tikta, Kashaya ²²	Ushna ²²	Katu ²²	Laghu, Snigdha ²²	Tridosahara ²²
22	Trijat ²²	Katu, Madhura ²²	Ushna ²²	Katu ²²	Laghu, Ruksha, Tikshna ²²	Tidoshaghna ²²
23	Chaturjat ²²	Katu, Madhura ²²	Ushna ²²	Katu ²²	Tikshna, Snigdha ²²	Vatakaphaghna ²²
24	Kadali ^{1,25,47}	Madhura, Kashaya ⁴⁷	Shita ⁴⁷	Madhura ⁴⁷	Guru, Snigdha, Shita ⁴⁷	Pittahara, Kaphakara ⁴⁷
25	Aamra ^{29,46,61}	Madhura ⁴⁶	Shita ⁴⁶	Madhura ⁴⁶	Guru, Snigdha ⁴⁶	Vata-pittashamaka ⁴⁶
26	Chanaka ^{40,56}	Kashaya, Madhura ⁵⁶	Shita ⁵⁶	Madhura ⁵⁶	Riksha, Laghu ⁵⁶	Pitta-kaphahara, Vatajanan ⁵⁶
27	Krushna shali ⁵⁵	Madhura ⁵⁵	-	Madhura ⁵⁵	Picchilah ⁵⁵	Tridoshaghna, Pittaghna ⁵⁵
28	Madhura Narikel ⁴⁸	Madhura ⁴⁸	Shita ⁴⁸	Madhura ⁴⁸	Guru, Snigdha ⁴⁸	Vatapittashamaka ⁴⁸
29	Jambir nimbu ⁴⁹	Amla ⁴⁹	Ushna ⁴⁹	Amla ⁴⁹	Guru, Tikshna ⁴⁹	Kapha-vatashamaka ⁴⁹

- Out of total 29 varnya dravyas, 16 possess predominantly madhura rasa, while 4 have Kashaya rasa and 3 have tikta rasa.
- Regarding veerya, 11 dravyas show ushna veerya and 16 show shita veerya.
- Regarding vipaka, 19 dravyas have madhura vipaka while 8

- dravyas have katu vipaka.
- Regarding guna, 17 dravyas are snigdha (unctuous), 13 are laghu and 12 are guru.
- Doshaghna karma analysis shows that 6 dravyas are tridosahara, 8 are vata-pittashamaka while 6 are pitta-kaphahara and 4 are vata-kaphashamaka.

Table 2 Latin name, Family & Chemical composition of Dravyas.

S. N.	Dravya name	Latin name	Family	Chemical composition
1	Raktashali	Oryza sativa Linn.	Poaceae (Gramineae)	Anthocyanins, flavonoids, Proanthocyanidins, Catechins, Tocopherols & Tocotrienols
2	Kukkutand	Gallus gallus domesticus	Phasianidae	Vitamin A,D,E, iron, zinc, albumin
3	Yava ³	Hordeum vulgare	Poaceae (Graminae)	Starch, protein, sugar, fibres,
4	Godhuma ³	Triticum aestivum Linn	Gramineae	Mg, Min, Zn, Fe, Ca, oxalic acid
5	Mudga ⁴	Vigna radiata (Linn.) wilezek	Fabaceae (Papilionaceae)	Protein, fibre, carbohydrates, Ca, P, Fe and K
6	Masoor ⁴	Lens culinaris Medic.	Fabaceae (Papilionaceae)	Amylase, proteolytic enzymes, phosphate and phytase
7	Tuvari (Adhaki) ³	Cajanus cajan (Linn.)Mills	Fabaceae (Papilionaceae)	Flavonoids, Stilbenes, Saponins
8	Tila ⁵	Sesamum indicum Linn.	Pedaliaceae	Vitamin A, B and C, Sesamin and sesaminin, sesamol, phenol, oleic and linoleic acid
9	Erand tail ³	Ricinus communis Linn.	Euphorbiaceae	Ricin, oleate, Palmitine
10	Haridra	Curcuma longa Linn.	Scitamineae	Curcumin, alkaloid, lactone, alcohol, zingiberene
11	Rasona ⁵	Allium sativum Linn.	Liliaceae	Albumin, Calcium, iron, Vitamin C
12	Kumkuma ⁴	Crocus sativus Linn.	Iridaceae	Glycoside crocin, picrocrocin
13	Kadali ⁴	Musa paradisiaca Linn. Syn. Musa sapientum Linn.	Musaceae	Vitamin B, carbohydrates, minerals
14	Aamra ³	Mangifera indica Linn.	Anacardiaceae	Vitamin A,B,C & D, Galic acid, citric acid, Resin, chlorophyll, carbon disulphide, benzol.
15	Chanak ³	Cicer arietinum Linn.	Fabaceae (Leguminosae-Papilionaceae)	Arginine, tyrosine, cystine, tryptophone, carotenoids, lecithin, phytin, and saponin, Vit A,D,E.
16	Narikel ⁴	Cocos nucifera Linn.	Palmae	Lauric acid, myristic acid, caprylic acid, palmitic acid, stearic acid, glycerides, vit A, B, sucrose, chlorides, protein
17	Jambir Nimbu ³	Citrus limon (L) Burm	Rutaceae	Citric acid

Out of 17 dravyas listed, 4 dravyas like mudga, masoor, tuvari, chanak are of Fabaceae (Papilionaceae) family and 3 dravyas like raktashali, yava, godhuma are of Poaceae (Gramineae) family.

Regarding chemical composition

1. Dravyas rich in Vitamines (A,B,C,D,E): 7 dravyas- Kukkutand, Tila, Rasona, Kadali, Aamra, Chanak, Narikel.
2. Dravyas containing Minerals (Ca, Fe, Zn, Mg, etc): 6 dravyas- Raktashali, Tila, Haridra, Tuvari, Aamra, Kumkuma.
3. Dravyas with Proteins, amino acids, or Enzymes: 5 dravyas- Kukkutand, Mudga, Masoor, Chanak, Rasona.
4. Dravyas containing Essential fatty acids or oils (oleic, linoleic, palmitic, etc): 3 dravyas- Tila, Erand tail, Narikel.
5. Dravyas containing sugars or Carbohydrates: 4 dravyas- Yava, Mudga, Kadali, Narikel.
6. Dravyas with specific Phytochemicals (Curcumin, Crocin, Citric acid, etc): 5 dravyas- Haridra (Curcumin), Kumkuma (Crocin), Aamra (Gallic & Citric acid), Jambir nimbu (Citric acid), Erand tail (Ricin).

DISCUSSION

Mode of action according to Ayurveda²⁶

- Varnya dravya when used externally or internally acts on Bhrajaka pitta which is an important factor related with Varna (complexion).
- Ushna veerya stimulates Bhrajaka pitta and does varna prasadena. And so helps to absorb the medicines applied externally and

improves Varna (complexion).

- Madhura rasatmaka dravyas increase the production or Rasa, Rakta, Majja, Shukra, Oja which in turn acts on Varna.
- Madhura rasa, Tikta rasa and Sheeta veerya pacifies pitta dosha.
- Madhura rasa, Sheeta veerya increases oja and thus helps enhancing skin complexion.
- Excessive Vata dosha causes hyperpigmentation in skin and blood. Madhura rasa, Madhura vipaka, Ushna veerya pacifies vata and hence removes hyperpigmentation.
- Kashaya and Tikta Rasatmaka dravyas absorb Kleda and pacifies pitta. And this way enhances complexion.

Mode Of Action According To Modern

- According to modern review- Varnya dravyas disrupts the melanin formation pathway through tyrosinase inhibition.²⁶
- So, its potentially excellent whitening agent that improves skin colour.²⁶
- The analysis of these varnya dravya shows that significant number of them possess essential nutrients and bioactive compounds responsible for maintaining skin health and complexion.
- Among them dravyas rich in vitamins A,B,C,D and E which are well known for their antioxidant, collagen-boosting and regenerative roles in skin physiology.^{68,71}
- Dravyas contain vital minerals like calcium, iron, zinc and magnesium, which help in cellular repair and pigmentation

- balance.⁶⁹
- Dravyas contain flavonoids and phenolic compounds that exhibit strong free-radical scavenging and anti-inflammatory activities, thus protecting the skin from oxidative stress and aging.⁷⁰
 - Dravyas are rich in fatty acid and natural oils, contributes to skin softness and hydration.⁷³
 - While dravyas show the presence of sugars and carbohydrates, offering nutritional energy to skin cells.
 - Dravyas such as Haridra, Kumkuma, Aamra, Jumbir nimbu and Erand tail contain unique phytoconstituents like curcumin, crocin, gallic acid, citric acid and ricin. Which possess antimicrobial, depigmenting, and rejuvenative properties.⁷²

CONCLUSION

As per the review of above all mentioned factors-Majority of Ahariya dravyas are Madhura, Kashaya, Tikta rasatmaka, Madhura vipaka and Shita veeryatmaka which not only balances vitiated pitta. Varnya dravya enhance skin complexion by acting on Bhrajaka pitta, improving Rasa, Rakta and Oja, and balancing Vata and Pitta doshas. Modern study support their role through tyrosinase inhibition, antioxidant, and nutritive actions. Rich in vitamins, minerals, and bioactive compounds, these dravyas promote healthy, radiant skin by preventing hyperpigmentation and supporting natural regeneration. This way these dravyas enhances complexion of skin.

REFERENCES

- Manisha, M., Sharma, O., & Garg, N. K. (2021). Varnya dravya in Bhavprakash Nighantu: A review article. *World Journal of Pharmaceutical and Medical Research*, 7(9), 22-24.
- Shaikh, S., & Surve, P. (2025). Review on varnya mahakashaya. *Journal of Emerging Technologies and Innovative Research*, 12(5), 1501-1505
- Pandey, G. (2005). Dravyaguna Vijnana (Materia Medica- Vegetable Drugs), Part 1 (A-J)(3rd ed.). Varanasi: Chowkhamba Krishnadas Academy, 1-943
- Pandey, G. (2004). Dravyaguna Vijnana (Materia Medica- Vegetable Drugs), Part 2 (K-N)(3rd ed.). Varanasi: Chowkhamba Krishnadas Academy, 3-824
- Pandey, G. (2004). Dravyaguna Vijnana (Materia Medica- Vegetable Drugs), Part 3 (P-Y)(3rd ed.). Varanasi: Chowkhamba Krishnadas Academy, 1-1087
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 302.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 307.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 308.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 309.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 314.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 315.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Dhanya varga. (second edition). Varanasi: Choukhambha Orientalia, 316.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Ghruta varga. (second edition). Varanasi: Choukhambha Orientalia, 367.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Ghruta varga. (second edition). Varanasi: Choukhambha Orientalia, 371.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Ghruta varga. (second edition). Varanasi: Choukhambha Orientalia, 372.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Taila varga. (second edition). Varanasi: Choukhambha Orientalia, 375.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Taila varga. (second edition). Varanasi: Choukhambha Orientalia, 374.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Aushadhi varga. (second edition). Varanasi: Choukhambha Orientalia, 36.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Aushadhi varga. (second edition). Varanasi: Choukhambha Orientalia, 205.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Aushadhi varga. (second edition). Varanasi: Choukhambha Orientalia, 225.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Aushadhi varga. (second edition). Varanasi: Choukhambha Orientalia, 241.
- Sharma P. & Sharma G.(2006). Kaiyadeva Nighantu (Pathyapathyavibodhaka): Aushadhi varga. (second edition). Varanasi: Choukhambha Orientalia, 246.
- Vaidya B. (2005). Nighantu Adarsha: Ardrakadi varga. Vol 2. Varanasi: Choukhambha Bharati Academy, 556
- Vaidya B. (2005). Nighantu Adarsha: Kesaradi varga. Vol 2. Varanasi: Choukhambha Bharati Academy, 596.
- Vaidya B. (2005). Nighantu Adarsha: Kadalyadi varga. Vol 2. Varanasi: Choukhambha Bharati Academy, 588
- Shelar, R., & Yadav, V. (2022). A review on Charakokta Varnya Mahakashaya. *World Journal of Pharmaceutical and Medical Research*, 8(8), 206-209.
- Rabb, U. N. (2022). Review on Dhanvantari Nighantu, Bhavprakash Nighantu and Raja Nighantu. *Journal of Medicinal plants studies*, 10(1), 8-11.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu: Karpuradi varga, Mumbai: Khemraj Shrikrushnadas Publication, 79.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu: Phaladi varga, Mumbai: Khemraj Shrikrushnadas Publication, 122.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu: Paniyadi varga, Mumbai: Khemraj Shrikrushnadas Publication, 168.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu: Paniyadi varga, Mumbai: Khemraj Shrikrushnadas Publication, 179.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu: Ikshu varga, Mumbai: Khemraj Shrikrushnadas Publication, 197.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu, Mumbai: Khemraj Shrikrushnadas Publication, 200.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu, Mumbai: Khemraj Shrikrushnadas Publication, 201.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu, Mumbai: Khemraj Shrikrushnadas Publication, 202.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu, Mumbai: Khemraj Shrikrushnadas Publication, 203.
- Pandit R. & Rajvaidya P. (2008). Madanpal Nighantu, Mumbai: Khemraj Shrikrushnadas Publication, 206.
- Sharma p. & Sharama G. (2008). Dhanvantari Nighantu: Guduchyadi varga, Varanasi: Choukhambha Orientalia, 25.
- Sharma p. & Sharama G. (2008). Dhanvantari Nighantu: Karviradi varga, Varanasi: Choukhambha Orientalia, 132.
- Sharma p. & Sharama G. (2008). Dhanvantari Nighantu: Suvarnadi varga, Varanasi: Choukhambha Orientalia, 195.
- Sharma p. & Sharama G. (2008). Dhanvantari Nighantu: Suvarnadi varga, Varanasi: Choukhambha Orientalia, 199.
- Sharma p. & Sharama G. (2008). Dhanvantari Nighantu: Suvarnadi varga, Varanasi: Choukhambha Orientalia, 203.
- Sharma p. & Sharama G. (2008). Dhanvantari Nighantu: Suvarnadi varga, Varanasi: Choukhambha Orientalia, 206.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Pippalyadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 174.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Mulakadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 197.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Amradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 341.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Amradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 346.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Amradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 350.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Amradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 375.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Chandanadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 402.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Kshiradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 506.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Kshiradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 519.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Kshiradi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 525.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Shalyadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 532.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Shalyadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 533.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Shalyadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 545.
- Tripathi I. (2021). Rajanighantu of Pandit Narhari: Shalyadi varga, (7th ed.).Varanasi: Choukhambha krushnadas Academy, 550.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Haritaktadi varga, Varanasi: Choukhambha Bharati Academy, 111.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Haritaktadi varga, Varanasi: Choukhambha Bharati Academy, 127.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Karpuradi varga, Varanasi: Choukhambha Bharati Academy, 222.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Amradi varga, Varanasi: Choukhambha Bharati Academy.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Dhanya varga, Varanasi: Choukhambha Bharati Academy, 625.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Dhanya varga, Varanasi: Choukhambha Bharati Academy, 628.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Dhanya varga, Varanasi: Choukhambha Bharati Academy, 629.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Dhanya varga, Varanasi: Choukhambha Bharati Academy, 635.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Dhanya varga, Varanasi: Choukhambha Bharati Academy, 638.
- Chunekar K.C. & Pandey G.S. (2015). Bhavaprakasa Nighantu (Indian Materia Medica) of Shri Bhavmisra: Ghruta varga, Varanasi: Choukhambha Bharati Academy.
- Kumar, V., Abbas, A. K., & Aster, J. C. (2023). Robbins Basic Pathology. Elsevier.
- Murray, R. K., Granner, D. K., & Rodwell, V. W. Harper's Illustrated Biochemistry, McGraw-Hill Education.
- Sies, H. (2017). Oxidative stress: Eustress and distress. *Nature Reviews Molecular Cell Biology*, 18(6), 359-371.
- Kaur, C., & Kapoor, H. C. (2001). Antioxidants in fruits and vegetables-The millennium's health. *International Journal of food science & Technology*, 36(7), 703-725.
- Mukherjee, P. K. (2019). Quality Control and Evaluation of Herbal Drugs. Elsevier.
- Shahidi, F., & Hong, M. (2023). Physicochemical, potential nutritional, antioxidant and health-promoting properties of sesame oil and its bioactive components. *Frontiers in Nutrition*, 10, 1127927.