



International Journal of Research in Academic World



Received: 05/September/2023

IJRAW: 2023; 2(10):17-19

Accepted: 01/October/2023

A Comprehensive Ayurvedic Literary Review on Ashwagandha (*Withania Somnifera*)

*¹Dr. Debabrata Ghosh, ²Dr. Lawsree Majumder and ³Dr. PB Kar Mahapatra

¹Lecturer, Department of Kayachikitsa, IPGAE&R at SVSP Hospital, Kolkata, West Bengal, India.

²Reader, Department of Roga Nidan and Vikriti Vigyan, IPGAE&R at SVSP Hospital, Kolkata, West Bengal, India.

³Reader Department of Kayachikitsa, IPGAE&R at SVSP Hospital, Kolkata, West Bengal, India.

Abstract

Ayurveda, the ancient most medical science, dealt with several components of natural sources in the prevention and cure of diseases. The observations of Indian sages have also been documented in their texts like Charak Samhita, Sushruta Samhita, and Nighantus etc. The herbal components for medicine have got a wide area towards use in therapeutics. Ashwagandha is one of the most useful herbal component has been mentioned by Ayurvedic ancestors and modern treties as rasayana (rejuvenator/immunity enhancer) besides its actions as *Shayabik Uttejana prasamak* (neuro sedative), *Vedanasthapak* (analgesics) and *Medhya* (intellect promoter) etc. In present article it has been tried to review all these important classical texts to find out those claims regarding the properties, actions, therapeutic uses in a methodical and scientific manner. The Ayurvedic texts of Samhita period, Samgraha period, medieval period and modern period have been taken into consideration towards gathering the information regarding Ashwagandha.

Keywords: *Ashwagandha*, *withania somnifera*, ayurveda, neuro-sedative, analgesics

Introduction

The plant Ashwagandha has been described in Baidyak Kalpa of Atharva Veda for the first time. The herb *Ashwagandha* is an indicator of a particular animal as well as his action. Ashwa, the word is an indicator of an animal who can be able to travel a long distance fast with proper food and drinks. Since ancient time, it has been traditionally used in Ayurvedic medicine as *balya*, *vatasamak* and *rasayana*. Root of this plant has been used widely as an aphrodisiac, diuretic, anthelmintic and stimulant. In modern time *Ashwagandha* is used for various kinds of disease processes especially as a nervine tonic. Considering all these facts many scientific studies were carried out and specially its anti-stress activities have been established. *Ashwagandha* shows significant protection against stress induced gastric ulcer. It has a cognition promoting effect over children as well as in aged people. It is also useful in neurodegenerative diseases such as Parkinson's, Alzheimer's diseases etc. It has anxiolytic effect and it improvises vigor and vitality. It has an anti-inflammatory and anti-arthritic effect and is found to be useful in Rheumatoid arthritis, Osteoarthritis, Spondylitis, Frozen shoulder and Sciatica syndrome etc. *Ashwagandha* improves the defensive mechanism of human body against disease process by improving and modulating the immunity

and its antioxidant properties can make a protection against cellular damage which are caused by free radicals.

It is generally used as powder form either in single or with combination.

In present study it has been tried to gather all those information which are mentioned in ancient Ayurvedic literatures like Charaka samhita, Sushruta samhita along with the textual references of medieval period viz. the Nighantus which are known as Ayurvedic pharmacopeia like Raj Nighantu, Kaiyadeva Nighantu, and Dhanwantari Nighantu etc. As Ashwagandha was used in different formulations of Ayurvedic medicines of Samgraha period its single use on that period was limited. Because of this mainly Nighantus and modern uses of Ashwagandha have been taken into consideration. The data rather information have been framed and placed in a methodical and scientific manner for better understanding of the readers.

Materials and Methods

The present study has been conducted with certain materials and methods where text books like Charaka samhita Sushruta samhita Bhavaprakash Nighantu, Dhanwantari Nighantu, Kaiyadeva Nighantu, Shaligram Nighantu, Raj Nighantu and Priya Nighantu are considered as materials. Through review towards collection of data regarding botanical description,

habitat, morphological character, properties of the drugs as per Ayurvedic pharmacodynamics like rasa, guna, virya, vipak, prabhav etc., therapeutic action and uses, doses, preparatory forms, and chemical constituents have been done and those have been presented here in table and charts.

Result and Observations

Varga

In Ayurvedic Nighantus Ashwagandha has been found to be grouped under following Vargas:

Nighantu	Varga
Dhanwantari Nighantu	Guruchyadi
Madanpal Nighantu	Abhayadi
Kaideva Nighantu	Osadhi
Raj Nighantu	Satahvadi
Bhabprakash Nighantu	Guruchyadi
Saligram Nighantu	Guruchyadi
Priya Nighantu	Satapuspadi

Kind and Varieties

There are two kinds of plant viz. wild (*Vanya*) and cultivated (*Gramya*). The cultivated plant is marketed and used commonly in medicine especially for internal use. The wild plant roots possessing sedative, diuretic and other properties are preferred only for external application; both varieties also differ phytochemically [1].

Pharmacology and Therapeutics

There are some differences of opinion of the scholars of Ayurveda regarding the properties of *Ashwagandha* which is being reflected in Table 01.

Table 1: Showing properties of *Ashwagandha* as per different classics

Properties	D.N ²	M.N ³	K.N ⁴	R.N ⁵	B.N ⁶	SG.N ⁷	P.N ⁸	N.R ⁷
Guna: Laghu	-	-	-	-	-	-	-	+
Rasa: Katu Tikta	-	-	-	+	-	-	-	+
Kasaya	+	+	+	-	+	+	-	+
Virya: Usna	+	+	+	+	+	+	+	+

The attributes and actions of *Ashwagandha* as found in various Ayurvedic literatures are given in the following Table 02:

Table 2: Showing attributes and actions over dosha of *Ashwagandha* as per different classics

Action	D.N ²	M.N ³	K.N ⁴	R.N ⁵	B.N ⁶	SG.N ⁷	P.N ⁸	N.R ⁷
Dosa								
Vatahara	+	+	+	+	+	+	+	+
Pitta hara	-	-	-	-	-	-	-	-
Kapha hara	+	+	+	-	+	+	-	+

On the basis of the quality and attributes the drug is indicated in various pathological conditions of the body are presented in the following Table 03

Table 3: Showing attributes and Ayurvedic pharmacological actions of *Ashwagandha* as per different classics

Action	D.N ²	M.N ³	K.N ⁴	R.N ⁵	B.N ⁶	SG.N ⁷	P.N ⁸	N.R ⁷
Balya	+	+	+	+	+	+	+	+
Vajikara	-	-	+	-	-	-	+	-
Vrisya	+	-	+	-	-	-	+	+
Dhatuwardhak	-	-	-	-	-	-	-	+
Rasayan	-	+	+	-	+	+	+	-
Atisukrala	-	+	-	-	+	+	-	-
Kantiprada	+	-	-	-	-	-	-	+
Jara	-	-	-	-	-	-	-	+

The therapeutic indications of *Ashwagandha* as revealed in the different Ayurvedic literatures are focused in the following Table 04:

Table 4: Showing the therapeutic indications of *Ashwagandha*

Name of the Diseases	D.N ²	M.N ³	K.N ⁴	R.N ⁵	B.N ⁶	SG.N ⁷	P.N ⁸	N.R ⁷
Kasa	-	-	+	+	-	-	-	+
Vrana	+	-	+	+	-	-	-	+
Sopha	-	+	+	-	+	+	-	+
Kandu	-	-	+	-	-	-	-	+
Visa	+	-	+	-	-	-	-	+
Switra	-	+	+	-	+	+	-	+
Krimi	-	-	+	-	-	-	-	+
Swas	-	-	+	+	-	-	-	+
Kshaya	+	+	+	+	+	+	-	+
Kshata	-	-	+	-	-	-	-	+

Chemical Constituents

The main active constituents are alkaloids and steroidal lactones. These include tropine and cuscohygrine. The leaves contain the steroidal lactones, withanolides, notably withaferin A. The roots contain withaferin A and several other steroidal lactones including pharmacologically active withanolides and saponins [9].

Recent Studies

Numerous animal and human studies were conducted by the scholars of modern time. Root powder or different alcoholic extract had been used during the course of the studies. Root powder showed increase in stress induced decrease in peripheral Total Erythrocyte Count, Total Leukocyte Count, Haemoglobin, Serotonin, High Density Lipoprotein (HDL) and Low Density Lipoprotein (LDL) in animal study. It acts on stress induced increase in peripheral Cortisol, Epinephrine, Blood Glucose Alanine aminotransaminase (ALT), Aspartate aminotransferase (AST), creatinine, Triglycerides, IL-6 in horse. Significant protection against stress-induced ulcers was also observed in rats. It could also be a potential source of hypoglycemic, diuretic and hypocholesterolemic agents [10]. Research on *Ashwagandha* has concluded that extracts of the plant has a direct spermatogenic influence on the seminiferous tubules of immature rats presumably by exerting a testosterone-like effect [11].

Different Reputed Classical Preparations found in Ayurvedic Pharmacopoeia

Ashwagandharista, Ashwagandga ghrita, Ashwagandha leha, Ashwagandha taila

Discussion

The present article has been dealt with the pharmacological action and therapeutic uses of Ashwagandha. Almost all the authors of ayurvedic Nighantus (ayurvedic pharmacopoeia) have described the herb as a potent balya (strength enhancer), brimhaniya (nutritious), Rasayana (rejuvenator), snayabik uttejana prasamak (neuro-sedative), medhya (intellect promoter), smriti Shakti bardhak (memory booster), vajikarak (Aphrodisiac), sukra bardhak (spermatogenic), kapha-vata samak (pacifies aggravated kapha and vata), shool prasamak (antispasmodic), kusthaghna (cure skin diseases) etc. It is evident that the properties which are present in Ashwagandha root are snigdha (unctuous) and laghu (light). Due to this Snigdha and laghu guna in natural course it will nourish bodily dhatus like rasa, rakta, mamsa, meda, asthi, majja and sukra. So the claim of our ancestors is justified that it is spermatogenic and it has the role against decaying of the dhatus. Simultaneously Ashwagandha is usna or hot in virya (potency), so by this property it could counteract the shita guna of vayu. As Ashwagandha is carrying the rasa (taste) katu (pungent), tikta (bitter), kashaya (astringent) and madhura¹ (sweet) so, in usual course katu, tikta, kashaya rasa have the ability to combat the aggravated kapha dosha and simultaneously by madhura rasa it could pacify vata dosha.

This is the unique effect of Ashwagandha where kapha and vata both could be pacified by this drug inspite of opposite quality of kapha and vata. As kshaya or decaying usually happens in aggravation of vata, so logically by adding of Ashwagandha that kshaya or degeneration could be arrested. Therefore the claim of our ancestors regarding the rasayana effect of Ashwagandha is justified. As Ashwagandha have the property like snigdha, in this regard it could also minimize the stress level over indriyas (sense organ) and Mana (mind) rather mastiska (brain).

Spermatogenic effect of Ashwagandha is justified with the evidence of Madhura rasa in its root and as previously it has been stated that it nourishes the dhatus. So quality sperm could also be produced by adding Ashwagandha. With the properties of usna virya and madhur rasa it has ability to reduce pain. All sorts of skin diseases have features like spreading, itching, discoloration, secretion or dryness of skin. By reducing aggravated kapha and provokated vata it could arrest all such features like spreading, itching, discoloration, secretion or dryness of the skin. Therefore claim like kusthaghna action of Ashwagandha is again justified as per the pharmacodynamic action of Ashwagandha as stated by our ancestors. Ashwagandha minimizes stress level, enhances memory, soothes sense organs, produces sperm and improves vigor and vitality by storing the vital force or energy in its root.

Common part of use of Ashwagandha is root which is used in the form of churna, kashaya, leha, ghrita, paka, kshara, taila, arista and those have been valued by the ayurvedic practitioners from the ancient era to till date in the Welfare of the suffering humanity.

Nowadays Ashwagandha is so much popular that the common people are taking regularly to enhance their vitality specially after COV-19 pandemic situation its use have been raised markedly as immune boosting agent. Few clinical and experimental studies have been conducted to evaluate its

immunomodulating action and found satisfactory. The national and multinational companies are using this herb in their health promoting and preventing products. As Ashwagandha is vatahara, so all such Ayurvedic preparations are composed with the said herb for its dual effect i.e., a) Shoolhara (anti spasmodic/analgesic), and b) Kshaya nasak (anti decaying) action. In lifestyle disorders, musculoskeletal disorders, geriatric healthcare and also in aphrodisiac purpose its uses are highly recommended by ayurvedic experts.

Other parts of use of Ashwagandha like mature fruit (berry), leaf are also useful as mutrala, kusthaghna, branaropak but those is rarely applied.

In present era Ashwagandha is called as Indian ginseng after being consider it with the therapeutic or immune boosting and body building or nourishing effect of the Chinese/Korean herb ginseng. After vivid literary review it has been revealed that Ashwagandha is very much useful and potent in this era to combat psychological stress and physical debility in a cost effective, bio friendly manner.

Conclusion

From above discussion it can be concluded that Ashwagandha has multi-dimensional effect over nourishment of body, enhancement of intellect, boosting of immunity and curing of skin ailments by pacifying aggravated kapha and vata.

References

1. Pandey G: Dravyagunavijnana, Part-1, Krishnadas Academy, Varanasi, First edition, 244.
2. Sharma Priyavrata Dhanwantari Nighantu Chaukhamba Orientalia, Varanasi, Reprint edition-(2012), Guruchyadivarga, Sloka 262-263, 64
3. Shastri JL N, Madanpal Nighantu, Chaukhamba Orientalia, Varanasi, First edition (2010), Abhyadivarga, Sloka 173-174, 132
4. Sharma Priyavrata, Sharma Guruprasada. Kaiyadeva Nighantu, Chaukhamba Orientalia, Varanasi, Reprint edition-(2009), Osodhivarga, Sloka 1044-1046, 193
5. Tripathi Indradeo; Raj Nighantu; Krishnadas Academy, Varanasi, Second edition (1998), Satahvadi varga, Sloka-109-112, 83
6. Singh Amritpal; Vhavaprakash Nighantu; Chaukhamba Orientalia, Varanasi, First edition (2007), Guruchyadivarga, Sloka-180-181, 111.
7. Vaishya Shree Shaligram; Saligram Nighantu; Khemraj Shrikrishnadas Prakashan, Mumbai (1997), Guruchyadivarga, 293-294.
8. Sharma Priyavrata, Priya Nighantu, Choukhamba Surbharati Prakashan, Varanasi, First edition (1983), Satapuspadivarga, sloka, 110, 95.
9. Sharma PC, Yelne MB, Dennis TJ *et al*; Database on Medicinal plants used in Ayurveda, Central Council for Research in Ayurveda and Siddha. 2005; 3:90
10. Speers Alex B, Cabey Kadine A *et al*; Effects of *Withania somnifera* (Ashwagandha) on stress and the Stress related Neuropsychiatric Disorders Anxiety, Depression and Insomnia
11. www.ncbi.nlm.nih.gov
12. Ambiye Vijay R, Langade Deepak *et al*; Clinical Evaluation of the Spermatogenic Activity of the Root Extract of Ashwagandha (*Withania somnifera*) in Oligospermic Males: A Pilot Study
13. <https://www.ncbi.nlm.nih.gov/pmc>.