COMPARATIVE ANALYSIS OF HARITA VARGA DRAVYA IN VARIOUS SEASONS AND DISEASES

Dogra Akanksha¹, Jagota Ankush²

¹PG Scholar, Department of Swasthavritta, RGGPG Ayurvedic College and Hospital Paprola 176115, Distt. Kangra (H.P.) India
²Lecturer, Department of Swasthavritta, RGGPG Ayurvedic College and Hospital Paprola 176115, Distt. Kangra (H.P.) India

Corresponding Author: akankshadogra35@gmail.com

https://doi.org/10.46607/iamj1608112020
(Published online: November 2020)

ABSTRACT

Ayurveda is an ancient system of medicine bestowed on humanity by the great sages of India. Ayurveda lays great emphasis on the concept of health and this is one of its strengths. It is more a way of life and describes methods for promotion and maintenance of positive health. Importance of diet in the promotion of health has been shown by describing various Aahara Varga in different Ayurvedic texts. Harita Varga is one of the 12 Aahara Varga described by Aacharya Charaka. It includes Aahara Dravya (green leafy vegetables, dried fruits and tubers) which are used in daily routine and are very familiar among one and all. Every Dravya mentioned there possess different properties and understanding those properties is very essential in present era where everyone is conscious about the diet. Also, for the promotion of health seasonal regimen is given prime importance in our Ayurvedic texts. Aahara when used in an appropriate way can be used as a medicine in various diseases. The main objective of this article is to understand the use of Harita Varga Dravya in different seasons and various diseases. An attempt has been made to explain the use of Harita Varga Dravya in different seasons and diseases based on Ayurvedic and Modern pharmacology.
Keywords: Aahara, Harita Varga, Season, Disease.

INTRODUCTION

Ayurveda, the science of life is a traditional Indian holistic medicine practice. It has its roots in ancient Vedic literature. Ayurveda has mainly emphasized on promotion of health and prevention of diseases. Aacharya Charaka has mentioned that one should take the articles in daily routine which maintain the health and prevent unborn diseases. [1]Aahara is the most important factor for sustenance of life and maintenance of health. It is described as foremost pillar among the three pillars of life (Trayopsthambha). Aacharya Charaka has described that Aahara not only forms this body but also forms the diseases which occur in us. The wholesome food (Hit Aahara) is responsible for happiness and health (Sukha) and the unwholesome food (Ahit Aahara) cause misery and disease (Dukha). [2] Various Aahara Varga has been described in Brihtrayi. 12 Aahara Varga has been described by Aacharya Charaka, Harita Varga is one of them. Harita Varga includes different green leafy vegetables and tubers. All these and their fruits in dried form alleviate Kapha and Vata. [3] The strength and complexion of the person knowing the suitable diet and regimen for every season and practicing accordingly are enhanced. Aahara Varga described by Aacharya Charaka when used in accordance with season help in the promotion of health and prevention of diseases. Based on the availability and pharmacological properties, Dravya mentioned in Harita Varga can be used in different seasons. Aacharya Kashyapa has mentioned that no medicine is equivalent to the Aahara. [4] Just by the administration of proper food and diet i.e. food according to the state of Dosha, Dhatu and Agni in the body, it is possible to cure the diseases without the need of administration of medicine and treatment. These Dravya can also be used in different diseases based on their pharmacological properties mentioned in Ayurvedic as well as Modern texts.

Aim and Objectives

1. To study pharmacological properties of Aahara Dravya mentioned in Harita Varga.
2. To establish use of Harita Varga Dravya in various seasons and diseases.

Materials and Methods

Ayurvedic literature like various Samhita (Charaka Samhita, Sushruta Samhita, Ashtang Hridya and Kashyapa Samhita) and Nighantu (Bhavprakash Nighantu, Dhanwantri Nighantu and Raj Nighantu) related to this topic are studied. Various articles and journals have also been searched.

Concept of Ritu

In Ayurvedic texts, a year is divided into two Ayana, depending on the direction of movement of sun that is Uttarayana (northern solstice) and Dakshinayana (southern solstice). Each Ayana comprises of three seasons which gives total of 6 seasons in a year. Each season lasts for two months. These six seasons are Shishira (winter), Vasanta (spring), Greeshma (summer), Varsha (monsoon), Sharsha (autumn), and Hemanta (late autumn).

Uttarayana and its effect

Uttarayana indicates the ascent of the sun or northward movement of sun. In this period the sun and the wind are powerful. The sun takes away the strength of people and the cooling quality of the earth. It brings increase in the Tikta (bitter), Kashaya (astringent), and Katu (pungent) Rasa respectively, which brings about dryness in the body and reduces the Bala (strength). It is also called as Aadana Kala.

Dakshinayana and its effect

Dakshinayana indicates the descent of the sun or movement of the sun in the southern direction. In this period, the wind is not very dry, the moon is more powerful than the sun. The environment becomes cool due to the clouds, rain, and cold winds. Unctuousness sets in the atmosphere and Amla (sour), Lavana (salty) and Madhura (sweet) Rasa are predominant, so the strength of person enhances during this period. It is also called as Visarga Kala.
Table 1: Aahara Dravya to be used in different seasons -

<table>
<thead>
<tr>
<th>Ritu</th>
<th>Kala</th>
<th>Aahara Dravya to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shishira</td>
<td>Aadana Kala</td>
<td>Madhura, Amla, Lavana Rasa and Snigdha Guna dominant Aahara is to be taken.(^5)</td>
</tr>
<tr>
<td>Vasanta</td>
<td>Aadana Kala</td>
<td>Aahara which is Katu, Tikta and Kashaya in Rasa, Laghu and Ruksha in Guna, Ushna in Veerya is advised.(^6)</td>
</tr>
<tr>
<td>Greeshma</td>
<td>Aadana Kala</td>
<td>Aahara which is light to digest and have Madhura, Snigdha, Sheeta and Drava Guna is advised.(^7)</td>
</tr>
<tr>
<td>Varsha</td>
<td>Visarga Kala</td>
<td>Aahara having Amla, Lavana Rasa and of Snigdha, Laghu Guna is to be taken.(^8)</td>
</tr>
<tr>
<td>Sharada</td>
<td>Visarga Kala</td>
<td>Aahara Dravya having Madhura, Kashaya and Tikta taste, and of Laghu and Sheeta Guna are advised.(^9)</td>
</tr>
<tr>
<td>Hemanta</td>
<td>Visarga Kala</td>
<td>Madhura, Amla, Lavana Rasa and Snigdha Guna dominant Aahara is to be taken.(^10)</td>
</tr>
</tbody>
</table>

Harita Varga in different seasons –

Ritucharya translates to the rules or regimens that vary with the change of seasons. As the time goes, seasonal changes are very evident in the environment, we live in. Various changes occur in bio life around us. As the human being is also a part of same ecology, the body is greatly influenced by environmental changes. If the body is unable to adopt itself with the seasonal changes, it may lead to Dosha Vaishamya where body is highly susceptible to one or more disorders. As the adaptations according to the changes is the key for survival, thus the knowledge of Ritucharya is important. Following Ritucharya supplies our body with everything it needs to tackle illness caused by seasonal changes.

Harita Varga includes Aahara Dravya, which are available in different seasons. Some of them are available in particular one or two seasons. So, based in the availability of these Aahara Dravya these can be used in that particular season. These Aahara Dravya shows different pharmacological properties, based on which these can be used in different seasons by preserving them. Like, if any of the Aahara Dravya described in Harita Varga has pharmacological properties which can alleviate aggravated Dosha in a particular season. Then, that Aahara Dravya can be used in that particular season by conserving it.

Table 2: Pharmacological properties of Dravya mentioned in Harita Varga -

<table>
<thead>
<tr>
<th>Dravya</th>
<th>Rasa</th>
<th>Guna</th>
<th>Veerya</th>
<th>Vipaka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ardraka(^11)</td>
<td>Katu</td>
<td>Teekshna, Ruksha, Guru</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Lashuna(^12)</td>
<td>Katu, Madhura</td>
<td>Teekshna, Snigdha, Guru, Sara, Pichhila</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Palandu(^13)</td>
<td>Madhura, Katu</td>
<td>Guru, Teekshna, Snigdha</td>
<td>Anushna</td>
<td>Madhura</td>
</tr>
<tr>
<td>Tulsi(^14)</td>
<td>Katu, Tikta</td>
<td>Laghu, Ruksha</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Mulaka&lt;sup&gt;[15]&lt;/sup&gt;</td>
<td>Katu, Tikta</td>
<td>Laghu, Teekshna</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Grinjanaka&lt;sup&gt;[16]&lt;/sup&gt;</td>
<td>Madhura, Tikta</td>
<td>Teekshna</td>
<td>Ushna</td>
<td>Madhura</td>
</tr>
<tr>
<td>Dhanyaka&lt;sup&gt;[17]&lt;/sup&gt;</td>
<td>Kashaya, Tikta, Katu, Madhura</td>
<td>Laghu, Snigdha</td>
<td>Ushna</td>
<td>Madhura</td>
</tr>
<tr>
<td>Yavani&lt;sup&gt;[18]&lt;/sup&gt;</td>
<td>Tikta, Katu</td>
<td>Laghu, Ruksha, Teekshna</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Ajagandha&lt;sup&gt;[19]&lt;/sup&gt;</td>
<td>Katu</td>
<td>Ruksha, Teekshna</td>
<td>Sheeta</td>
<td>Katu</td>
</tr>
<tr>
<td>Krishnajeeraka&lt;sup&gt;[20]&lt;/sup&gt;</td>
<td>Katu</td>
<td>Laghu, Ruksha</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Mishreya&lt;sup&gt;[21]&lt;/sup&gt;</td>
<td>Madhura, Katu, Tikta</td>
<td>Laghu, Snigdha</td>
<td>Sheeta</td>
<td>Madhura</td>
</tr>
<tr>
<td>Jalapippali&lt;sup&gt;[22]&lt;/sup&gt;</td>
<td>Katu, Kashaya</td>
<td>Ruksha</td>
<td>Sheeta</td>
<td>Katu</td>
</tr>
<tr>
<td>Tumbru&lt;sup&gt;[23]&lt;/sup&gt;</td>
<td>Katu, Tikta</td>
<td>Teekshna, Laghu, Ruksha</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Shigru&lt;sup&gt;[24]&lt;/sup&gt;</td>
<td>Katu, Tikta</td>
<td>Laghu, Teekshna, Ruksha</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>Jambiri Nimbu&lt;sup&gt;[25]&lt;/sup&gt;</td>
<td>Amla</td>
<td>Guru, Teekshna</td>
<td>Ushna</td>
<td>Amla</td>
</tr>
</tbody>
</table>
Hemanta Ritu: The strength of a person remains on highest grade and vitiated Pitta Dosha gets pacified. Activity of Agni is increased. One should use Madhura (sweet), Amla (sour), Lavana (salty) Rasa and Snigdha (unctuous) Guna dominant Aahara. Palandu (Allium cepa) which is Madhura in Rasa, Snigdha in Guna, Madhura in Vipaka can be used here.

Shishira Ritu: During this season, the environment remains cold, along with cold wind. The strength of the person becomes less, accumulation of Kapha Dosha occurs and Agni is increased. Diet regimen of Hemanta Ritu is to be followed here. As in Hemanta Ritu, Palandu (Allium cepa) can be used here.

Vasanta Ritu: Strength of the person remains in medium degree, vitiation of Kapha Dosha occurs and Agni remains in Manda state. Here, one should use Aahara which pacify Kapha Dosha and increase Agni (metabolism). So, Aahara which is Katu (pungent), Tikta (bitter) and Kashaya (astringent) in Rasa, Laghu (light) and Ruksha (dry) in Guna, Ushna in Veerya (hot potency) is advised in Vasanta Ritu. Here, Ardraka (Zingiber officinale) may be used which is Katu in Rasa, Ruksha in Guna and Ushna in Veerya. Mulaka (Raphanus sativus) having Katu and Tikta Rasa, Laghu Guna, Ushna Veerya can be used. Ajagandha (Cleome gynandra), Krishnajeeraka (Caruncarvi), Lashuna (Allium sativum), Yavani (Trachyspermum ammi), Tulsi (Ocimum sanctum), Tumburu (Zanthoxylum alatum), Shigru (Moringa oleifera) and Mrishataka (Brassica juncea) have the pharmacological properties which are helpful in pacifying Kapha Dosha and increasing metabolic fire.

Greeshma Ritu: The strength of the person is minimum during this period, deposition of Vata Dosha occurs, but the vitiated Kapha Dosha is pacified during this season. Agni of the person will remain in mild state. Foods which are light to digest those having Madhura (sweet), Snigdha (unctuous), Sheeta (cold) and Drava (liquid) Guna. Dhanyaka (Coriandrum sativum) which is Madhura in Rasa, Laghu and Snigdha in Guna and Madhura in Vipaka can be used.

Grinjanaka (Daucus carota) due to Madhura Vipaka can also be used. Both due to Madhura Vipaka do not aggravate Vata Dosha which is most likely to be aggravated during this season and also due to Ushna Veerya both are helpful in increasing Manda Agni (low metabolism).

Varsha Ritu: The strength of the person again become less, vitiation of Vata Dosha and deposition of Pitta Dosha, Agni also gets vitiated. Foods having Amla (sour), Lavana (salty) Rasa and of Snigdha (unctuous), Laghu (light) qualities are to be taken. Jambiri nimbu (Citrus limon) which is Amla in Rasa and Ushna in Veerya pacifies Vata and Kapha Dosha but does not aggravate Pitta Dosha. Due to these properties Jambiri nimbu can be used in Varsha Ritu.

Sharada Ritu: The strength of the person remains medium, pacification of vitiated Vata Dosha and vitiation of Pitta Dosha occur, and activity of Agni increases during this season. Aahara Dravya having Madhura (sweet), Kashaya (astringent) and Tikta (bitter) taste, and of Laghu (light Guna) to digest and Sheeta (cold) Guna to pacify vitiated Pitta are advised. Jalapippali (Lippia nodiflora) and Mishreya (Foeniculum vulgare) both having Sheeta Veerya can be used in Sharada Ritu due to its Pittahara property.

Harita Varga in different diseases – In Ayurveda, food is called ‘Mahabhaishjya’ which means the ‘Superior medicine’. Eating wholesome food is very essential to maintain health and prevent diseases. Vaidya Lolimbaraja indicated the importance of Pathya Aa-
hara (wholesome food) by stating that if a patient takes wholesome food then there is no need of medicine and if in other case patient takes unwholesome food then there is also no need of medicine. As in later case, the medicine will not be effective.

Aahara Dravya mentioned in Harita Varga of Acharya Charaka possess different pharmacological properties (i.e. Rasa, Guna, Veerya, Vipaka and Prabhava) based on which these can be used in different diseases.

Ardraka (Zingiber officinale)—Ardraka has pharmacological properties by the virtue of which it can be used in Agnimandya, Ajeerna, Gulma, Grahni, Udarashoola, Vibandha, Arsha, Shleepada, Sheetapitta, Kasa, Shwasa, Hijka, Pratishyaya, Jwara, Shotha, Chhardi, Aamavata and Sandhishto.

Tulsi (Ocimum sanctum)—Tulsi has many medicinal properties. It can be used in Agnimandya, Visthambha, Krimiroga, Raktavikara, Kasa, Shwasa, Parshwashoola, Yakshma, Mootrakrichchhra, Twakavikara, Jwara, Pratishyaya, Visha, Shitorioga and Karnashoolla.

Shigru (Moringa oleifera)– Moringa can be used in treating various ailments like Agnimandya, Aruchi, Udararoga, Gulma, Krimi Roga, Kasa, Shotha, Shoola, Jwara, Mootrakrichchhra, Medoroga, Visha, Kashtartava and Charma roga on the basis of pharmacological properties.

Mulaka (Raphanus sativus) — Mulaka can be used in the treatment of various diseases like Arsha, Atisara, Gulma, Hijka, Kasa, Shwasa, Gulma, Shoola, Pandu, Kamala, Mootrakrichchhra, Sheeta Pitta, Kushtha, Shotha, Visarpa, Vatavyadya, Amavata, Karnashoolla, Kanharogga, Jwara, Shosha and Netraroga.

Krishnajeeraka (Curcuma carvi) — On the basis of pharmacological properties present in Krishnajeeraka, it can be used in Agnimandya, Aruchi, Ajeerna, Udarashoolla, Atisara, Gulma, Krimi, Arsha, Shotha, Prasutivikara and Jwara.

Lashuna (Allium sativum) — Lashuna has pharmacological properties by which it can be used in medical conditions like Agnimandya, Aruchi, Ajeerna, Vibandha, Shoola, Gulma, Krimi, Arsha, Kasa, Shwasa, Yakshma, Kashtartava, Jwara, Vrana, Yonisvapada, Charmaroga, Parshwashoola, Shotha, Sandhivata, Ghridrasi, Ardita and Pakshaghata.

Yavani (Trachyspermum ammi) — Yavani can be used in Shotha, Charmeroga, Vrshchikadansha, Vaana, Adhmana, Sheetapitta, Aruchi, Agnimandya, Ajeerna, Anaha, Amavata, Sandhishto, Udarashoolla, Gulma, Pleeha, Krimi, Dantaro, Arsha, Jeerena Kasa, Shwasa, Visuchika, Mootraghata, Kashtartava and Sutikavikara.

Tumbru (Zanthoxylum alatum) — Tumbru can be used in Agnimandya, Atisara, Arsha, Krimi Roga, Kasa, Shwasa, Twakikara, Jwara, Mootrakrichchhra and Danta Roga.

Jambiri nimbu (Citrus limon) — Jambiri nimbu can be used in Aruchi, Trishna, Chhardi, Agnimandya, Ajeerna, Shoolo, Vibandha, Kasa, Shwasa and Krimi-Roga.

Mrishtaka (Brassica juncea) — Based on the pharmacological properties of Mrishtaka, it can be used in Agnimandya, Aruchi, Ajeerna, Udarashoolla, Gulma, Krimi Roga, Pleehavridhhi and Twakavikara.

Ajaagandha (Cleome gynandra) — Ajaagandha can be used in many ailments like Agnimandya, Ajeerna, Udarashoolla, Gulma, Krimi Roga, Pleehavridhi and Twakavikara.

Dhanyaka (Coriandrum sativum) — Based on the pharmacological properties present in Dhanyaka, it can be used in Aruchi, Chhardi, Agnimandya, Ajeerna, Atisara, Udarashoolla, Gulma, Arsha, Krimi, Kasa, Shwasa, Mootrakrichchhra, Jwara, Shotha, Mukhapaka, Raktapitta, Amavata, Vatarakta, Trishna, Daha and Visarpa.

Grinjanaka (Daucus carota) — It can be used various diseases like Aruchi, Arsha, Krimi Roga, Raktapitta, Grahni and Netra Roga based on its pharmacological properties.

Jalapippali (Lippia nodiflora) — Jalapippali can be used in many ailments like Aruchi, Agnimandya, Daaha, Vrana, Ajeerna, Atisara, Pratishyaya, Prasuti-jwara, Shotha, Netraroga and Raktavikara.

Palandu (Allium cepa) — Palandu can be used in many diseases like Agnimandya, Vibandha, Arsha, Kamala, Mootrakrichchhra, Shotha, Klaivyya, Kasa, Yonisvapada, Charmaroga, Parshwashoola, Shotha, Sandhivata, Ghridrasi, Ardita and Pakshaghata.
Charmaroga, Visuchika, Sandhivata, Gridhrasi, Karna-
shoola, Mukharoga, Vata Vyadhi and Vrana.
Mishreya (Foeniculum vulgare) – Mishreya on the
basis of its pharmacological properties can be used in
Agnimandya, Ajeerna, Adhmana, Vrana, Udarashoo-
l, Pravahika, Arsha, Hridroga, Raktavikara, Kasa,
Shwas, Mootrakricchha, Mootraghata, Stanyalpata,
Twyavikara, Jwara, Daha, Netraroga, Yonishoola and
Malabaddhata.

Table 3: Harita Varga in various diseases on the basis of Chemical Constituents present

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Aahara Dravya</th>
<th>Chemical constituents present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever [27]</td>
<td>Tulsi, Dhanyaka</td>
<td>β- Sitosterol, Rhymol, Eugenol and Camphor in Tulsi and β- Sitosterol, D- mannitol, Coriandrinonediol, Kaempferol, Limonene, Linalool, Thymol in Dhanyaka</td>
</tr>
<tr>
<td>Jaundice [31]</td>
<td>Mulaka</td>
<td>β- Sitosterol, Raphanusol A, Myrosinase, Brassinolide</td>
</tr>
<tr>
<td>Obesity, Diabetes [32]</td>
<td>Shigru</td>
<td>Gallic acid, Chlorogenic acid, Ellagic acid, Ferulic acid, Kaempferol, Moringine, Moringinine, Quercetin and Vanillin.</td>
</tr>
<tr>
<td>Hyperlipidemia [33]</td>
<td>Palandu, Lashuna</td>
<td>Quercetin, Flavonoid Allucide G in Palandu and Allicin, Allin, Diallyl disulphide in Lashuna</td>
</tr>
<tr>
<td>Worm infestations [34]</td>
<td>Tulsi</td>
<td>Rhymol, Eugenol and Camphor</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The prime principle of Indian system of medicine is preventive aspect which can be achieved by the change in diet and practices in response to change in climatic condition. Ayurveda has depicted various rules and regimens (Charya), regarding diet and behavior to acclimatize seasonal enforcement without altering body homeostasis. Aahara is one of the prime factors described in the Ayurveda for healthy living. Aahara Dravya mentioned in Harita Varga are available in different seasons. However, based on the pharmacology mentioned in Ayurvedic texts they are sometimes not useful in the season in which they are available. So, here Dravya can be conserved or their dried forms can be used in the seasons in which they maintain and promote health due to pharmacological properties present in them. Improper diet leads to the diseased condition in an individual which can be corrected by diet according to varying seasons. So, Aahara Dravya mentioned in Harita Varga may be used in various seasons and diseases specifically lifestyle disorders based on pharmacology described in Ayurvedic and Modern texts.

**CONCLUSION**

As our body’s environment changes with the changes in seasons mentioned in Ayurvedic texts. Changes that predominantly affect our body and mind are the changes in metabolism (Agni) and strength (Bala). So, one should use Aahara that maintain optimum level of metabolism and strength. Aahara Dravya mentioned in Harita Varga possess different pharmacological properties based on which one can use these in different seasons according to the seasonal changes in the body to maintain health in an individual. If one is not having food according to the seasonal changes, this will lead to diseased condition due to disturbed metabolism (Agni) and decreased immunity (Bala). In
that case also, one can use Aahara as medicine to treat various diseases. So, one can also use Aahara Dravya described in Harita Varga based on the pharmacological properties in various diseases.

REFERENCES

5. Charaka Samhita (Text with English Translation) P.V. Sharma Chaukhambha Orientalia Varanasi Vol 1 Reprint Edition 2008 Ch. 6/19 Pg 44
6. Astangahrdayam of Vagbhata Edited with the ‘Vidyoti- ni’ Hindi Commentary By Kaviraja Atrideva Gupta Chaukhambha Prakashan Ch 3/19 Pg 36
8. Astangahrdayam of Vagbhata Edited with the ‘Vidyoti- ni’ Hindi Commentary By Kaviraja Atrideva Gupta Chaukhambha Prakashan Ch 3/46 Pg 40
11. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 333
12. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 72
13. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 70
14. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 514
15. Database on Medicinal Plants Used in Ayurveda – Vol 4 CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg. 444
16. Bhavprakasa of Sribhava Misra Edited with the ‘Vidyotini ‘Hindi Commentary, Notes and Appendix First Part Chaukhamba Sanskrit Bhawan Pg – 697
17. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 323
18. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 495
19. Database on Medicinal Plants Used in Ayurveda – Vol 5, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi. Pg- 1
20. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 12015 Pg.369
21. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 402
22. Database on Medicinal Plants Used in Ayurveda – Vol 2, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi. Pg - 263
23. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 328
24. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 112
25. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 346
26. Dravya Guna Vigyana Vol. 2 By Prof. P.V. Sharma Chaukhambha Bharati Academy, Varanasi (India) 2015 Pg. 129
27. Database on Medicinal Plants Used in Ayurveda – Vol 2, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi. Pg- 500
28. Database On Medicinal Plants Used in Ayurveda – Vol 6, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 87

Database On Medicinal Plants Used in Ayurveda – Vol 7, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 497
Database on Medicinal Plants Used in Ayurveda – Vol 5, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 3
29. Database on Medicinal Plants Used in Ayurveda – Vol 7, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg – 285
Database on Medicinal Plants Used in Ayurveda – Vol 2, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg – 266
30. Database on Medicinal Plants Used in Ayurveda – Vol 5, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 316
31. Database on Medicinal Plants Used in Ayurveda – Vol 4, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 444
32. https://www.hindawi.com/journals/ab/2014/162914
33. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6337254
Database on Medicinal Plants Used in Ayurveda – Vol 6, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 158
34. Database on Medicinal Plants Used in Ayurveda – Vol 2, CCRAS Dept. of AYUSH, Ministry of Health and Welfare Govt. of India, New Delhi Pg- 501

Source of Support: Nil
Conflict of Interest: None Declared