Aloe vera barbadensis

Science, Biology



The Aloe Vera Barbadensis plant has been used for thousands of years to heal a variety of conditions, including wounds, skin irritations, and constipation. Originally Aloe Vera is native to arid regions of north-eastern and southern parts of Africa and Madagascar. Aloe is a member of the Lilyfamilyoften referred to as "the desert Lilly". The plant stores the limited rainwater it gets in its leaves and forms a gel. The Gel is used both internally and externally on humans, and is claimed to have some medicinal effects.

For that reason it is grown commercially in the United States, the Caribbean, and Mexico. There are around two hundred and forty species growing in other dry regions around the world, but only a few are recognized as being of value to humans and animals. Aloe barbadensis is significantly at the top of the aloe species. The earliest reference to its use can be found in the famous Egyptian Ebers Papyrus, which dates back to 1500 BC and is widely regarded as one of the earliest documents, the western Materia Medica.

The Egyptians referred to it as "the plant of immortality". However, it is more than likely its been commonly used for centuries before it was recorded. There is reference made to it in the New Testament, when Nicodemus comes by night and brings a mixture of Myrrh and Aloe to embalm the body of Jesus. If you believe in Christianity this is the first documented use of Aloe vera. Galen was a physician to a Roman emperor (AD 131-201), he used Aloe vera as a healing agent and authored over 100 books on conventional and herbal medicine.

He gained his knowledge from doctoring the Roman gladiators. Galen was a follower of the works of Hippocrates and Aristotle. Also Christopher Colombus

had documented the medical use and value of the plant on his ship logs, many believe he introduced it to the "New World". World War II military manuals suggested that servicemen could use it as a remedy for burns, insect bites, or other skin ailments. Aloe would lose potency when transported due to oxidation. The pulp was most effective when fresh.

Aloes Vera's reputation as a miracle plant declined in places were the plant could not be grown, until the mid 1900's. In 1950's America, many processing techniques were attempted, but they ended infailure. Over heating the Aloe can cause it to loose its medicinal value. By the 1970's there was a breakthrough in the processing techniques leading to the successful stabilization of the leaf gel. This success was found by using natural ingredients and cold pressing. They also found a way to separate the aloin form the rind.

The aloin is a compound found in Aloe that is used internally for digestivehealth. It worked as a laxative and was found as a main ingredient in most OTC laxative medications until the millennium. These new found processing techniques created a new market for Aloe vera. In modern day America Aloe vera is used for the same reasons it was thousands of years ago in ancient civilizations. Externally used for the treatment of burns, cuts, insect bites, and rashes and it is still rarely internally used as a natural dietary supplement that regulates digestion.

Today it can be found in many different forms such as dried powders, capsules, extracts, juices, gels, and lotions. When looking for quality Aloe products to use on your skin you must read labels to ensure that Aloe is the

first or second ingredient listed. A lot of the gels and lotions can be extremely diluted with other ingredients. If you are looking for the soothing effects of pure aloe on the shelves of your local drugstore you must see that the product is free of artificial colors and stabilizing ingredients.

When looking for a quality Aloe product to apply to your skin, look for a gel that is 98-100% Aloe. There is much debate to whether benefits exist from ingesting the aloin compound. In 2002, the FDA required that all OTC aloe laxative products be removed from the U. S. market or reformulated because the companies that manufactured them did not provide the necessary safety data. Externally Aloe is still a treasured remedy used for osteoarthritis, burns, sunburns, and psoriasis. Because Aloe Vera plants are very succulent and consist of 95% water, they are tender to frost.

If they are grown outdoors in warm climates, they should be planted in full sun, or light shade. Aloe vera's roots like to be crowded so they must be planted clustered or potted. In a temperate American climate they thrive as potted houseplants. Due to their vulnerability to frost most of the year they must be kept inside next to a south or westward facing window to receive sunlight but regulate temperature. They thrive in pots and make great indoor plants. Aloe Vera is a succulent meaning it stores a large quantity of water within its leaves and root system.

The plant will become dormant-like in thewinter seasonutilizing very little moisture, watering at this time should be minimal. During the summer months the plant needs to be saturated with water. After watering the plant allow the soil to dry before re-watering. The soil needs to have a sandy base

in a way to emulate an arid climates soil. A quality commercial potting mix with extra perlite, granite grit, or coarse sand added will work perfectly. The plant has a very wide root base so a deep pot is not necessary however the width of the pot is very important.

When it is time to repot an aloe vera plant look for a wider pot than before, focus on width rather than depth. Aloe Vera plants are propogated by removing the offsets, which are produced around the base of mature plants, it can also be planted by seed. The Aloe Vera plants scientific relevance is debated widely for its different remedies. I believeit is obviously a miracle plant and the human race is blessed to have it for burns, cuts, and infection. It appears people have been using aloe vera since the dawn of humanity and do not appear to be stopping anytime soon.