

# THE GENUS *ALOE* (L.) IN GIBRALTAR.

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## Resumen

*Se exploran los orígenes de las especies de Aloe que se encuentran naturalizadas en Gibraltar y se dan detalles sobre su historia y usos.*

## Summary

*The origins of the members of the genus Aloe that are naturalised in Gibraltar are explored and details on the plants, their history and uses are described.*

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The Genus *Aloe* belongs to the family Liliaceae, and today some 400 species of these succulent plants are to be found in various parts of Africa, northwards to Saudi Arabia and the Yemen and on the islands of Socotra and Madagascar.

Four species of *Aloe* are to be found today naturalised on the Rock of Gibraltar, although only two of them grow in abundance.

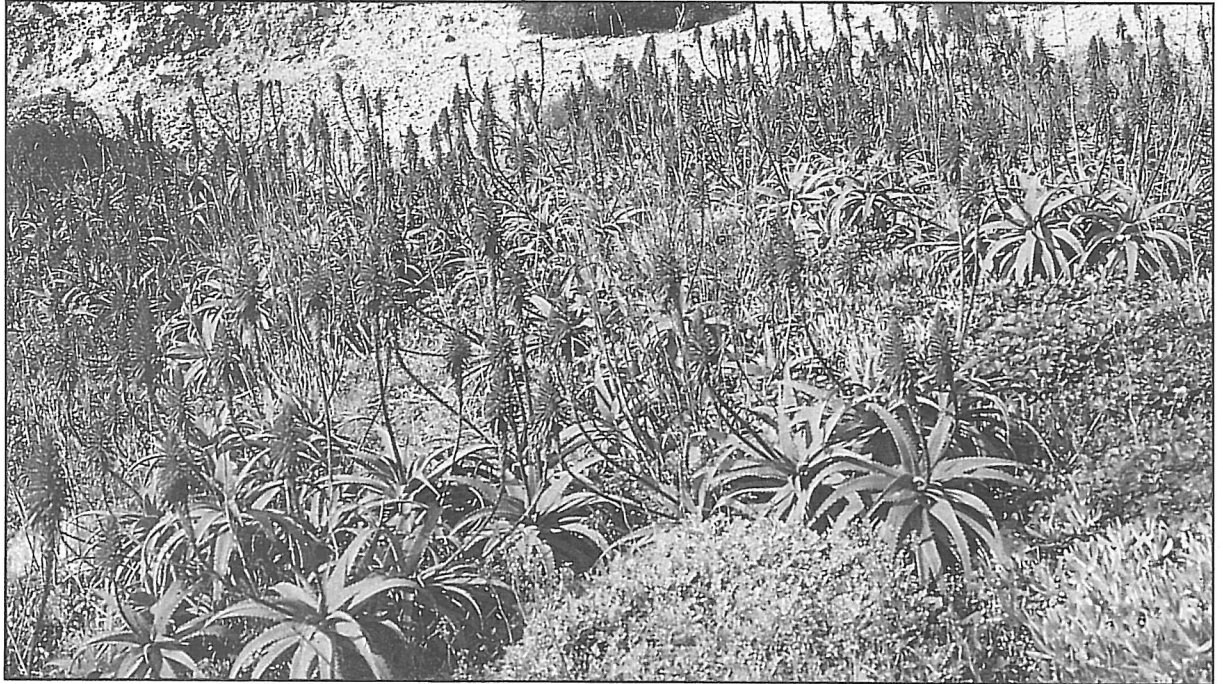


Figura 1. *Aloe arborescens*.

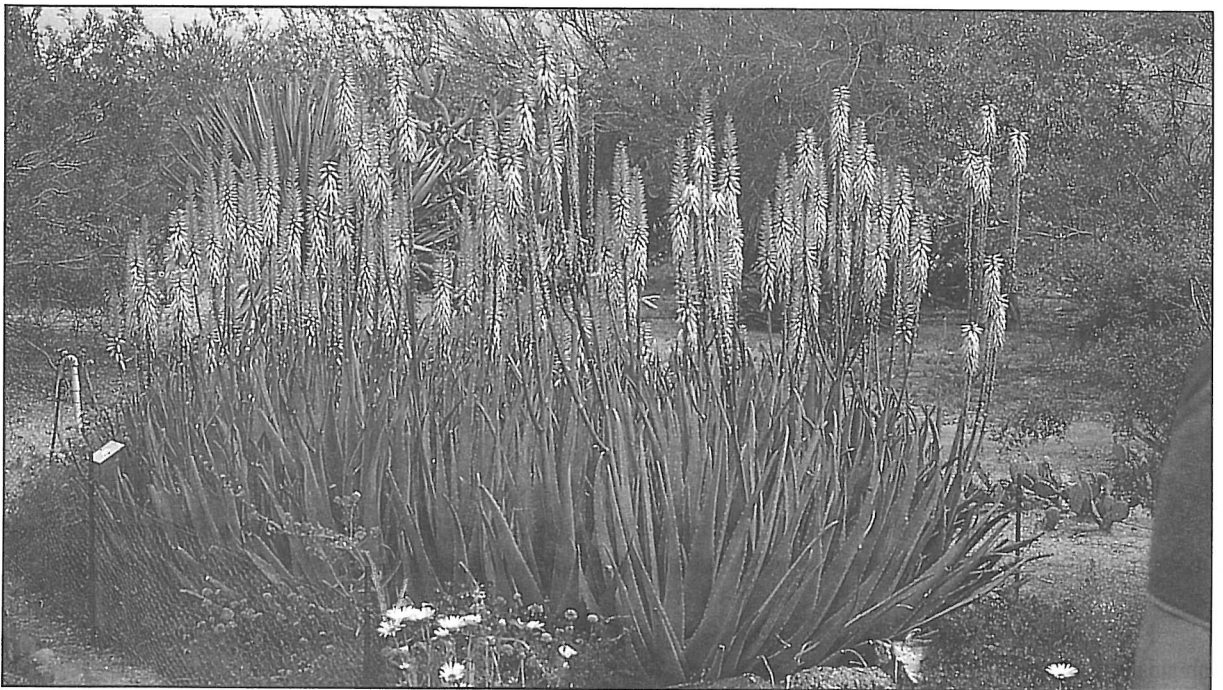


Figura 2. *Aloe barbadensis*

They are:

*Aloe arborescens*

Occurs in many parts of the Rock, although the best stands are on steeply sloping ground towards Europa Point.

*Aloe barbadensis* (syn. *A. vera*)

A small wild colony occurs on the east side, growing amidst two species of *Agave*, not far from Catalan Bay.

*Aloe brevifolia*

Just a small wild colony further south on the east side, growing amidst *Mesembryanthemums* on rocks some 40m above the sea.

*Aloe saponaria* (syn. *A. maculata*)

Another prolifically spread species in many parts of the Rock, although the most natural colonies occur near Europa Point.

*Aloe arborescens*, *A. brevifolia* and *A. saponaria* originate from South Africa, whereas *A. barbadensis* probably originates from Socotra. This species was known of as far back as the First Century A.D. Dioscorides in his Greek herbal «Codex Aniciae Julianae» listed the medicinal properties of this plant. An illustration of it appeared in 512 A.D., along with the original Greek text, and that original parchment can be seen in the Austrian National Library in Vienna. Many people think that it was described by Linnaeus as *Aloe vera*. In fact he described it as a variety of *Aloe perfoliata*. Oddly enough, Miller described it in 1768 as *Aloe barbadensis*, from material gathered at Masca in Tenerife, rather than Socotra.

Colonies of the species can be found in many countries, far from civilisation, even in Mexico. It has been cultivated from remote times in Egypt, often as a cemetery plant, or hung over a door of a new house as a good luck symbol. *Aloe vera* is spoken of in the Akkadian texts of ancient Assyria-Babylonia for similar usage, which means it was known of back to 2000 B.C.

The Aloes of commerce must not be confused with «Aloes» as referred to in the Old Testament. That «Aloe» was a perfume obtained from a Judean Gum-Tree, most likely *Aquilaria agallocha*.

In the New Testament there is a reference to Nicodemus coming by night bringing about 100 pounds in weight of myrrh and aloes for the embalming of Jesus. The Aloes mentioned here could have been derived from either *Aloe barbadensis* (known to most as *Aloe vera*), or from *Aloe perryi* from Socotra.

It is possible that the Phoenicians brought *Aloe barbadensis* to Gibraltar, but in the absence of any large colonies, this is unlikely. It is more likely that it came in the early 1700s as a remedy for skin burns during the sieges or perhaps a little later as a decorative garden or patio plant.

All three of the naturalised South African species are to be found in the Cape Peninsula area, although *A. arborescens* and *A. saponaria* are very widespread throughout southern Africa. There is some variability over such a wide range, but without doubt the plants on the Rock of Gibraltar are typical of those to be found in the S.W. part of Cape Province.

## Comunicaciones

Johan van Riebeeck founded the Colony of the Cape of Good Hope on 7th April 1652, and the Dutch East India Company kept a journal or dag register from 1652 up to the end of its rule in 1795. Records were kept in it about a wide range of subjects, including instructions to leaders of expeditions to the interior to collect plants. The first definite record of an Aloe having been collected was in 1674. Offshoots were brought back from Soesquass Boundary in the Zonder End Mountains and planted in the Company's garden. This species must have been *A. arborescens*. In 1699 a Mr A. Hartogh collected 4 Aloes between Hermanus and Caledon and one of these had to be *A. brevifolia*. *Aloe saponaria* which we should now refer to as *A. maculata* had also been collected by this time.

The Dutch East India Company garden was considerably improved when Simon van der Stel was installed as Commander at the Cape on 12th October 1679. Plots within it were devoted to fruit, vegetables, wild plants of Africa, etc., including Aloes of which 28 species were in cultivation. However, not all of them were Aloes as we know the genus today, as it included what we now refer to as *Haworthia*, *Kniphofia*, etc.

Francis Masson, an Under-Gardener at the Royal Botanic Gardens at Kew, thanks to a suggestion by Sir Joseph Banks was sent to the Cape in 1772 to collect seeds and plants, and remained there for two and a half years, and later for a further nine years from 1786-1795. His interest was more with Stapeliae than Aloes, but a limited variety made its way to Kew.

When the Cape came under British rule in 1795, an increasing number of English botanists went there, resulting in an ever increasing number of plants including Aloes being taken back to England. In Hooker's Journal of Botany (1843) Charles J F Bunbury mentions that *Aloe ferox* was the most important medicinal plant in the colony and that the export of Aloes in one year amounted to £2794, a large sum of money in those days.

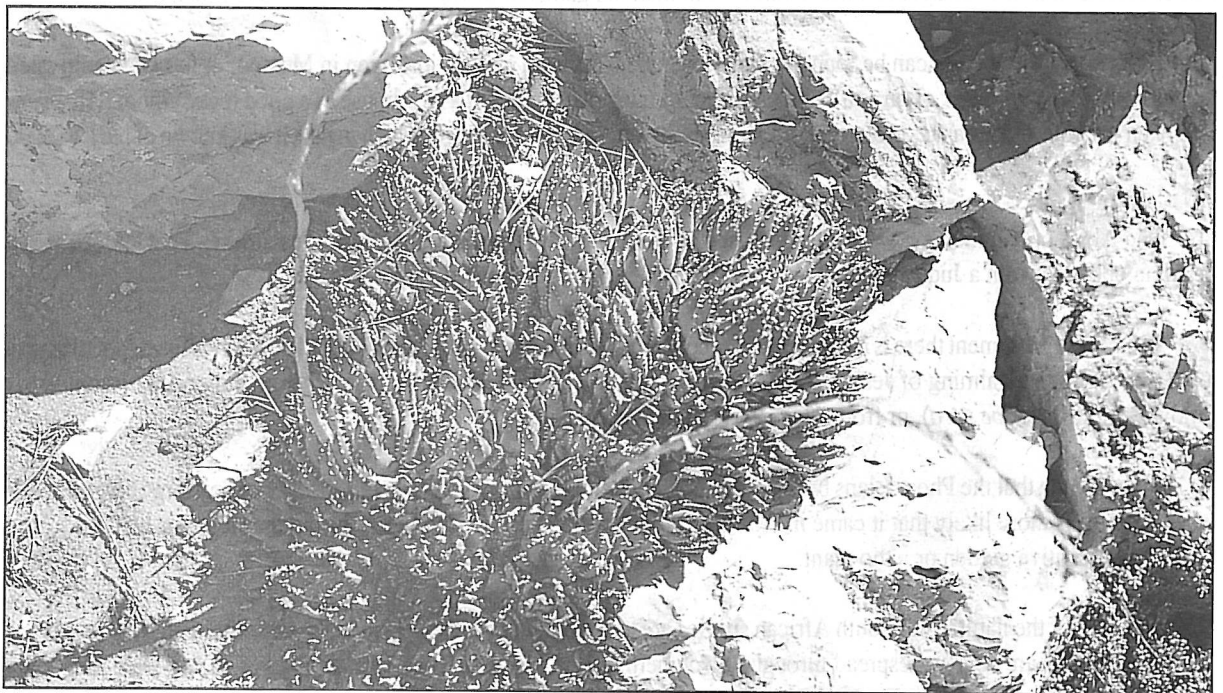


Figura 3. *Aloe brevifolia*.

This species has similar medicinal properties to *A. barbadensis* (*A. vera*), and has been used in more recent times by Dr L J A Loewenthal in the treatment of X-ray burns, with great success.

*Aloe arborescens* Miller, sometimes referred to as the «tree aloe», can reach 3 metres in height as an arborescent shrub, a dwarf compared with *Aloe bainesii* from Natal which can grow to 20m. *Aloe arborescens* has a very wide habitat range from S W Cape Province, throughout much of South Africa northwards to the highlands of Zimbabwe, and from sea level to nearly 2000m altitude.

Its pre-Linnean citation by Commelin in 1701 was as follows: *Aloe africana, caulescens folii glaucis caulem amplectentibus*.

*Aloe brevifolia* Miller is a dwarf clustering species, individual rosettes rarely exceeding 8cm in diameter, and bearing up to forty thorny edges and tipped leaves. The flower spike is usually simple, up to 40cm in height, with orange to red tubular flowers. Its range is limited to the western part of Cape Province.



Figura 4. *Alōe saponaria*.

Its pre-Linnean citation by Commelin in 1703 was as follows: *Aloe africana caulescens, foliis glaucis brevissimis, foliorum summitae intern et externs nin-nihil spinosa*.

It was described by Miller in 1771 as *Aloe brevifolia* in the Gardener's Dictionary. This 1703 illustration is the first one known of this species.

There are no specific references of this species being used for medicinal purposes.

*Aloe saponaria* Haworth, sometimes referred to as the «Common Soap Aloe» is a low-growing, suckering species, with stems up to 50cm in height. It has a densely rosulate structure, leaves up to 30cm in length, slightly recurved, and a reddish-green colour with whitish oblong spots. Leaf tips when dry are twisted at the apex, a typical feature of species within the Saponariae section of the Genus *Aloe*. It is a widely distributed species from western Cape Province to all other provinces of South Africa.

Its pre-Linnean citation by Commelin in 1701 was as follows:

*Aloe africana caulescens foliis spinosis maculis ab utraque parte albicantibus notatis*.

## Comunicaciones

It was described by Haworth in 1804. The Commelin illustration in 1701 was the earliest known of the species, while one by Dillenius (1732) is the earliest one showing the inflorescence.

It was in cultivation in the Dutch East India Company's garden in 1695 when Oldenland was Superintendent there.

Medicinally it has many uses, from the treatment of wounds, against ringworm, for boils and sores, etc. The Suots use it against influenza. Inhabitants of villages bathe in public in an infusion of the plant. The Suosts also use this plant as a charm against lightning.

From the mid 1700s onwards Gibraltar was a fairly regular port of call for ships sailing between South Africa and the United Kingdom. No matter where British people have been posted overseas, a garden has been almost a necessity. It is probable that some time from the mid 1700s onwards, seeds or plants were planted in Gibraltar. The climate is very similar to that of the Cape, so they thrived, and along with mesembryanthemums from the same area, escaped from cultivation and quickly naturalised in various areas of the Rock. From dated paintings they were early inhabitants of «The Alameda», now the Gibraltar Botanic Garden.

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