
**MEDICINAL PLANT - ALOE VERA
(ALOE BARBADENSIS)**

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Abstract

Exploring medicinal plants and their attributes for traditional medicine remains a prominent research area. This paper investigates the botanical classification, chemical components, medicinal properties, and indigenous medicine applications of Aloe, focusing on Aloe Barbadensis.

Keywords: Aloe Barbadensis, Amino Acids, Essential Oils, Enzymes, Polysaccharides, Phytoncides.

INTRODUCTION

Aloe Barbadensis, part of the Liliaceae family, is an evergreen herb. Its thick, sword-like leaves with thorny edges grow symmetrically on the stem, forming a visually striking plant with colorful flowers and cylindrical fruit capsules.

RESEARCH METHOD AND METHODOLOGY

Originating in southeastern Africa, Aloe is cultivated as an annual plant across CIS countries, with Aloe Barbadensis recognized for its medicinal prowess. This species, grown extensively in North Africa, the Canary Islands, and around the Mediterranean, boasts over 200 distinct varieties worldwide. Aloe Barbadensis serves as a natural antibacterial agent rich in essential compounds like vitamins, amino acids, trace elements, glycosides, and polysaccharides, contributing to its therapeutic properties.

RESEARCH FINDINGS AND DISCUSSION

Aloe vera (aloe barbaodensis) is a useful raw material in many fields due to its rich composition. Including: Application in gastroontology; relieves constipation, improves digestion, improves intestinal motility, and due to acemannan restores the mucous membrane of the stomach, heals stomach and duodenal ulcers. Aloe juice is used for gastritis, enterocolitis, colitis, gastroenteritis. Aloe juice used in small doses eases digestion, improves bile secretion, and normalizes intestinal peristalsis.

Uses in Dermatology: Aloe has bactericidal anti-inflammatory, antioxidant and wound healing properties and is used to treat various dermatitis, rashes, psoriasis, eczema,

acne, burns and bedsores. Gel made from aloe plant is used for swelling under the eyes, cold skin damage, pimples and boils.

Application in ophthalmology: Aloe juice is used for conjunctivitis, inflammation of the vitreous body, myopia and even cataract. The components of aloe juice improve blood supply to the retina and tissues around the eyes. Aloe emulsion is used for dry and wet epidermitis, for repairing 2nd and 3rd degree burns as a result of light therapy. When aloe is used externally for treatment; It is used for skin diseases, acne, boils, pustules, wound treatment, lupus, eczema. Aloe water contains polysaccharides, which form a protective film on the skin, protect and soften it, and accelerate the regeneration process in cells. Because of this, aloe vera is usually included in skin care products

Uses in gynecology: cervical erosion, uterine myoma, menstrual cycle disorders, candidiasis, vaginosis, entometriosis, genital herpes, amenorrhea, and is widely used as a remedy for colds. Application in cosmetology: softening and rejuvenating the skin, moisturizing the skin, fighting signs of aging, removing wrinkles, and aloe stimulates hair growth and restores its structure. . It is used in respiratory diseases: it is used in the treatment of tuberculosis, angina, cough, flu, bronchial asthma, pneumonia, pulmonary tuberculosis.

Use in stomatology: aloe is also used when the gums are inflamed and painful. Also, aloe has bactericidal properties, it is an active agent against streptococci, staphylococci, typhoid and dysentery bacilli. Aloe is a useful remedy for headache, various neuroses, headaches of unknown etiology. Aloe helps in poisoning with liquid substances, removes toxins. Syrup prepared by adding iron to aloe juice is used to treat anemia. Aloe contains a substance that prevents the growth of bacteria. That is why, when a bee stings a leaf, or when the skin is cut with a knife or something else, to prevent it from festering, an aloe leaf is split in the middle lengthwise and bandaged. Aqueous extract of aloe has immunostimulant properties and protects the body from various diseases. Aloe extract is considered a unique component and is used in the food industry for the production of yogurts, sweets and drinks.

High aloe extract has antioxidant, antibacterial, restorative and antiallergic properties. Aloe extract cleans the lymph, improves blood circulation, and accelerates the transport of oxygen to the organs, which has a positive effect on the health of the heart and brain. Substances contained in the plant regulate the level of bad and good cholesterol in the body and prevent clogging of blood vessels. Aloe vera gel contains more than 200 useful substances. These minerals, including acids, cannot be produced by the human body, but they are necessary for the control of important brain functions, emotions and sleep. Folic acid in the gel is recommended by doctors for women planning pregnancy. The gel prevents cancer. Aloe stimulates the production of collagen, so it is often recommended for myocardial infarction. Oimlik is also useful for increasing the general tone of the body in elderly people suffering from cardiovascular diseases. Aloe Vera juice is recommended to prevent liver cirrhosis. Enzyme phosphatase in plants regulates liver function.

The plant to be used must be at least 3 years old. then the leaves are cut (the lower large leaves of the plant are removed). The cut leaves are washed and refrigerated for 7-10 days. To get aloe juice, the leaves are washed with boiled water, cut into pieces smaller than 0.2 cm and pressed through a sieve. You can also pass aloe leaves through a meat grinder, and then squeeze the juice through a puree.

There are cases in which aloe cannot be used. Including: during pregnancy, hormonal substances, anthraglycosides can cause bleeding; kidney disease, as well as cystitis, hemorrhoids, cholecystitis, hepatitis A, cardiovascular problems, allergic reactions, oncological diseases, several complex diseases, with a mild therapeutic effect, cannot be used for bleeding, nephritis, advanced hypertension and serious heart diseases. If negative reactions are observed after taking aloe and using it, it is necessary to stop taking it and consult a doctor.

CONCLUSION

1. The organic acids contained in the plant work to normalize the intestinal flora and prevent decomposition in this process;
2. Carotenoids in aloe are a group of substances that synthesize vitamin A. They lower cholesterol levels, normalize fat metabolism, and also affect the sensitivity of the retina;
3. Tannins act as anti-inflammatory, hemostatic and bactericidal agents;
4. Vitamin C is an integral part of cell enzymes. It ensures the elasticity of tissues, thickens the tissues of the teeth and their vascular walls, increases the protective properties of the body;
5. Aloe enzymes normalize bile secretion, ensure normal digestion, slow down the aging process of the body;
6. Minerals and trace elements of this medicinal plant help to cleanse the body of toxins and slags. They affect metabolic processes, normalize them, increase immunity, have an analgesic effect;
7. Kohotin strengthens the walls of blood vessels, has anti-allergic properties;
8. Flavonoids affect the whole body. These are natural regulators, their most important task is to adapt to external conditions and have a disinfecting effect.

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