

Open Research Online

The Open University's repository of research publications and other research outputs

Aloe forbesii - a small Socotran endemic

Journal Item

How to cite:

Walker, Colin C. (2020). *Aloe forbesii* - a small Socotran endemic. *CactusWorld*, 38(4) pp. 325–327.

For guidance on citations see [FAQs](#).

© (c) BCSS, authors and illustrators of individual articles

Version: Version of Record

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's [data policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Aloe forbesii – a small Socotran endemic

Colin C Walker

Aloe forbesii, first described in 1903, is a small Socotran endemic with a chequered history. This is discussed together with details of its habitat and relationships to the other four species of Socotran aloes, and the author's plant in cultivation is described and illustrated. Photographs by the author.

History

In the winter of 1898 to 1899, Henry Forbes and William Robert Ogilvie-Grant were sponsored by The Royal Society of London and the Museums Committee of Liverpool City Council to undertake an expedition to the islands of Socotra and Abd-elkuri. The chief aim was the zoological exploration of Socotra but plant material was also collected and studied. The results of the expedition were published by Forbes (1903) as a *Natural History of Sokotra and Abd-el-Kuri*. The plants collected on the expedition were described in this work by Isaac Bayley Balfour of the Royal Botanic Garden, Edinburgh, including two new species of succulent: *Aloe forbesii* and *Euphorbia abdelkuri* (Balfour, 1903).

Balfour named *Aloe forbesii* in honour of one of the expedition's leaders and discussed this saying that "Along with the living specimens of *Aloe perryi* brought home by the expedition were young plants of two other species. One of these has now flowered in the Royal Botanic Garden, Edinburgh, and this hitherto undescribed species I here name. It is easily distinguished from *Aloe perryi* and *Aloe squarrosa*, the other Sokotran species; from the former by its thin not erect stem, narrow leaves, and simple inflorescence with smaller flowers; from the latter by its unspotted narrow leaves [Fig. 1]. The plant is a neat one resembling when young, in which condition the leaves are often spineless, some of the Mesembryanthemums. The inflorescence is a small one with too few and small flowers to be striking as a horticultural plant".

Since then, recognition of *Aloe forbesii* as a distinct species has been variable. Gilbert Westacott Reynolds, the doyen of aloe students, was well travelled around Africa and Madagascar but never visited Arabia including Socotra. As a consequence of this his treatment of Arabian aloes is by far the weakest section

of his monumental monograph of the genus. In his book on tropical African and Madagascan aloes Reynolds (1966) did not fully appreciate the difference between *A. forbesii* and *A. perryi*. He described and illustrated *A. forbesii* but the plant illustrated in colour plate 39 shows a large, erect plant that is clearly

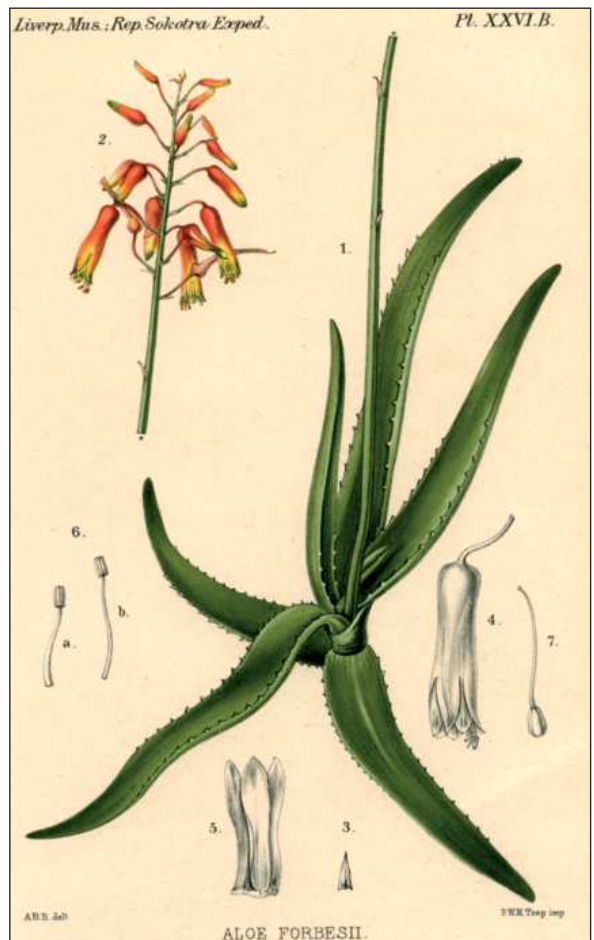


Fig. 1 The first published illustrations of *Aloe forbesii* (from Balfour, 1903). This plate is now accepted as the lectotype of the species (McCoy, 2019)

A. perryi as currently understood, indicating that Reynolds misunderstood Balfour's species. Reynolds also misinterpreted at least two other Arabian aloes, notably in this context another Socotran species, *A. squarrosa*, which he maintained separate from *A. zanzibarica*, whereas we now know that these are one and the same species.)

In the spring of 1967, the intrepid and renowned succulent explorer John Lavranos visited Socotra and Adbelkuri in the company of Kew's Alan Radcliffe-Smith as part of the Middle East Command Expedition, during which *A. forbesii* was recollected. However, in his write up of Socotran aloes, Lavranos (1969) only recognized two species: *A. perryi* (with *A. forbesii* as a synonym) and *A. squarrosa* (including *A. concinna* and *A. zanzibarica*).

Miller & Morris (2004) in their otherwise exhaustive treatise on useful plants of Socotra entitled *Ethnoflora of the Soqotra Archipelago*, followed Lavranos in treating *A. forbesii* as a synonym of *A. perryi*. (Significantly though, the new Socotran species *Aloe jawiyon* is first described in this book.)

However, more recently, Carter et al (2011) accepted five aloes for Socotra with *A. forbesii* being considered as distinct from *A. perryi*. In addition, *Aloe haggeherensis*, *A. jawiyon* and *A. squarrosa* were recognized; the first two of these had been described since Reynolds's monograph.

Tom McCoy, in the first monograph of aloes from Arabia including Socotra, similarly accepted five species for Socotra including *A. forbesii*, all being endemic to this archipelago (McCoy, 2019).

Finally, for completeness it is worth recording that Socotra is also home to *Aloe* ×*buzairiensis*, the intraspecific hybrid: *A. perryi* × *A. squarrosa* (Lode, 2010, 2011).

Habitat and distribution

McCoy (2019) states that *A. forbesii* "is at present known only with certainty from the Adho Dhemalu Gap, which traverses the spectacular Haggeher Mountains from north to south". He goes on to say that it "is restricted to crevices and ledges of low rock outcrops where gentle slopes deflect excessive rainfall runoff" and it "is known to grow at an altitude of 900m".

Relationships

Aloe forbesii is closely related to three of the other Socotran endemic aloes: *A. haggeherensis*, *A. jawiyon* and *A. perryi*, from which it differs principally by having decumbent not erect rosettes and in size, having significantly shorter and narrower leaves than all of these other species. Indeed, *A. forbesii* is amongst the smallest of all 50 species of Arabian aloes currently recognised (McCoy, 2019). As mentioned



Fig. 2 *Aloe forbesii* in cultivation from a Lavranos collection without further data. Plant is shown in a 12cm square pot



Fig. 3 Close up of the plant in Fig. 2 showing the pattern of basal branching

earlier, it is clearly distinct from the fifth, similarly small Socotran species, *A. squarrosa*, by having unspotted leaves. (Note, the plant illustrated by McCoy (2019, p.164) is probably



Fig. 4 Detail of flowers of *A. forbesii*

A. haggeherenesis and not *A. forbesii* because its leaves are relatively broad and not typical of *A. forbesii*.)

***Aloe forbesii* in cultivation**

My cultivated plant, shown in Fig. 2, grows easily and prolifically. With time it has produced a thin, short decumbent stem about 12cm long, such that it now hangs over the edge of the pot. Its leaves are smooth and unspotted, up to 2cm broad at the base, up to 15cm long, slightly channelled with prominent pale teeth on the leaf margins and tapered towards the tip. It readily branches from the base of the stem forming a small clump; additionally, there is some underground branching (Fig. 3). The decumbent non-erect inflorescence is up to 35cm long and is branched with three racemes up to 9cm long (Fig. 2). Flowers are small only up to 18mm long (Fig. 4), coral pink fading to pale green tips to the tepals. In all details this Lavranos collected material matches the first description of Balfour (1903) apart from one significant feature: my plant has a branched inflorescence, whereas the first description calls for an unbranched inflorescence. How significant this difference is remains to be seen.

ACKNOWLEDGEMENTS:

I thank Suzanne Mace for living material of *Aloe forbesii*. Tina Wardhaugh is thanked for Photoshop work on Fig. 1. My wife Marjorie read and commented on an earlier draft of this article.

LITERATURE:

- Balfour, I B (1903) Botany of Sokotra and Abd-el-Kuri. In H O Forbes *The Natural History of Sokotra and Abd-el-Kuri*. The Museums, Liverpool, pp. 449–535, pl.XXVIB (*Aloe forbesii*).
- Carter, S, Lavranos, J J, Newton, L E & Walker, C C (2011) *Aloes. The Definitive Guide*. Kew Publishing, Royal Botanic Gardens, Kew/British Cactus & Succulent Society.
- Forbes, H O (1903) *The Natural History of Sokotra and Abd-el-Kuri*. The Museums, Liverpool.
- Lavranos, J J (1969) The genus *Aloe* L. on the Socotra Archipelago. *Cact. Succ. J. (U.S.)*, **41**: 202–207.
- Lodé, J (2010) Description of a new nothotaxon in the genus *Aloe* (Asphodelaceae) in Socotra: *Aloe* × *buzairiensis* J. Lodé nothosp. nov. *Cact. Adv. Int.* **85**: 30–31.
- (2011) Diagnosis of *Aloe* × *buzairiensis* J. Lodé 2011. *Cact. Adv. Int.* **92**: 19.
- McCoy, T (2019) *The Aloes of Arabia*. McCoy Publishing, Temecula, California.
- Miller, A G & Morris, M (2004) *Ethnoflora of the Soqatra Archipelago*. Royal Botanic Garden, Edinburgh.
- Reynolds, G W (1966) *The Aloes of Tropical Africa and Madagascar*. The Aloes Book Fund, Mbabane, Swaziland.