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"Jivak (*Microstylis wallichi*) An Endangered plant species of Asthavarga- Mentioned in Jivaniya Gana"

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Abstract:
Medicinal plants can be used to successfully make both conventional and alternative medicines. It is challenging to standardize plant products because of their diverse composition, which can be found in whole plants, plant parts, or extracts made from them. To ensure the consistent quality of herbal medications, it is imperative to appropriately manage the starting material. A plant called Asthvarga is present among them. Two of the eight ingredients in the vitality-boosting polyherbal ayurvedic preparation "Astavarga" are jeevak (Malaxis acuminata D.Don), a critically endangered medicinal plant family. The botanical identities of these plants are somewhat unclear and confusing in the literature on ayurveda. In Jivaniya mahakashaya and Balya Mahakashaya, Acharya Charak makes reference. The genus Malaxis is one of the Orchidaceae family's plants that has a great affinity for the land. There are about 200 species of this genus in the globe, and most of them are found in tropical alpine habitats close to mountains. The author of this research article covered every detail on jeevak (Malaxis acuminata D.Don).

Keywords- Ayurveda,Asthavarga,Jivak, *Microstylis wallichi*

Introduction-

As the "oldest medical system known to man and the oldest and most comprehensive spiritual teachings in the world," Ayurveda holds this distinction. The foundation of Ayurveda is in the idea that a person may lengthen their life by keeping their body, mind, and spirit in balance[1]. Ayurveda uses natural therapeutic compounds that are safer for the human body than allopathy, which uses harsh chemical substances. Instead of using a "offensive strategy," Ayurveda focuses on strengthening the host body's ability to withstand a variety of physical and psychological strains. Ayurveda focuses on eating, breathing, digestion, thoughts, memory, and sleep in order to understand the underlying causes of disease. These are simple methods that can be used to improve one's health [2].

The mixture of different substances that were collected for bodily nutrition, antioxidants, a group of eight energizing plants known as ASHTAVARGA, jeevaniya (vital enhancement), and vaysthapan (revival of young condition) was used in the preparation. They served as the proportionate component of the mixture known as chyavanprash. Ashtavarga is a blend of eight herbs that are used to guarantee energy and endurance. Consequently, it raises a person's rate of morbidity[3]. Eight of these plants, collectively referred to as "Ashtavarga," are used in the composition of chyavanprash. These stimulating qualities are associated with both convalescence and the pharmacological domain of treatments. [4] These herbs work to strengthen the weaker and more vulnerable bodily

regions while also revitalizing the body's dead cells. They were successfully utilized in the making of the renowned "CHYAVANPRASH," which was used to treat Chyavan Rishi's sick, elderly body and restore its young vigor. [5]

Malaxis acuminata, often known as Jeevak, is a plant that grows worldwide and is a member of the Orchedaceae family. One of the most often used terrestrial medicinal orchids is Malaxis acuminata. The forests of Banj-oak, mixed-oak, and oak pine have the highest density of Jeevak. This species forms colonies, with five to twenty-five individuals per colony. Malaxis accuminata establishes colonies in areas that are damp and covered with moss, as well as in shaded spots.[6]

Scientific Classification: [7]

Kingdom- Plantae
Division-Tracheophytes
Clade- Angiosperms
Clade- Monocots
Order- Asparagales
Family-Orchidaceae
Genus- Microstylis
Species- M. wallichi
English Name: The gradually tapering Microstylis,
Sanskrit/ Hindi Name: Jeevak

Habit: A terrestrial, pseudo bulbous, 5-25 cm in height, perennial, tender herb.

Habitat: It is found in the Andaman Islands, Travancore, Anamallay hills, Madhya Pradesh, and the temperate and subtropical Himalayas of India, ranging in elevation from 1200-2100 m in Himachal Pradesh, Uttarakahand to Arunachal Pradesh, Assam, Nagaland, Manipur, Mizoram, Tripura, and the Khasi hills at an elevation of 1500-1800 m. Additionally, it can be found up to 1400 meters high in South-East Asia, China, and Cambodia.[7]

Botanical characteristic features: This plant has an underground stem with spreading, ribbed fibrous roots that descend; leaves that are usually 2-4, sessile or petioled, 7.5-12.5 cm long, ovate-lanceolate, often discolored, light green, acute with prominent veins; leaves in whorls on the nodes directly raised upwards, angular, attenuate; flowers that are small, shortly stalked in terminal racemes, about 10 mm in diameter, yellowish-green with a purple center; bracts that are spreading shorter than the ovary oblong sepals with recurved borders, dorsal 1-3 nerved, lateral 3-5 nerved, and two lateral segments that are shorter than the dorsal; Petals: linear, slender, longer than sepals; margin recurved; lip-5; shield-like, slightly convex; tip rounded, notched or bilobulate; adnate to the base; the lip's column sides produced upwards into large auricles; the lip's auricle very variable, acute or obtuse, straight and slightly overlapping; staminal column: very short with short spreading arms; anthers: subterminal, pollinia-4; fruits: six chambered capsule; seeds: minute, powdery, ovoid; pseudobulbs: pseudobulbs are 3-9 cm long and 1-3 cm in diameter, conical, fleshy, smooth, shining, in pairs; the new ones resemble cloves of garlic, greenish-white, covered in a membranous sheath, slightly mucilagenous, and remain alive for a longer amount of time.[9]

Furthermore, certain species of the genus Malaxis have the ability to grow in rocks and epiphytically. The term "Malaxis" refers to the flexible look of plant leaves in the genus Malaxis and comes from Greek literature. This genus, which is mostly found in the western Himalayas, has not been studied as much as other members of the Orchidaceae family. The lack of proper production, the supply chain, and the growing demand for herbal medications are the primary factors promoting the practices of adulteration and substitution. Therefore, standardizing herbal medicines is essential to ensuring their therapeutic efficacy.[10]

Flowering: July-August. **Fruiting:** September-October.

Active principles: Its pseudobulbs include β-sitosterol, flavonoids, glycosides, and alkaloids. contains limonene, p-cymene, ceryl alcohol, 1, 8-cineole, citroenellal, eugenol, glucose, rhamnose, coline, limonene, and ceryl alcohol in addition to piperitone.[11]

Properties & Action: The pseudobulbs are sweet, refrigerant, aphrodisiac, ferbrifuge and tonic.

Ayurvedic Properties-

The literature includes screening of classical *Ayurvedic* literature, contemporary literature, modern literatures, journals and internet sources etc. to collect adequate data for the study purpose. The properties of Jeevak (*Malaxis acuminata* D.Don) is mentioned in Dhanwantari Nighantu, Raja Nighantu and Kaiyadeva

Nighantu, Madanpal nighantu & Bhavaprakash nighantu. [12]

Properties	Jeevak
Microstylis wallichi	
Family	Orchidaceae
Rasa	Madhur
Guna	Guru
Veerya	Sheeta
Vipaka	Madhur
Dosa Karma	Vaat-pitta Shamaka
Karma	Jivaniya, Brighaniya, shukrajanana,Balya, Snehopaga

Medicinal uses of Jivak (*Microstylis wallichi*) in Ayurvedic Text-: [13,14,15,16,17,18]

1. It helps with general debility, emaciation, dipsia, fever, seminal weakness, burning feeling, and tuberculosis.
2. In test animals, the pseudobulb's ethanolic extract demonstrated analgesic and anti-inflammatory properties.
3. A powder made from Jeevak and other herbs combined with the right amount of honey and crystal sugar can be applied to treat heart conditions and cough.
4. When taken in the right dosage, ghrita processed with Devadaru, Kakoli, Jeevak, and other medicinal plants is helpful in treating infant malnourishment.
5. Mahapadma taila, when combined with jeevak and other herbs, can help treat fever and gout.
6. Jivaniya ghrita prepared with jeevak is beneficial for gout and other persistent vata-related illnesses that affect the entire body.
7. The toxicity of a snake bite can be decreased by externally applying Himavana Agada, which is made with the powder of pancavalkala, jeevak, and other plants combined with honey.
8. Asthapana vasti combined with jivaka and other therapeutic herbs can be used to cure malaria and anemia.

Part used: Pseudobulb

Formulations: Astavarga churna, Chyavanprash rasayan, Chitrakadi taila, Vachadi taila, Mahakalyan ghrita, Mahamayura ghrita, Mahapadma taila, Jivaniya ghrita, Vajikaran ghrita, Brahini gutika and Himvana agada.

Substitutes: Guruchi (Tinospora cordifolia (Willd.) Miers), Safed behmen (Centaurea behen Linn.), and Vidari kand (Pueraria tuberosa (Willd.) DC). In substitute of Jeevak, two species of Malaxis found in the North-West Himalaya (Uttarakhand) are Malaxis cylindrostachya (Lindl.) Kuntze and Malaxis mackinnoni (Duthie) Ames.[19,20]

Discussion- Microstylis wallichi, often known as jeevak, is a highly significant Asthvarga plant that is rare, endangered, and valued for its medicinal properties. Furthermore, it is a significant ethnomedicinal herb. To gather sufficient data for the study, a variety of literary sources, including journals, the internet, and classical and contemporary Ayurvedic literature, were screened. According to Dhanwantari Nighantu, Raja Nighantu, Kaiyadeva Nighantu, Madanpal Nighantu, and Bhavaprakash Nighantu, Jeevak (Microstylis wallichi) has certain qualities. It is used as a refrigerant, aphrodisiac, in bug bites, rheumatism, as a tonic, in general debility, burning feeling, coughing, decrease in bone tissue, blood problems, and TB. It's an essential part of the Ayurvedic prescription "Astavarga," marketed under the name "Jeevak," which signifies life's vitality.

Conclusion- Microstylis wallichi, also known as jeevak, is a significant Astavarga plant. It has a great deal of therapeutic promise. Anthraquinones, coumarin, flavonoids, steroids, bitter principles, and essential oils were found to be present in the methanol extract, according to the study. use of Microstylis wallichi in numerous Ayurvedic formulations as a possible health rejuvenator and anti-aging agent. Studies on Jeevak's pseudobulb extract (*Microstylis wallichi*) have demonstrated the presence of antioxidant activity. has enormous therapeutic potential, however further research is needed to identify and isolate the bioactive components in order to create an anticancer medication soon.

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References-

1. Kumar V, Antil M, Kumar D, Minocha N, Ankur. Importance of ayurvedic medicine in modern lifestyle: A

keynote review study. International Journal of Advanced Educational Research,2016:1(4):31-33.
2. Nandha R, Singh H. Amalgamation of ayurveda with allopathy: A synergistic approach for healthy society. International Journal of Green Pharmacy,2013:7173-176.
3. Rao RR. 1994. Traditional knowledge and sustainable development key role of ethnobiologists. Ethnobotany. 8:14–24.
4. Pant B. Medicinal orchids and their uses: Tissue culture a potential alternative for conservation. African Journal of Plant Science 2013;7: 448–67. https://doi. org/10.5897/AJPS2013.1031
5. Chunekar KC. Bhav Prakash Nighantu. Varanasi, India: Chaukhambha Bharti Academy; 1982.
6. Naithani, B.D. 1985. Flora of Chamoli. Vol. II. Howrah, Botanical Survey of India, Department of Environment.
7. HUTCHINSON J. 1973. The Families of Flowering Plants. Oxford University Press, Oxford.
8. Nautiyal, A.R., Nautiyal, M.C., Purohit, A.N. 1997. Harvesting Herbs-2000: Medicinal and Aromatic Plants-An Action Plan for Uttarakhand. Proceeding of a Seminar on Harvesting Herbs-2000. Bishen Singh Mahendra Pal Singh, Dehra Dun, p. 196.
9. Hooker, J.D. 1997-1999. Flora of British India. Bishen Singh Mahendra Pal Singh 23-A, New Connaught place, Dehradun, 248001, India. (Vol. V-VI) (reprints).
10. Osmaston, A.E. 1978. A Forest Flora for Kumaon, Bishen Singh Mahendra Pal Singh, Dehradun, India.
11. Sharma, Alok., Reddy, G.D., Kaushik, Atul., Shanker, K., Tiwari, R.K., Mukherjee, Alok., Rao, Ch.V. 2007. Analgesic and anti- inflammatory activity of Carissa carandas Linn. fruits and Microstylis wallichii Lindl. tubers. Natural Product Sciences, 13(1): 6-10.
12. Chunekar, K.C., Pandey, G.S. 2006. Bhavaprakasa Nighantu, Chaukhambha Bharti Academy, Varanasi.
13. Sharma, Pushpa., Mahajan, Nipun., Garg, Pankaj., Singh, Gurkirpal., Dadhwal, Sumit., Sharma, Sakshi. 2011. Malaxis acuminata- A review, International Journal of Research in Ayurveda & Pharmacy, 2(2): 422-425.
14. Pandeya G, Sashtri K (2011) Charaka Samhita (part I) (Sanskrit-Hindi) Chaukhambha Bharatee Academy, Varanasi, India, pp: 587.
15. Balkrishna A (2012a) Secrets of Astavarga Plants (for vitality and anti-aging). Haridwar, Uttarakhand, India: Divya Prakashan, Patanjali Yogpeeth,.
16. Balkrishna A, Misra LN (2017a) Ayurvedic plants in brain disorders: the herbal hope. J Tradit Med Clin Natur 6(2): 1-9.
17. Giri L, Belwal T, Bahukhandi A, Suyal R, Bhatt ID, et al. (2017) Oxidative DNA damage, protective activity and antioxidant potential of Astavarga species growing in the Indian Himalayan region. Indust Crops Prod 102: 173-179.
18. Chunekar KC (1969) Vanaspatika Anusandhan Darshika, Vidya Bhavan, Varanasi, pp: 1
19. Rajashekhar I, Rathod H, Desai H (2015) A short review on astavarga plants-losing their existence. Int J Ayur Pharma Res 3(7): 32-38.
20. Chunekar KC, Pandey GS (2006) Bhavaprakasa Nighantu, Chaukhambha Bharti Academy, Varanasi, India.