

A LITERARY REVIEW ON ASHWAGANDHA (*Withania somnifera* (Linn) Dunal): AN AYURVEDIC APHRODISIAC DRUG

Shalini.R¹, Jolly Kutty Eapen², Deepa.M.S³

¹PG Scholar, Govt Ayurveda College, TVM, Kerala, India

²Professor, Department of Dravyaguna Vijnanam, Govt Ayurveda College, TVM, Kerala, India

³Associate Professor, Govt Ayurveda College, TVM, Kerala, India

Email: shalur2014@gmail.com

ABSTRACT

Ashwagandha (*Withania somnifera* (Linn)Dunal), is one of the essential medicinal herbs in *Ayurveda* used from time immemorial. . It is believed that the herb imparts the vigour and strength of a stallion when taken which is known by its name ‘*hayahwaya*-’(because of providing horse potency, it is known by title of horse). There is no reference about it in *Vedas*. But all Ayurvedic classic literature like *Charaka*, *Susrutha* and *Vagbhata* and all the *nighantus* has elaborately mentioned about the properties, action and therapeutic uses of *ashwagandha* in their works. *Charaka*, *Susrutha* and *Vagbhata* does not mention about the *shukrala* properties or *vajeekarana* actions of *Ashwagandha*. It is later authors like *Sharangadhara*, *Chakradutta*, *Vrnda Madhava* and all *nighantu*’s which mentioned about the above said actions of *Ashwagandha*. This article is a review on *Ashwagandha* from all the available classical literature and it also throws light on how *Ashwagandha* acts as an aphrodisiac drug.

Keywords: *Withania somnifera*, *Ashwagandha*, Ayurvedic aphrodisiac

INTRODUCTION

Ashwagandha (*Withania somnifera* (Linn) Dunal) (Solanaceae) is an ayurvedic herb widely distributed throughout India. *Ashwagandha* (*Withania somnifera* (Linn) Dunal), is a very important medicinal herbs in *Ayurveda* used from ancient times. From medieval period onwards, *Ashwagandha* emerged as an

aphrodisiac agent and immunomodulator. The recent development in research reveals that US patent office has granted a patent to a new vaccine adjuvant extracted from *Ashwagandha* which is used as immunity enhancer. The grant of patent has opened up further prospects of far more effective vaccines for the im-

provement of human immune system to counter many incurable ailments. The plant, also called 'Winter Cherry' in English belongs to the family Solanaceae. The *Ashwagandha* root is compared with the Ginseng root for their anti stress activity and weight gain properties¹. The total alkaloids present in roots have variety of pharmacological actions. More recently an alkaloid Visamine USSR had marked sedative, hypnotic and nicotinolytic effects².

Ashwagandha plant also called "Indian Ginseng" has been used as a panacea (single medicine therapy) traditionally. The root of the plant is commonly used in a variety of Ayurvedic Pharmaceutical formulation. *Ashwagandha* is highly esteemed as a rasayana drug by Ayurvedists which is capable of imparting long life, youthful vigour and good intellectual powers. It cures ulcer, fever, cough, dyspnoea, consumption, dropsy, impotence, rheumatism, toxicosis and leucoderma³. It improves physical strength and is prescribed in all cases of general debility. It is used as single drug or in combination with other drugs. *Ashwagandharistam*, *Ashwagandhavalehyam*, *ashwagandhathi taila*, *Valiya Narayana tailam* etc. are some of the important preparations using the drug.

1.1 Etymology of herb *Ashwagandha*⁴

"*Ashwasyeva gandho asyah*

It has smell like those of horse

"*Ashwasyeva gandha utsaaha yasyaah sevarena saa!*

It provides horse's potency.

1.2 History

a. Vedas⁵:

There is no direct reference about *Ashwagandha* in vedas. But numerous claims about

Withania somnifera as a twin to the wondrous root jangida, whose praise were sung in the vedas. The root jangida is frequently mentioned in *atharva veda*, and is considered second in importance to *soma*.

b. *Samhithas*:

Ashwagandha is one of the main drugs of *Ayurveda* classics.

(i). *Paippalada Samhita*⁶: *Ashwagandha* root juice is given as *nasya* to achieve conception.(P.S.1/89/3)

(ii) *Charaka Samhita*⁷: *Acharya Charaka* included *Ashwagandha* under *Balyadasaimani* group and *Brimhaneeya* group (*suthra sthana* 4th chapter *Shadvirechanashatashritheeyam*). It is included in *Moolasava yoni* (*suthra sthana* 25th chapter *yajjapurushheeyam*). *Acharya* considered decoction of *Ashwagandha* along with other drugs in *virechana* group (*vimana sthana* 8th chapter *Rogabhishakjitheeyam*), *Ashwagandha* can be used for *udwardhana* in case of *kandu*, *pidaka* and *koda* (*suthra sthana* 3rd chapter *Aragwadheeyam*). *Acharya* also considered it as an ingredient of *Vajeekarana ghrtam* (*vajeekarana pada* 1st chapter *Samyogasharamooleeyam*). The *Siddhi sthana* 9th chapter *Trimarmeeyasiddhi* stated the use of *Ashwagandha* in the treatment of *Sirakampa*.

(iii) *Susrutha Samhitha*⁸: Mentioned it in the treatment of *karshya* in the 25th chapter of *suthra sthana* (*Doshadhatumala Kshayavrddhi Vijnaniya*). Oil cooked with *Ashwagandha*, drugs of *jeevaneeya gana* etc is used for anointing that helps growth of the earlobe (*Suthra sthana* 16th chapter *Karna vyadha bandha vidhi*). It is also used for *Utsaadana in vrana* (*suthra sthana* 37th chapter *Mishrakadhyayam*). In the 39th chapter of *suthra sthana* *Samsodhana samsamaniya* it is mentioned as *urdhwabaghahara dravya*. *Susrutha* also men-

tioned *Ashwagandha* in the context of treatment of *Kaphaja visarpa* (*chikitsa sthana* 17th chapter).

(iv). **Ashtangasangraha**^{9,10}: *Ashwagandha* churna was suggested for *abhyanga* in pediatric cases. *Acharya* mentioned it as an ingredient of *Bala taila* in 4th chapter of *sareera sthana*, *Garbha Vyapath Adhyaya*, which is highly beneficial for diseases of women in *peurperum*. It is an ingredient of *sukumara ghrta* (*Chikitsa sthana* 15th chapter *Vidradhi vriddhi chikitsa*). *Ashwagandha* is mentioned in *Kalpa sthana* as an ingredient of *Eranda-moolaadi basthi* which is *lekhana* and *deepana* (*Kalpa sthana* 4th chapter, *Basthi Kalpa*). *Acharya* mentioned it as an ingredient of *anuvaasana basthi kalpa* which is used in the cure of all *vaata* diseases (4th chapter *Kalpa sthana*).

(v) **Ashtanga Hridaya**^{11,12}: contained similar explanations like *Ashtanga sangraha*. *Acharya* mentioned it as an ingredient of *Bala taila* in 2nd chapter of *sareera sthana*, It is an ingredient of *sukumaara ghrta* in the treatment of *Vidradhi* and *Vrddhi* (*Chikitsa sthana* 13th chapter *Vidradhi-Vrddhi Chikitsa*). *Ashwagandha* is also mentioned in *Kalpa sthana* in *Ashtanga Hridaya* like *Ashtanga Samgraha*. Like *Ashtangasangraha* *Ashwagandha* is mentioned in 2nd chapter of *uttara sthana Balaamaya Pratisheda* as having *srothoshodhana* properties.

(vi) **Vrnda Madhava**¹³: Milk processed with *ashwagandha* and added with milk should be taken by women in proper time. It helps conception. (VM.14.10). In *Balashosa* ghee is cooked with one-fourth paste of *Ashwagandha* and ten times milk. It promotes development of body (VM.67.9)

(vii). **Chakradutta**¹⁴: He mentioned *Ashwagandha* in *udararoga chikitsa*. *Devadaru*, *sobhanjana* and *apamarga* pounded with cow's urine, if taken alleviates severe *udara roga*, *krimi* and *shopha* (37th chapter *udara chikitsa*). He has mentioned *grtham* with *Ashwagandha* in *Vatavyadhi chikitsa* (22nd chapter *Vatavyadhi chikitsa*). In 62nd chapter *yoni Vyapath chikitsa* he has mentioned *Ashwagandha* in the treatment of *Vandhyatwa*. Also in 66th chapter *rasayanadhikara* he has stated the use of *Ashwagandha* for half a month with *grtha*, *taila*, hot water etc for *dehapushti*.

(viii). **Vangasena Samhitha**¹⁵: Stated it as a substitute of *Jeevaneeya gana* drugs *Kakoli* and *Ksheera Kakoli* in *Maha Kalyana ghrtam*. *Vangasena* in 28th chapter *Vatavyadhi* mentioned to take *Ashwagandha* along with *guduchi* and *maricha* pounded with warm water.

(ix). **Sharangdhara**¹⁶: *Brihat Trayi* did not emphasize *Ashwagandha* as *vrisya* in their works. It is *Sarngdhara* who highlighted the *sukrala* property of *Ashwagandha* along with *musali* and *shatavari* (*Pradhama Khanda* 4th chapter *Dipanapachana Adhyaya*). He mentioned it as ingredient of much yoga like *Maharasnaadi*, *Ashwagandhadi choornam*, *Kamadeva ghrtam*, *Maha narayana taila*, *Shatavari taila*, *Dhatu taila*, *Madana Kamadeva* etc.

Nighantu^{17,18,19,20,21}

Ashwagandha is also mentioned in other books like *Siddha Bhesaja Manimaala Vaidya Manorama*, *Bhaishajya ratnavali* and *yogaratnakara*. *Ashwagandha* is mentioned in all *Nighantus*. *Kaiyadeva Nighantu* mentioned it under *Oushadi Varga*. *Madanapala Nighantu*¹⁷ mentioned it under *Abhayaadi varga*. According to *Raja Nighantu* it is in *Shatahvadi*

varga. According to *Dhanwanthari Nighantu* it is mentioned in *guduchyadi varga*. *Bhava-prakasha* also mentioned it in *Guduchyadi varga*. As per *Nighantu Adarsha* it comes in *Kandakaryadi varga* and *Shodhala Nighantu*, like *Dhanwanthari Nighantu* mentioned it in *Guduchyadi varga*.

In literature we do not come across the description regarding two kinds of *Ashwagand-*

ha. But in *Nighantu* commentaries two types of *Ashwagandha* are mentioned: *Withania somnifera* and *Withania ashwagandha*. The cultivated variety which is thin lean is mainly brought from Nagori district of Madhya Pradesh which is called *Nagouri Ashwagandha*; *Withania ashwagandha*.

Table 1: Synonyms according to different Nighantus.^{17,18,19,20,21}

Synonym	Bha.Ni ²¹	Mad.Ni ¹⁸	Dha.Ni ²⁰	Kai.Ni ¹⁷	Sho.Ni	Raj.Ni ¹⁹
<i>Ashwagandha</i>	-	-	+	+	+	+
<i>Ashwavarohaka</i>	-	+	+	+	+	-
<i>Balada</i>	+	-	-	-		+
<i>Balya</i>	-	+	+	+	+	+
<i>Elaparni</i>	-	-	-	-	+	-
<i>Gokarna</i>	-	+	-	+		-
<i>Gandhapatri</i>	-	-	-	-	-	+
<i>Hayagandha</i>	-	-	-	+	-	+
<i>Hayapriya</i>	-	-	-	-	-	+
<i>Varahakarni</i>	+	+	+	+	+	+
<i>Kamarupini</i>	-	-	-	-	+	+
<i>Kanjuka</i>	-	-	+	-	-	-
<i>Kushtagandhini</i>	+	-	-	-	+	-
<i>Marutaghni</i>	-	-	-	-	+	-
<i>Pivara</i>	-	-	-	-	+	+
<i>Pita</i>	-	-	-	+	-	-
<i>Pushtida</i>	-	-	-	-	-	+
<i>Thuragi</i>	-	+	+	+	+	+
<i>Vajigandha</i>	-	-	+	-	-	+

Interpretation of the synonyms⁴

Ashwagandha, Hayagandha - root, part used, also emits horse's smell

Ashwavarohaka, Vrisha, - it is *vrishya* in nature

Balada, Balya- promote strength

Elaparni- leaves having shape of *ela*

Gandhapatri- having smell like that of horse

Gokarna- Herb with leaves resembling shape of cow's ear

Hayapriya- favourite of horses

Hayahvaya- provides horse potency

Kaamaroopini- it increases libido

Kancuka- retains semen

Kushtagandhini- has smell of plant *Kushta*

Marutaghni- useful in *vatika* disorders

Pita- having yellow colour

Putrada- provides male progeny

Pushtida- it is nourishing

Thuragi- it has smell of hoarse

Vajigandha- has smell of hoarse

Varahakarni – herb with leaves resembling pig`s ear

Categorization of Ashwagandha as per classical text^{7,8,17,18,19,20,21}

Table 2: Categorization as per classical text

Classical Text	Category
<i>Bhavaprakasha Nighantu</i> ²¹	<i>Hareethakyaadi varga</i>
<i>Madanapala Nighantu</i> ¹⁸	<i>Abhayaadi varga</i>
<i>Dhanwanthari Nighantu</i> ²⁰	<i>Guduchyadi varga</i>
<i>Kaiyyadeva Nighantu</i> ¹⁷	<i>Oushadi varga</i>
<i>Charaka</i> ⁷	<i>Balya, Brimhana, Madhuraskandha, Virechanopaga</i>
<i>Raja Nighantu</i> ¹⁹	<i>Shatahwadi varga</i>
<i>Susrutha</i> ⁸	<i>Urdhwabhagahara</i>

Useful Part⁶

Root, leaves

Root powder= 3to 6 gms

Kshara=1 to 3 gms

Dose²²

Pharmacological Properties^{17,18,19,20,21}

Table 3: Pharmacological properties according to different *Nighantus*

<i>Nighantus</i>	<i>Rasa</i>	<i>Veerya</i>	<i>Guna</i>	<i>Vipaka</i>
<i>Kai.Ni</i> ¹⁷	<i>Kashaya, Tiktha</i>	<i>Ushna</i>	<i>Laghu, snigdha</i>	-
<i>Mad.Ni</i> ¹⁸	<i>Kashaya, Tiktha</i>	<i>Ushna</i>	<i>Laghu, snigdha</i>	-
<i>Bha.Ni</i> ²¹	<i>Kashaya, Tiktha</i>	<i>Ushna</i>	<i>Laghu, snigdha</i>	-
<i>Dha.Ni</i> ²⁰	<i>Kashaya, Tiktha</i>	<i>Ushna</i>	<i>Laghu, snigdha</i>	-
<i>Ra.Ni</i> ¹⁹	<i>Katu Tiktha</i>	<i>Ushna</i>	-	-

Karmam^{7,8,17,18,19,20,21}

Table 4: *Karmam*

<i>Karma</i>	<i>Dha Ni</i> ²⁰	<i>Ra.Ni</i> ¹⁹	<i>Bha.Ni</i> ²¹	<i>Charaka</i> ⁷	<i>Susruta</i> ⁸	<i>Kai.Ni</i> ¹⁷
<i>Dosha Karma</i>	<i>vatakapha-hara</i>	<i>Vatahara</i>	<i>Vatakapha Hara</i>	-	-	<i>Vatakaphahara</i>
<i>Dhatu Karma</i>	<i>Shukrala</i>	<i>Shukrala</i>	<i>Atishukrala</i>	-	-	<i>Vrishya</i>
<i>Sarvadaihika Karma</i>	<i>Vajeekarana</i>	<i>Vajeekarana</i>	<i>Balya, Rasayana</i>	<i>Virechana Upaga</i>	<i>Urdhwabag-hahara</i>	<i>Balya, Vajeekara</i>

Indications⁶

Shopha, shvitra, Kshaya, Nidranasha, Grandhi, Gandaroga, Apaci, Klaibya, Vandhyatwa

Therapeutic uses^{22,23}

For the Development of the body

1. *Aswagandha* taken with milk, ghee, oil, or warm water for a fortnight promotes development of body. (AH.U.39.158)¹²
2. *Mandukaparni*, *sankhapuspi*, *aswagandha* and *satavari* should be used in order to promote intellect, lifespan, stability, and strength. (AH.U.39.61)¹²
3. One who takes powder of *Aswagandha* root in late winter mixed with honey and ghee along with milk regains youthfulness even if old. (RM.33.11)

For Diseases

a) *Sosha*

1. Powder of *aswagandha*, *tila* and *masa* taken with goat's ghee and honey. (SS.U.41.40)⁸
2. *Sarkara*, *ashwagandha* and *pippali* mixed with ghee and honey. (SS.U.41.41)⁸
3. Milk cooked with *ashwagandha* which provides nourishment to body. Or ghee obtained from that milk should be taken after adding with sugar and followed by intake of milk. (SS.U.41.42)⁸
4. *Ashwagandha*, *yava*, and *punarnava* should be used for rubbing externally. (SS.U.41.43)⁸
5. Ghee extracted of milk boiled with *ashwagandha* is cooked with *sarkara*, milk, meat along with the paste of *jivaniya* drugs used in consumption. (AH.Ci.5.25)
6. The paste of *pippali*, *draksha* *ashwagandha* and *sarkara* mixed with oil and honey. (V.M.10.9)

b) Excessive emaciation

Ashwagandha with milk should be used. (SS.SU.15.33)

c) Bronchial Asthma (*Tamaka Shwasa*)

The Kshara of *ashwagandha* should be taken with honey and ghee. (SS.Ci.17.117; AH.Ci.4.38)

d) *Granthivisarpa*

The part should be sprinkled with hot decoction of leaves and cow's urine or warm paste of *ashwagandha* should be applied externally on the affected part. (CS.Ci.21.123)

e) *Vatavyadhi*

Ghee is cooked with decoction and paste of *aswagandha* along with four times milk. The *ashwagandha ghrta* pacifies *vata* and promotes semen and muscles. (VM.22.73)

f) *Urustambha*

The root of *ashwagandha* or *arka* or *nimba* are mixed with honey, mustard, and ant-hill earth should be anointed thickly and applied as paste in *urustambha*. (CS.Ci.27.50-51).

g) *Insomnia*

The powder of *aswagandha* mixed with sugar and taken with ghee alleviates insomnia and brings sleep quickly. (BS.Jaladosha.13)

h) *Cardiac disorder*

The paste of *ashwagandha* and *bibhitaka* mixed with jaggery and taken with tepid water alleviates *vata* located in heart. (BS.Vatavyadhi.60)

i) *Accidental wound*

One affected with accidental wound should lick the powder of *ashwagandha* with jaggery or ghee or should take with milk. (VD.4.2)

j) *Suppression of urine*

Decoction of *ashwagandha* removes suppression of urine and promotes urination. (SB.4.54)

k) *Conception in sterility*

Milk processed with *Ashwagandha* and added with milk should be taken by women in proper time. It helps conception. (VM.14.10 also BP.Ci.70.26)

l) *Balasosa*

Ghee is cooked with one-fourth paste of *ashwagandha* and ten times milk. It promotes development of body. (VM.67.9)

m) *Udararoga*

Devadaru, *sobhanjana*, and *apamarga* or *ashwagandha* pounded with cow's urine alleviates *udara roga*. (CD.37.48)

n) *Twak roga*

It is used in vitiligo and other skin diseases, blisters heal when black ash of root is applied on them.

o) Digestive system

The bark powder is appetizer, carminative and anthelmintic and hence is used in abdominal pain, constipation and worms.

Substitutes and adulterants^{24,25,26}

According to *Bhaishajya ratnavali*, *Ashwagandha* is used as substitute of *Meda* (24). *Yogaratanakara* opines it as substitute of *Kakoli* and *Ksheera Kakoli* (25). *Vangasena* has same opinion like *yogaratanakara*. *Bhavaprakasha* also opines *Ashwagandha* as substitute of *Kakoli* and *Ksheera Kakoli*. But in Quality standards of Indian medicinal plants, it is mentioned that *Withania coagulans* (Stocks) Dunal and wild growing *Withania somnifera* (Linn) Dunal are known to be the common substitutes or adulterants²⁶.

DISCUSSION

Relevant background information about the drug *Ashwagandha* was collected from the classical textbooks, where it is considered as an aphrodisiac drug. There is no reference about this drug in *Vedas*. But a wide range of application of *Ashwagandha* is mentioned during *samhitha* and *nighantu* period. The classical texts and *nighantu's* don't mention about

the *vipaka* of drug. But we can consider it as *madhura vipaka* from its *balya*, *brhmana* and *vrshya* actions. Among the classical literature works, only *Charaka* mentioned *Ashwagandha* in *vargas* like *balya* and *brimhaneeya*, *Susrutha* and *Ashtanga hridaya* did not mention it under any group. Authors like *Bhaishajya ratnavali*, *Yogaratanakara* and *Vangasena* have mentioned substitutes for *Ashwagandha*; *Medha* as mentioned by *Bhaishajya ratnavali* and *Kakoli*, *Ksheera Kakoli* as by *Yogaratanakara* and *Vangasena*.

Even though *Charaka* has mentioned *Ashwagandha* as an ingredient of *vajeekarana ghrita*, *Brihat Trayi's* did not emphasize *Ashwagandha* as *vrisya* in their works. It is *Sarngdhara* who highlighted the *sukrala* property of *Ashwagandha* along with *musali* and *shatavari* in *Pradhama Khanda* 4th chapter *Dipanapachana Adhyaya*. Also authors like *Vrnda Madhava*, *Chakradutta* and all the later *nighantu* authors (which is evident from the synonyms itself told in *Nighantu's*) mentioned about the *shukrala* and *vajeekarana* actions of *Ashwagandha*. *Vrnda Madhava* has mentioned about a special *yoga* with *Ashwagandha* that helps in child conception. Milk processed with *ashwagandha* and added with milk should be taken by women in proper time helps in conception (VM.14.10). In 62nd chapter *yoni Vyapath chikitsa chakradutta* has mentioned *Ashwagandha* in the treatment of *Vandhyatwa*.

The drug which increases libido and improves one's sexual vigour is known as *vajeekarana* according to *Adhamalla*¹⁶. In *Yoni vyapath chikitsa* chapter, *Charaka* mentioned *Rasayana* and *Vajeekarana dravyas* for the treatment of *ashta rajo doshas*. *Ashwagandha* being a *rasayana* and *vajeekarana* drug is very useful in *shukra dosha*. *Charaka* in fourth *paada* of

vajikarana adhyaya, *Pumanjathabalaadhikam* has mentioned about the qualities of *vrshya* drug as those having *madhura rasa*, *snigdha guna*, that which is rejuvenating, nourishing, *guru*, and that which is pleasing to mind. *Ashwagandha* being *madhura vipaka* and *snigdha guna* meets the requirement of a *vrshya dravya*. It belongs to the *shukrala* group (that which increases *shukra*) of *vajeekarana* drugs as per *sharangadhara*, other categories being *shukrajanana pravarthaka*, *shukra pravarthaka* and *shukra rechaka*.

There are many modern studies that prove the *shukrala* property i.e. effect on reproductive system²⁷ of *Ashwagandha*. *Withania somnifera* root water extract studied on follicular development and serum level of FSH and LH showed significant changes in gonadotropine level with a significant increase in ovarian weight and folliculogenesis. It also showed a significant increase in body weight in animal study. *Ashwagandha* is also known to increase libido in males and in females.

CONCLUSION

In this article all the information regarding *Ashwagandha* is being meticulously collected from our ancient text books all of which reveals the importance of *Ashwagandha* in our ancient science, *Ayurveda*. *Ashwagandha* belonging to *shukrala* group of *Vajeekarana dravyas*, rightly meets all the requirement of a *vrshya dravya*. Modern research works has also proved the *vrshya* action of *Ashwagandha*. Such kind of research studies can also extended to the known substitutes of *Ashwagandha* like *Kakoli*, *Ksheerakakoli* and *Medha* to know its efficacy as *vajeekarana oushadha* in the place of *Ashwagandha*.

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REFERENCES

1. http://www.lef.org/magazine/2006/6/report_ashwa/page-01
2. NIIR Board of Consultants and Engineers. The Complete Book on Jatropha (Biodiesel) with Ashwagandha, Stevia, Brahmi and Jatamansi herbs (Cultivation, Processing & Uses). Delhi: Asia Pacific Business Press Inc; 2006.
3. Sivarajan V.V, Indira Balachandran. Ayurvedic drugs and their plant sources. vol 1, New Delhi: Oxford & IBH Publishing CO.PVT.LTD ;1994, P63
4. Sharma P.V. Namaroopavijnanam. 1sted. Varnasi: Sathya Priya Prakashan; 2000. P18
5. Kumaraswamy R. Ethnopharmacognostical Studies of the Vedic Jangida and the Siddha Kattuchooti as the Indian Mandrake of the Ancient Past. Curare 3. 1985:109-20.
6. Dr Shastry. J.L.N. Dravya Guna Vijnana. Varnasi: Chaukambha Orientalia; 2005. P 375
7. Agnivesha. Charaka Samhitha. 4thed. Acharya VYT, editor. Varnasi: Chaukambha Sanskrit Sansthan; 1994.
8. Susruta. Susrutha samhitha with Nibandhasangraha comentary. 9th ed. Acharya VYT, editor. Varnasi: Chaukambha Orientalia; 2007.

9. Vagbhata. Ashtangasamgraha, vol2. Varnasi: Chaukambha Orientalia; 2009.
10. Vagbhata. Ashtangasamgraha, vol 3. Varnasi: Chaukambha Orientalia; 2012.
11. Vagbhata. Ashtanga Hrdayam vol 2. Varanasi: Chowkaba Krishnadas Academy; 2012.
12. Vagbhata. Ashtanga Hrdayam vol 3.5th ed. Varanasi: Chowkaba Krishnadas Academy; 2009.
13. VrndhaS.M. Vrndha Sangraha. Bombay: Anandha Soman Press; 1894.
14. Chakrapani. Chakraduttam. 27 ed. Kollam: S.D Reddiar and sons; 2010.
15. Vangasena. Chikitsasara Samgraha. Saxena D N, editor. Varnasi: Chaukambha Sanskrit Series; 2004.
16. Sarngadhara. Sarngadhara Samhitha. Varnasi: Chaukambha Orientalia; 2010.
17. Kaiyadeva. Kaiyadeva Nighantu. 1st ed. Sharma PP, editor. Varnasi: Chaukambha Orientalis; 1979.
18. Madanapala. Madanapala Nighantu. Tripaty PHP, editor. Varnasi: Chaukambha Orientalia; 2009.
19. Pandit SN. Raja Nighantu. Indradev DT, editor. Varanasi: Chaukambha Orientalia; 2012.p112
20. Dr.Kamat S.D. Studies on Medicinal Plants & drugs in Dhanwanthari Nighantu. Delhi: Chaukamba Sanskrit Pratishthan; 2002.P 105
21. Bhavamishra. Bhavaprakasha Nighantu Varanasi: Chaukambha Krishnadas Academy; 2011.P258 Sanskrit Pratishthan; 2002.P105
22. Gogte VVM. Ayurvedic Pharmacology & Therapeutic Uses of Medicinal Plants. Dravya Guna Vignyan. New Delhi: Chaukhambha Publication; 2009.
23. Sharma P.V. classical uses of medicinal plants.1st ed. Varanasi: ChaukambhaVishwabharathi27
24. Bhisagratna GD, Bhaishajya ratnawali. Bhisagratna Shri Brahma Shankar Mishra editor. Varnasi: Chaukambha Sanskrit Sansthan; 2008.P83.
25. Yogaratnakara Par 1. Kumari DA, editor. Varnasi: Chaukambha Vishwabharati; 2010.P193.
26. Neeraj Tandon, Madhu Sharma. Quality Standards of Indian Medicinal Plants. Vol 9, Medicinal plants unit Indian council of medical research New Delhi; 2010, p 359-361.
27. Mukund Salim V.D. Chemistry and pharmacology of Ayurvedic medicinal plants, 1sted. Varanasi: Amarabharathi Prakashan; 2006.P383

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