A tale of two Ethiopian aloes: Aloe jacksonii & A. elkerriana

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Aloe jacksonii is a very attractive, dwarfgrowing species. It has short, erect or procumbent stems up to 20cm long which branch freely from the base forming clumps (Fig. 1) that can be up to 50cm or more across. Its leaves are spotted, narrowly tapering with a rough spotted surface and short teeth on the margins (Fig. 2).

This species was named in 1955 by G.W. Reynolds for Major T.H.E. Jackson, who discovered it at El Kerré in the Ogaden Province of Ethiopia in 1943 whilst stationed there during the Second World War. Major Jackson wrote that "El Kerré is a strange rock outcrop with precipitous sides, and the station was built below the precipice. There is a steep path winding up a cleft, and the aloes were found along the edge at the top" (Reynolds, 1955). However, when Maurizio Dioli revisited El Kerré in 2000, he was unable to locate *A. jacksonii* but instead found another species which he described in 2007 as *Aloe elkerriana* (Dioli & McCoy, 2007).





Fig. 2

There are, therefore, mysteries surrounding these plants. Firstly, it is strange that Major Jackson did not find *A. elkerriana* back in 1943 because it is apparently quite common at El Kerré (Carter *et al.*, 2011). Secondly, the origin of *A. jacksonii* is now uncertain: did it ever grow at El Kerré, has it died out from that location, or did Major Jackson incorrectly report its type locality? Whichever of these possibilities turns out to be correct, this species is currently only known from cultivated material derived from the original Jackson collection, hence there is only a single known clone in cultivation and all plants are presumably genetically identical.

In my experience, *A. jacksonii* flowers freely even as a small plant, making it highly desirable in cultivation where space is at a premium. Its inflorescence is unbranched up to 30cm tall, bearing deep coral pink flowers that are white-tipped at the mouth and up to 27mm long (Fig. 3).

Aloe jacksonii is also of interest because of its chromosome count (cytology). *Aloe* is a very large genus with over 550 species, subspecies and varieties (Carter *et al.*, 2011), the vast majority of which are diploid with chromosome counts of 2n = 14 (Rowley, 2017). Amongst a small minority of species there are relatively few (about 6%) that are polyploid with higher chromosome counts. Interestingly, *Aloe jacksonii* is one of these, being tetraploid with a count of 2n = 28 (Brandham, 1971); this might account for its robust growth in cultivation.

The closest relative to *A. jacksonii* appears to be *A. cremnophila* from the Dhalo Escarpment, the highest point (2,400m) in Somalia (Carter *et al.*, 2011). This species is also tetraploid and has a similar growth habit, but the leaves are unspotted (Brandham *et al.*, 1994). One significant difference in my experience between *A. cremnophila* and *A. jacksonii* is that the former is an incredibly reluctant flowerer, whereas the latter is very free-flowering.

As currently understood, both *A. jacksonii* and *A. elkerriana* are narrow Ethiopian endemics and although they apparently come from the same locality they are not closely related. *Aloe elkerriana* is a much larger growing and more vigorous plant than *A. jacksonii* with pendent or sprawling stems up to 5m long. Its inflorescence is also much larger up to 50cm tall and well branched. As yet I have no experience of growing *A. elkerriana*, so I would be very interested to hear from any *Haworthiad* reader who has a spare cutting!

These species have similar ecology because they are both **cremnophytes**: plants that grow solely on cliffs. Several other *aloes* grow exclusively on cliffs and hence are referred to as **obligate cremnophytes**. Such species include *A. inamara*, *A. mendesii* (Angola); *A. ankoberensis*, *A. downsiana*, *A. pulcherrima* (Ethiopia); *A. amicorum*, *A. doddsiorum*, *A. tartarensis* (Kenya); *A. corallina*, *A. huntleyana*, *A. omavandae*, *A. pavelkae* (Namibia); *A. collenetteae* (Oman); *A. squarrosa* (Socotra); *A. cremnophila* (Somalia), *A. hardyi*, *A. meyeri* (South Africa); *A. tororoana* (Uganda) and *A. pendens*, *A. yemenica* (Yemen) (Carter *et al.*, 2011).

References

- Brandham, P.E. (1971) The chromosomes of the Liliaceae: II. Polyploidy and karyotype variation in the Aloineae. *Kew Bull.*, 25: 381–399.
- Brandham, P.E., Carter, S. & Reynolds, T. (1994) A multidisciplinary study of relationships among the cremnophilous aloes of northeastern Africa. *Kew Bull.*, 49: 415–428.
- 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.
- Dioli, M. & McCoy, T. (2007). Aloe elkerriana (Asphodelaceae), a new Ethiopian species from the type locality of A. jacksonii. Haseltonia 13: 34–37.
- Reynolds, G.W. (1955) A new *Aloe* from Ethiopia. *J. So. Afr. Bot.*, 21: 59-61, pl. X.
- Rowley, G.D. (2017) Succulents in cultivation breeding new cultivars. British Cactus & Succulent Society, Hornchurch, Essex.



Fig. 3