

Review on the Indian drug Aloe vera

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Abstract—Aloe vera is a natural product widely used in cosmetology today. This plant has numerous health benefits, with effects that seem to touch almost every part of the human body. It serves as a natural defense against various infections, acts as a laxative, enhances beauty, can help lower blood sugar levels in people with diabetes.

Index Terms—Aloe vera, health and beauty, skin

Aloe vera has many vernacular names including:

Hindi: Gwar patha or Ghrit Kumari

Sanskrit: Ghrit Kumari

Kannada: Lolesara

Tami: Chottu Katthaalai

Telgu: Chinnakala Banda

Malayalam: khorpad

Plant profile

Kingdom: Plantae

Subkingdom: Viridiplantae

Division: Tracheophyta

Subdivision: Spermatophyta

Order: Aspargales

Family: Asphodelaceae

Genus: Aloe

Species: Aloe vera L.

I. INTRODUCTION

Aloe vera is an important and traditional medicinal plant. It is widely cultivated because of its use as medicinal plant. The word Aloe is derived from the Arabic word alloeh which means bitter and shiny substance. It is a cactus like plant. aloe vera plant is native of Africa, the Arabian Peninsula, And Madagascar the genus Aloe is originated in Southern Africa around 16 million years ago. The Aloe vera leaves can be separated into two basic products the latex, a bitter yellow liquid beneath the epidermis of the leaf and the gel a colourless and tasteless substance in the inner part of the leaf. Both of them have many biologically active components mainly Antraquinones and polysaccharides. Aloe vera can be used in

cosmetic-moisturizers, toothpastes etc, food as flavoring compound or preservative of fresh products and in medicine of humans and animals. There are 420 different plant species of Aloe vera. Aloe vera specially refers to Aloe barbadensis Miller plant.

Aloe barbadensis; It is a plant native to North and East Africa. It is widely recognised for its diverse health promoting skin care and medicinal properties.

Plant Description: Aloe vera is perennial, succulent plant, meaning its leaves store a lot of water. It can grow up to 4feet tall, with tough, fleshy, spear shaped leaves reaching up to 36inches long. The clear, thick gel inside the leaves if often used for treating minor cuts and burns. Aloe vera grows widely in tropical, semi tropical and arid regions around the world.

II. THERAPEUTIC USES

Action of Aloe vera in Digestive Health:

Aloe vera juice is sometimes used to aid digestion and relieve symptoms of conditions like acid reflux, irritable bowel syndrome and constipation. It is believed to have a soothing effect on tract. Aloe vera mouth wash has also demonstrated to be effective in the treatment of stomachitis.

Anti-inflammatory property of Aloe vera:

Aloe vera contains compounds that have anti-inflammatory effects. Which can help to reduce inflammation in conditions like arthritis and other inflammatory disorders. Aloe vera contains Aloin it is related to inhibit cytokines. Aloe vera is used to reduce pain in rheumatoid arthritis. Oral Aloe vera could be used in treatment of chronic non cancer pain, particularly that is caused by osteoarthritis. The gel of Aloe vera plant can be also applied directly on the

swollen and painful joint the gel will provide relief of joint immobility and pain.

Aloe vera extract may be used in eye drops to treat inflammation and other cornea ailment.

Anti diabetic Action of Aloe vera:

Aloe vera gel possesses anti diabetic activity. Adding an Aloe vera gel to the diet of diabetic patient it results in reduction of total cholesterol, triglycerides, fasting and post prandial blood sugar level. For diabetic patient oral administration of one tablespoon of Aloe vera juice, twice a day at least for 2 weeks. Blood sugar, triglyceride level and cholesterol levels were not affected. Aloe vera can improve the body's response to insulin, making insulin more effective.

Wound healing Property of Aloe vera:

Wound healing is dynamic process occurring in 3 phases. Aloe vera is used for the healing of first to second degree burns. The oral administration of Aloe vera influence collagen composition and increased collagen cross linking for wound contraction and improving breaking strength. It also increases synthesis of hyaluronic acid and dermatan sulfate in the granulation tissue of healing wound. Acemannan is considered the main component of Aloe vera. This complex carbohydrate accelerates wound healing and reduces radiation induced skin reactions. Aloe vera gel has been used for the treatment of radiation burns and radiation ulcers.



Wound healing by Aloe vera:

Aloe vera as a Moisturizing and Anti-Aging agent:

Its moisturizing effects have also been studied in treatment of drug skin associated occupational exposure. Aloe vera gel improves the skin integrity than there will be decrease in appearance of acne wrinkle and decreases erythema. The Aloe vera gel gives cooling effect and also acts as a Moisturizing

agent. This property of Aloe vera is because of its biogenic agent. Aloe vera is used as skin tonic in cosmetic industry

Cosmetic and Skin protection Application:

Aloin and its gel are used as skin tonic against pimples. Aloe vera is also used for soothing the skin and keeping the skin moist to help avoid flaky scalp and skin harsh and dry weather. Aloe vera extracts have antibacterial and antifungal activities which may help in the treatment of minor skin infections such as boils and benign skin cysts and it also inhibits the growth of fungi that cause tinea. Currently the plant Aloe vera is widely used in skin care, cosmetic and a nutraceutical.

Antiseptic property of Aloe vera:

The antiseptic property of Aloe vera is due to presence of six antiseptic agents namely lupeol, salicylic acid, urea nitrogen, cinnamonic acid, phenols and sulphur . These compounds have inhibitory action on fungi, bacteria and viruses.

Anticancer property of Aloe vera:

Aloe vera juice enables the body to heal itself from cancer and also from the damage caused by radio and chemotherapy that destroys healthy immune cells crucial for the recovery. Aloe vera emodin and Anthraquinone has the ability to suppress or inhibit the growth of malignant cancer cells makinit to have antineoplastic properties.

Aloe vera used in decreasing Stress Level:

Aloe vera juice is helpful in smooth functioning of the body machinery. It reduces cell damaging process during stress condition and minimized biochemical and physiological changes in the body. Aloe vera is an excellent example of a functional food that plays a significant role in protection from oxidative stress.

Traditional uses of Aloe vera:

Aloe vera has been traditionally used to treat skin injuries (burns, cuts, insect bites, and eczemas) and digestive problems because of its anti-inflammatory antimicrobial and wound healing properties.

Uses of Aloe vera in Ayurveda:

Maharishi Ayurveda recommends Aloe vera for a number of skin problems. According to Ayurveda Aloe vera is used for treating skin, hair and digestive

disorders also it signifies youthful energy, femininity and supports the female reproductive system with is rejuvenating and Anti-inflammatory properties. It is used to prepare various herbal formulation in Ayurveda.

Uses of Aloe vera in homoeopathy:

Aloe vera Mother tincture that is indicated for the treatment of medical conditions. The medicine acts against skin aging and restores shine to hair, skin and nails. It helps to reduce dandruff and embodies antioxidant, antiseptic and antifungal properties. In addition to this it is helpful in the case of diabetes and also improves the metabolic activity of the body.



Uses of Aloe vera in homoeopathy

Precautions and side effects of Aloe vera:

Using Aloe vera is very safe but can cause allergic reactions and skin irritation in some individuals interactions with certain medications such as diabetes and blood thinners. When it is consumed excessively gastrointestinal side effects occurs.

III. CONCLUSION

Aloe vera is natural treasure trove of medicinal and cosmetic benefits. This miraculous plant has been cornerstone of traditional medicine and skincare and its popularity endures to this day. Aloe vera soothe and heal skin irritations and wounds support digestive health and boost immunity. Nourish and hydrate the skin, hair and scalp. Provide natural relief from inflammation and pain.

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