

Aloe (Aloe vera)

Description and Distribution

The aloe is an evergreen succulent with a number of growth forms, from small (miniature), stemless bushes to tall single stemmed trees. Aloes are found throughout Africa, mainly in the tropical and sub-tropical regions, and are common in parts of the southern sub-continent, including South Africa and Namibia. Generally, aloes prefer sandy soils in dry shrub-lands and woodlands at elevations of 200-1065m. Aloes are drought resistant and when cultivated prefer full sun in a well-drained area.(4)

All indigenous aloe species are protected in Namibia.

Aloe vera:

(1)The leaves of the *Aloe vera* are a greyish green colour and marked with small white spots. The margins of the leaf have little “teeth” that are a red-brown colour. The flowers of the Aloe grow out the centre of the plant and are yellow with a silvery sheen due to the waxy layer on them.

Harvesting and Processing

The leaves of the *A. vera* contain a clear gel, that when broken off from the plant can be applied directly to the skin. The gel is extracted by removing the skin of the leaves. Care should be taken to remove the inner layer of the skin as this layer is toxic (contains Aloins). If not removed and added to the gel, the gel cannot be used. Therefore the gel is pasteurised and stabilised. During this process the residual Aloins in the gel are removed and the product is safe to use. (2)



Uses and Properties

The *A. vera* gel contains various Vitamins (Vitamin A, C, E and B12), various minerals (calcium, chromium, copper, selenium, magnesium, manganese, potassium, sodium and zinc). It also contains phytonutrients such as Acemannan, lignans, saponins, sterols and anthraquinones, which help in the immune response to damaged tissue. The enzymes in the gel, such as Bradykinase, are said to aid in reducing skin swelling and irritation.

Therefore ingesting the gel may aid an anti-aging diet (due to the anti-oxidants), balance blood composition (normalises blood sugar and cholesterol levels), stimulate the immune system (with its compounds it stimulates protein production to boost the immune system), encourage wound repair (as it nourishes and stimulates the skin), support oral health (by soothing the gums and protecting them from germs), and promote digestive comfort and gut health (by promoting probiotic production and preventing harmful organisms from growing in the gut). (3) (5)



References

1. <http://tropical.theferns.info/viewtropical.php?id=Aloe%20littoralis>.
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3. <http://aloe-maxx.com/about.php>
4. <http://www.succulents.co.za/aloes/single-stemmed-aloes/aloe-littoralis.php>
5. <https://www.globalhealingcenter.com/natural-health/benefits-of-aloe-vera/>
6. https://www.naturalnews.com/PhotoTour_Aloe_Vera_13.html