

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Ten-Year-Review proposals

A. PROPOSAL

Deletion of *Aloe barbadensis* Mill (= *Aloe vera*) from Appendix II.

B. PROPONENT

Swiss Confederation

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Liliopsida (Monocotyledoneae)

12. Order: Liliales

13. Family: Liliaceae

14. Species: *Aloe barbadensis* Mill

141. Synonyms: *Aloe vera* L.
Aloe perfoliata var. *vera* L.
Aloe vulgaris Lam.

Aloe barbadensis is thus the true name, and *Aloe vera*, while much more common among the general public, is merely a synonym.

15. Common Names:

16. Code Numbers:

2. Biological Data

21. Distribution: This species is probably native to the coastal regions of Africa, near the southern tip of the Red Sea, in the area adjacent to Ethiopia, but little is known of its original geographic distribution. According to Reynolds (1982), in any event, it is not native to Socotra or South Africa, although it may have existed naturally in the Cape Verde Islands.

Some authors believe that it may have also been native to Mediterranean Europe, although it has been cultivated in this region since the dawn of time. Some specimens are found in the Canary Islands (Spain), but these are relics of very ancient introductions, probably attributable to the Arabs. Furthermore, these populations are incapable of sexual reproduction. There is some indication as well that these plants may have been introduced into the Iberian peninsula, particularly at Malaga, where they were cultivated for medicinal purposes. However, all of these plants have disappeared (Clemente Munoz, pers comm, 1994). *A. barbadensis* is currently found in Morocco, Algeria, Tunisia, Libya and Egypt, as well as in Palestine, Lebanon, Syria, Cyprus, Turkey, Greece, Malta, Sicily, southern Italy and Gibraltar. It grows in Ethiopia, Somalia, Saudi Arabia and India, but, surprisingly enough, has never been propagated east of Burma and Indochina,

although they are on the same latitude. It is cultivated as far as Nepal and Tibet and has been introduced as a garden plant in the Malaysian peninsula and the Philippines. In all these locations, *A. barbadensis* is widespread and abundant. The plant is never indigenous but has been naturalized or has escaped from cultivation or gardens.

The Spanish probably introduced the species into America from the Canaries at the time of the first conquests. There, too, it is naturalized and widespread in numerous countries, including the Barbados, Jamaica, Antigua, Puerto Rico, Mexico and Central America, extending as far north as Texas and Florida and south to the Peruvian Andes (Miller Kent, 1979).

22. Population: The species may be extinct in nature. Only cultivated plants remain.

221. History: This plant has been known since earliest Egyptian and Babylonian antiquity, or for more than 5000 years! Later, it was introduced in particular into the Barbados in the 16th century, where it was intensively cultivated until the 19th century. It appears to have been cultivated in England as early as 1596 (Aiton, 1789).

3. Trade Data

31. National Utilization: *A. barbadensis* is cultivated commercially in particular in the Dominican Republic, along the Venezuelan coast and in Aruba, in the Dutch West Indies (Miller Kent, 1979).

32. Legal International Trade: Appendix II does not currently include "seeds and pollen, tissue cultures and flanked seedling cultures, and separate leaves and parts and derivatives thereof or artificially propagated plants of the species *Aloe vera*". However, entire plants are frequently found in trade. The most recent information (1981-1992) obtained from the WCMC database (Cambridge, UK) indicates that all exports, originating primarily from the Dominican Republic and the United States, involve artificially propagated plants.

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992
DO	27,530	81,915	--	9,930	99,715	632,947	893,341	1,218,850	178,000
US	--	96,011	208,295	94,410	9,943	--	--	--	--

33. Illegal Trade: No data. However, confiscations are often performed when very large shipments of cultivated plants are not accompanied by the necessary documents.

34. Potential Trade Threats: There is a slight risk that this exemption will be used to export similar species without authorization from the countries of origin. However, since exports consist almost exclusively of very large shipments of *A. barbadensis*, the risks are virtually nil. Moreover, since all large-scale commercial cultivation occurs on the American continent, the exemption could possibly be limited to specimens of *A. barbadensis* from the New World.

4. Protection Status

42. International: The species is listed in Appendix II.

43. Additional Protection Needs: Nil.

5. Information on Similar Species

Aloe vera var. *officinalis* Baker is a larger form found in the Near East. *Aloe vera* var. *chinensis* Baker (= *A. indica* Royle) is a smaller Asian form.

A. barbadensis is the species with the highest aloin content (30%), more than *A. ferox* (10%) and *A. perryi* (25-28%). It should be noted, however, that *A. barbadensis* is clearly distinguishable from the other two medicinal species by the size and shape of its leaves. Finally, *A. ferox* is native to South Africa, while *A. perryi* comes from Socotra and Zanzibar, although it is found throughout eastern Africa as far as Arabia. *A. barbadensis* is used in cosmetics, including sun creams, and to a lesser extent as an ornamental plant.

A. barbadensis is thus the easiest of the medicinal Aloes to propagate, and the only one cultivated in the New World.

6. Comments from Countries of Origin

Numerous "countries of origin", particularly in Central and South America, have been consulted at length and are unanimously in favour of removing this species from Appendix II.

To ensure the credibility of the Convention with the authorities responsible for its application and with the public, it is extremely important that all species of plants which, like *A. barbadensis*, are not endangered in the wild by international trade, be removed from the Appendices. It should also be noted that the removal of *A. barbadensis* from Appendix II in no way reduces the protection of other species of Aloes.

7. Additional Remarks

This measure is designed to remove a species which is not endangered and which in fact is doing very well in most of the countries in which it is naturalized. In addition, the elimination of such species from the Appendices permits the authorities responsible for the application of the Convention to concentrate more effectively on truly endangered species, without wasting energy and financial resources on cases which are of no interest in terms of conservation.

A number of countries, including the members of the European Union (EU) and Australia, as well as the Plants Committee, supported this proposal at its fifth meeting, held at San Miguel de Allende, Mexico, in May 1994.

8. References

Aiton, W. 1789. Hortus Kewensis 1467.

Miller Kent, C. 1979. Aloe vera. Airlington, USA. 115 pp.

Reynolds, G W. 1982. The Aloes of South Africa. Balkema, Cape Town. 538 pp.

WCMC (World Conservation Monitoring Center), Cambridge, UK.

