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Aloe challisii

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Aloe challisii Van Jaarsv. & A.E.van Wyk

Family: Asphodelaceae
Common names: Steenkampsberg aloe

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Aloe challisii is a charming new cliff-dwelling aloe from the Steenkampsberg in Mpumlanga Province. It is easily grow cuttings and thrives as a pot plant.

Description

Aloe challisii is a fast-growing dwarf succulent with fleshy roots and subterranean suckers, forming small, dense grou to 200 mm in diameter. The branches at length hang down over cliff faces.

The leaves are rosulate (rosette forming), 4-7 per branch, soft, very fleshy, linear-triangular, about 100-200 mm long, 8 mm broad, curved downwards and pendent from rock faces, becoming channelled and less succulent during the dry season. The leaf surface is smooth, slightly pale bluish green and with white spots at the base. The leaf margins are minutely toothed (serrate), and slightly transparent, its teeth are soft and small and the leaf apex is pointed.

The inflorescence is a simple raceme 140-160 mm long, with up to 15 flowers crowded head-like in the terminal 40-45 of the inflorescence which at first bears orange buds. The flowers are tubular to slightly club-shaped and drooping, 2 long, bright orange-red, yellow and green-tipped. The petals (perianth segments) are free to the base. The stamens a yellowish and 20-22 mm long. The ovary is oblong, 5-6 mm long and 2 mm in diameter, grooved, brownish green wit mm long style.

Its capsules are 16 mm long and 5 mm in diameter. The seeds are oblong, angular, 3-4 mm long, 1.5 mm broad and gr black.

Flowering time Flowering occurs mainly in spring (October).

Conservation Status

Aloe challisii is a rare endemic confined to the Steenkampsberg near Lydenburg (Mpumalanga). However it is not threatened due to its safe cliff habitat.

Distribution and habitat

Aloe challisii is known only from the upper, vertical, quartzitic sandstone cliffs (south- and southeast-facing) along the southern part of the Steenkampsberg, southwest of Lydenburg in Mpumalanga Province, South Africa. It grows at an altitude of 1 700-1 800 m, frequently covered in clouds.

Plants occur scattered in rock crevices among moss and are difficult to reach. Rainfall is high, from 1 500-1 750 mm p annum, and is experienced mainly in summer. Vegetation of the region includes Afromontane grassland and forest in kloofs. The new species was found in association with other temperate, high-altitude plants such as *Morella pilulifera Crassula pellucida* subsp. *brachypetala, C. setulosa* var. *setulosa, C. setulosa* var. *rubra, C. sarcocaulis, Elaphoglossu Mohria caffrorum, Senecio orbicularis, Rhodohypoxis baurii, Ledebouria saundersiae* and a species of *Streptocarpus.*

Seeds are dispersed by wind in the rainy season during the summer months (December onwards).

Derivation of name and historical aspects

The species is named for Mr Chris Challis, a Johannesburg businessman and lover of aloes and other succulents. He collected this species first while exploring a hiking trail at Verlorenkloof on the Steenkampsberg. It was described by Braam van Wyk and the author in 2006 (Van Jaarsveld & Van Wyk 2006).

Some 125 species of *Aloe* are indigenous to South Africa and Namibia (Glen & Smith 2003). *Aloe challisii* is the seventeenth species of *Aloe* (21% of the total) and the fourth member of section *Leptoaloe,* a group of small aloes gr in cool mountainous grassland habitat (Reynolds 1950), recorded as confined to sheer cliff faces in South Africa and Namibia. This section also includes *A. nubigena, A. thompsoniae* and *A. soutpansbergensis,* all of them with soft, flac leaves bearing small or no (*Aloe nubigena*) marginal teeth. *Aloe nubigena* and *A. soutpansbergensis* also have a pen habit. *A. challisii* is at once distinguished from the other cliff-dwelling species by its short inflorescence bearing its flo in an almost head-like (subcapitate) inflorescence, and with a flower perianth which is almost club-shaped (subclavate species is further distinguished by its bluish green, almost cylindric (subterete) leaves. Its closest known relative is *A. soutpansbergensis,* which has longer cylindrical flowers which appear during summer (not spring), and flat, channelle leaves which are less markedly succulent.

Ecology

Aloe challisii is pollinated by sunbirds.

Uses

No uses, other than the horticultural potential, have been recorded.

Growing Aloe challisii

Propagation

Aloe challisii is easily grown and can be propagated by seed or by offshoots. The best time for sowing the seeds is ir spring or summer. They are best sown in a sandy, well-drained potting soil in a warm shady position in standard seed Cover the seeds with a thin layer of sand (1-2 mm) and keep moist. Germination will take place within 3 weeks and th seedlings grow fast. They can be planted out in individual bags or containers as soon as they are large enough to ha Keep in a cool situation and provide sufficient moisture. Offshoots can be removed with a sharp knife and transplante first rooted in sand. It is recommended to add a fungicide when watering. The plants grow fast and can reach floweri stage in about 2-3 years.

Cultivation

Aloe challisii grows best in containers or hanging baskets. It should preferably be grown in partial shade. Plants prolif readily and soon become pendent. They are not shy of flowering. The key to successfully growing this species is a sa acid soil with excellent drainage, cool moist conditions during summer and dry winters. It is frost resistant and fairly p free, but will rapidly rot if there is insufficient drainage. *Aloe challisii* responds well to fertilisers, and an organic feedir recommended during spring and summer.

References

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Ernst van Jaarsveld
Kirstenbosch National Botanical Garden

October 2007

Plant Attributes:

Plant Type: Succulent

SA Distribution: Mpumalanga

Soil type: Loam

Flowering season: Spring

PH: Acid

Flower colour: Orange

Aspect: Full Sun, Shade, Morning Sun (Semi Shade)

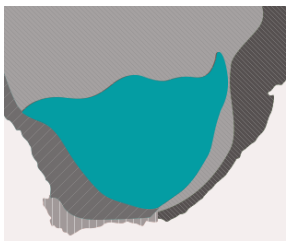
Gardening skill: Average

Special Features:

Attracts birds

Good potplant

Horticultural zones



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