



Review Article

SIBR (ALOE BARBADENSIS MILLER.), A POTENT HERB OF UNANI MEDICINE: A REVIEW

Amena Khatoon¹, Ashfaque Ahmad², Mohd Azeem³

¹Maulana Azad National Urdu University, Hyderabad, india

²National Institute of Indian Medical Heritage, Hyderabad, india

³Unani consultant, Hyderabad, india

Correspondence should be addressed to **Amena Khatoon**

Received March 11, 2015; Accepted March 21, 2015; Published March 28, 2015;

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Cite This Article: Khatoon, A., Ahmad, A., Azeem, M. (2015). Sibr (Aloe Barbadensis Miller.), A Potent Herb of Unani Medicine : A Review. International Journal of Ethnobiology & Ethnomedicine, 1(1). 1-5

ABSTRACT

Unani System of medicine is universal in its origin and exists into south Asian countries particularly in India. In this system most of the treatments depend upon plants. Unani Drugs consist of naturally occurring mostly herbal medicine. India has such a diverse climate that many kinds of medicinal herbs and plants are available in this country. Among them one is Sibr (*Aloe vera* Linn.). Sibr, also known as the 'plant of immortality' by the ancient Egyptians, was used for its healing properties since time immemorial. It is known for its succulent or fleshy leaves. This nontoxic plant stores water in its leaves and survives in low rainfall and arid regions. Aloe Vera leaf looks unique; it doesn't have any stems and the edges of leaves have tiny spikes. It has detailed descriptions in *Unani Literatures*.

KEY WORDS: Sibr, Drug review, Unani Literature

INTRODUCTION

Drug Sibr consists of dried juice of leaves collected from transversely out bases of large leaves of various species of *Aloe vera* which is a shrub planted in many Indian gardens and found growing throughout India. It is dark chocolate brown to black, compact, irregular masses, surface dull, opaque with slightly vitreous appearance, characteristic odor, nauseous and bitter taste. Many varieties are cultivated throughout India for the commercial production. *Aloe vera* is a drug which has been used for many years. It has been described by first century Greek physician Dioscorides (40-90 AD). Latin name: *Aloe Barbadensis* Miller. Family: Liliaceae

OTHER NAMES

- i. **Common name:** Aloe Vera

- ii. **Arabic:** Sibr
- iii. **Persian:** Shab yar, Faiqra
- iv. **English:** Indian Aloe
- v. **Hindi:** Musabhar, Ailva, Ghikvar, Ghrit Kumari
- vi. **Sanskrit:** Kumarirasambhava, Sahasara, Ghritra Kumari, Kanya
- vii. **Telgue:** Musambaramu, Kalabanda
- viii. **Urdu:** Musabbar, Ailva, sibr, Ghikwar
- ix. **Gujrati:** kumar pathu kunawar

HABITAT

It is a native of Arabia and Africa. It is cultivated in India in hedge rows [2]. This is a large genus comprising of species native to Mediterranean regions, Atlantic islands and Madagascar. Other species like "curacad" grown in Egypt, West Indies, Tropical America and in the Netherlands. [3] Many varieties are found in a semi wild state in all parts of India, and also cultivated in ports and gardens.

CULTIVATION

It is cultivated throughout India, such as Mumbai, Gujarat, Mysore and Chennai. It is cultivated in many parts of India, particularly in dried part of the country. Dry or hot climate having light soil, ranging from sandy red with pebbles (Murrum) to Loamy soils under rained / irrigated condition are suitable for its cultivation. [4] Knowing the medicinal uses, it can be grown indoor pots.

TEMPERAMENT

(Mizaj): Hot 2 and Dry 2 [11]. Every drug has its own temperament according to the Unani concept. The temperature depends upon its constituents and its potency.

DESCRIPTION

Aloe vera is Short, stemless, perennial, succulent plant. Leaves are green to gray green, fleshy, toothed on the margins. The inner leaf tissue contains Aloe Vera gel. During summer, pendulous tubular flowers appear on the flower stalk from the main stem. They are green to bright yellow. The margin of the leaf is serrated and has small white teeth. The flowers are produced in summer on a spike up to 90 cm (35 in) tall, each flower being pendulous, with a yellow tubular corolla 2–3 cm (0.8–1.2 in) long. *Aloe vera* forms arbuscular mycorrhiza, a symbiosis that allows the plant better access to mineral nutrients in soil. The leaves are broad, glaucous and spiny in margins lower and upper surfaces the leaf epidermis is smooth, thick and rubbery, mucilaginous pulp is present. [3]



PARTS USED

Flowers, Roots, Mainly the central tissue of the Aloe leaf, which contains Aloe gel.

CHEMICAL CONSTITUENTS

The main constituent is aloin, obtained from the gel in the leaf. The other beneficial constituents are: vitamins A, B1, B2, B3, B6, B12, creatin, creatinine, HDL cholesterol, essential and secondary amino acids, minerals (calcium, zinc, chromium, magnezium, pottasium, phosphorus, iron...). Aloin, isobarbaloin, emodin and resins. [6] Juice contains anthraquinone derivatives like emodin and chrysophanic acid. Leaves contain uronic acid, oxidase, catalase and sugar. Aloe contains crystalline glycoside

barbaloin. [5] Active principle anthracenderivatives, flavonoids aloeresins BC&D aloin. [4] In perri baaker (socotrine). A new glycoside aloinoside which on hydrolysis yielded aloe-emodin has been isolated from the plant. Aloesine and aloesone isolated malic, citric and tartaric acids from leaves. Jelly from leaves composed of four partially acetylated glucomannans which differ in their glucose to mannose ratio and acetyl content. [11]

PHYTO CHEMICAL STUDIES

Aloe is almost used medicinally throughout the world. So the chemical analysis of drug is being carried out. The leaves contain barbaloin, chrysophanol glycoside and the aglycone, aloe emodin. The mucilage of the leaves contains glucose, galactose, mallose and galacturonic acid in addition to an unidentified aldopentose and a protein (0.013%) with 18 amino acids. The plant contains aloesone (7 hydroxychromone c13 h12 O4 mp 150 – 52) and aloesin (c – glucosyl – 7 –hydroxychromene).

RESEARCH

The following studies are carried out:

Pharmacognostic studies, Chemical studies, Pharmacological studies, Biological studies, Anti microbial activity, Anti helminthic activity, Anti oxidant activity, Hypo glycaemic effect, Hypo lipidaemic effect, Anti tumor activity against sarcoma, Anti inflammatory and wound healing, Anti hypertensive, Radio protective, Insecticidal [10][11] Phyto-therapy of diabetes in west Algeria (mapa 12 / 08 vol 30 no6), Antioxidant activity of skin care herbal cosmetic cream lotion, (mapa 2 /08 vol 30 no. 1), 20 indigenous hypoglycaemic substances were documented in north Karnataka (mapa 2 /09 vol 31 no.1). Plant used by the tribes of North West Maharashtra for the treatment of gastrointestinal disorders. (mapa 2 / 09 vol 31 no.1)

PHARMACOLOGICAL ACTIONS

Mudirr-e-Haiz: (An agent which promotes the menstrual blood flow) [19]

Mujaffif (desiccant / siccative): an agent which constricts blood vessels and decreases exudation from them.

Muqawwi Kabid (liver tonic): an agent which strengthens liver Muqawwi Meda wa Ama (stomachic, intestinal tonics)

Mushil e Balgham (phlegmatic purgatives): an agent which expels phlegm through stools. Mushil e Safra (bilious purgatives) an agent which expels bile through stools [8]

THERAPEUTIC USES

Leaves: Qabz, Deedan-e-Ama, Waram-e-Kabid, Wajul-Mafasil, Izm-e-Tehal, [19] Ethebas-e-Tams, Inflammation of spleen, Lumbago, Muscular pain, Indigestion, Piles &rectal fissures, chronic ulcers [6]

Fresh juice: Direct application to eye in ophthalmia, [7] Burns, Wounds, Spleen & liver ailments, fevers, [9]

Dermatitis, Painful inflammation. Dried juice of the leaves used in dysmenorrhea, a gynecological condition that causes painful menstruation, and also for treating liver diseases.

Root: Colic pain, Gel is used for skin care and cosmetic due to its anti inflammatory antibiotics and healing properties. Insect bites, Arthritis, Cosmetics etc. [7]

Pulp mucilage: Intestinal worms, Rheumatism, Skin disorders, Liver disorders. [2] Painful inflammation. *Aloe vera* extracts are also used in food and energy drinks. It is good to drink on empty stomach every morning to get maximum benefits of this plant. It is sold as gel, powder and juice. Fresh juice can be made at home by cutting the leaf and extracting the gel. The scientific epithet 'vera' means true and genuine. So *Aloe vera* derived from the plant will have a tangible impact on the health, hair and skin.

MEDICINAL USE

Aloe Vera has strong healing powers when used both internally and externally. Used internally, *Aloe Vera* stimulates our immune system, helps stomach disorders by improving our digestive system and destroying abusive fungi and bacteria in the intestinal tract. Dried aloe latex, a substance derived from the leaf, is a strong laxative. *Aloe Vera* acts as a pain reliever, due to analgesics in salicylic acid. Used externally, *Aloe Vera* softens the skin, acts as an excellent moisturizing agent, and has a same Ph as the skin. It reaches the deepest body tissues, and therefore has the ability to restore them, proving to be extremely beneficial in the acceleration of the process of wound healing. It can also be used on blemishes and dandruff. *Aloe* had also shown excellent results in treating facial edema. Used as a mouth rinse, it has shown to be very helpful in cases of cold sores and lockjaw. [7]

NUTRITIONAL VALUE

Aloe vera consist as much as 75 nutrients, 20 minerals, 12 vitamins, 18 amino acids and 200 active enzymes. *Aloe vera* contains Vitamin A, B1, B2, B6 and B12, Vitamin C and E, folic acid and Niacin. Minerals include copper, iron, sodium, calcium, zinc, potassium, chromium, magnesium and manganese. The nutrients naturally present in *Aloe vera* makes it a potential herbal product that can be safely used both internally and externally. This exotic plant contains other beneficial compounds like polysaccharides, mannans, anthraquinones and lectins. The presence of these nutrients makes it possible to use *Aloe vera* for variety of therapeutic purposes. *Aloe vera* not only cures the skin, health and hair problems, it so soothing that it also helps you to relax. Let's have a look at various *Aloe vera* uses and benefits. [7][17]

HEALTH BENEFITS OF ALOE VERA

Aloe Vera is highly regarded as a miracle or wonder plant for its healing properties. The various healing properties make aloe vera a favorite choice among organic and fitness enthusiasts. This magical plant is used for the treatment of various kinds of diseases and illness. The health benefits of aloe vera include: [17][18]

Aids Digestion and Treats Intestinal Issues

Aloe vera when taken internally aids in digestion and effectively cleanses the digestive system. It works as a laxative which makes it easier for the food particles to pass through the intestine. Thus it helps those who suffer severe constipation problems. Drinking *Aloe vera* juice regularly helps to detoxify the body which in turns improves daily bowel movements. It alleviates acidity, inflammation and intestinal ulcers. It has a soothing effect on the stomach walls and relieves stomach ache. It also helps to cure Crohn's disease and peptic ulcers.

Boosts Immune Power

It is full of antioxidants, also known as natural immunity enhancers, which help to fight free radicals in the body. Free radicals cause several diseases and ailments which speeds up the ageing process. Consuming *Aloe vera* juice regularly boosts immune system and helps you to stay young and fit.

Treats Inflammation, Wounds and Burns

Inflammation is the body's first reaction to damage. The damage can be caused by physical means or due to chemical reactions. It has been used in Unani Medicine and in the recent times to cure cuts, wounds, burns, abrasions, inflammations and skin breakage. It contains plant steroids which help in reducing inflammation naturally. It also contains salicylic acid and its salts salicylates; it helps to curb inflammation by inhibiting the production of hormones like prostaglandins. Salicylic acid is like aspirin and has the potential of reducing inflammation by destroying the bacteria that cause inflammation. Drinking its juice regularly eases swollen and painful joints and reduces the stiffness of bones. It is excellent for treating scars, burns and cuts. It also soothes wound or cuts and fights bacteria that occur due to wounds. The cooling effect of the plant helps to regenerate new cells and helps in rebuilding the damaged tissue.

Good for Female Reproductive System

Its tonic is wonderful for the female reproductive system. It helps to rejuvenate the uterus. It is very beneficial to drink its juice if you are experiencing painful menstrual cycle. It helps to curb inflammation by inhibiting the production of hormones like prostaglandins. Salicylic acid is like aspirin and has the potential of reducing inflammation by destroying the bacteria that cause inflammation. This versatile plant is also useful for treating respiratory disorders and is particularly useful for those who get frequent attacks of cold, flu, bronchitis herpes, running nose and other respiratory disorders. It contains Vitamin C which helps to prevent colds, cough and flu.

Diabetes

The dried gel of *Aloe vera* is used to treat diabetes as it helps to lower blood sugar level by decreasing insulin resistance and also lowers the triglyceride levels in the liver and plasma. It helps to improve the blood quality naturally by decreasing the levels of cholesterol and triglyceride. Since, it helps to control cholesterol,

triglycerides and blood sugar; it directly helps to prevent cardiovascular disease. It keeps the blood fresh and rich in oxygen.

Metabolism

Its juice also increases energy level and helps to maintain a healthy body weight. Drinking juice regularly stimulates the metabolism and helps the body to burn calories more quickly. So it keeps you slim naturally.

Oral and Dental Health

It juice also helps in maintaining healthy gums and oral hygiene. Its natural anti-bacterial and anti-microbial actions promote cell growth and healing. It gels are also used in a variety of tooth gels which prevent bleeding gums and mouth ulcers. It also provides quick relief to people who experience burning mouth symptoms. Its antifungal properties help greatly in the problem of denture stomatitis, aphthous ulcers, cracked and split corners of the mouth.

Skin Benefits

It has several properties that are effective in treating a variety of skin conditions like flaky or dry skin, cosmetic ailments, and hair and scalp problems. Due to its many uses and benefits to the skin and hair; It has now gained more popularity and has become a staple ingredient in many beauty and skin care products. In order to achieve proper skin restoration, It needs to be applied every day. Applying gel soon after taking a shower is advisable as the skin is clean. Its benefits are surplus and given below are its skin benefits:

Healing of Skin tissues: It is useful in the treatment of various skin diseases like eczema, psoriasis, itchy skin etc due to anti-allergic property. They are helpful in curing blisters, insect bites and other allergic reactions as well. Its face packs are a boon for people who have a sensitive skin type.

Offers Healthy Glow: Drinking juice supplies body with essential nutrients which help to produce and maintain healthy skin. It helps to remove dead cells and replenishes it with new ones, giving the skin a radiant glow. It treats Acne, sunburns & reduces stretch marks, improves skin firmness, lightens skin, beneficial for dry skin. Once applied, it releases natural vitamins and enzymes on the skin to produce a deep moisturizing effect that helps to treat and restore its pH balance. It is helpful in lip care and foot care. Hair Benefits of It: it treats hair loss, itchy and inflamed skin, dandruff, acts as a good conditioner, restores hair's strength and beauty, as a perfect hair rinse it repairs dry and damaged hair and treats alopecia. [17][18]

MUSLEH (CORRECTIVE)

In Unani system corrective means to reduce its adverse effect and to enhance its efficacy, Correctives are: Kateera

(*Sterculia urens* Roxb.) Tragacanth, Gul e Surkh (*Rosa damascene*, Mill.), [13] Mastagi (*Pistacia lentiscum*) [16]

Badal (Substitute): There is no substitute but it has a replacement for certain function like Turbud, turpeth (*Ipoemoca turpethum*) [12]

Dose: 1 to 4 gm

Important Unani Formulations: Zimad-e-Jalinoos, Majoon-e-Antaki, Kohal-e-Bayaz, Habb-e-Muntin Akbar, Habb-e-Mudirr, Habb-e-Ghafis, Iyarji-e-Loghaziya

CONCLUSION

From the above consideration it is evident that *Aloe vera* is a potent Unani herb used therapeutically since antiquity by the Unani scholars in various ailments which is now validated by ethno botanist, phytochemist, pharmacologist etc. Hope now we are going to make *Aloe vera* a part of our daily life.

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