

at almost every watering. A normal treatment is 2 to 3 g of a soluble 20:20:20 (NPK) fertiliser per litre of water. In bright sunshine and at moderate temperatures, potted lachenalia bulb uses water more rapidly.

Irrigation

Irrigation should take place when growth appears and the soil should be kept moist until foliage dies-off after flowering. When the bulbs are at dormant stage, they should be kept relatively dry. In the greenhouse, lachenalia bulb should be watered regularly during sunny periods.

Once the bulbs are potted, they should be watered once until the leaves appear above the surface of the soil. The soil should never be allowed to dry out completely as this can trigger dormancy and stress the bulbs. Too much watering in a poorly drained soil may result in the rotting of bulb.

Weed control

The best time to control weeds is during soil preparation. Registered pre-sprouting herbicides can be applied for weeds that appear before planting but herbicides label instructions should always be followed to avoid contamination.

Pest and disease control

Pest

PORCUPINES AND MOLES

In South Africa, where porcupines usually occur outdoors, plantings of bulbs are liable to be dug up and eaten. Cape golden moles also dig and eat the bulbs.

CONTROL MEASURES

Lining of the area with wire-mesh or sink a wire into the soil is advisable as the bulbs can be lifted by the tunneling activities of the moles.

Disease

Lachenalia is susceptible to common bulb diseases, but more particularly to virus. Symptoms of virus include mottling of leaves, necrotic spots and stunted growth. There is really no cure for plants that are already infected.

Control measures

Keep your healthy plants away from plants that have been infected with virus. Plants with virus symptoms should be removed and destroyed as soon as possible. Virus is transmitted from diseased to healthy plants by means of aphids and offsets.

Uses

It is used commercially in horticulture and is rivalling many of the more common well-known hyacinths on the market.

Acknowledgements

Appreciation is hereby extended to the South African National Biodiversity Institute (SANBI) for providing relevant sources of information.

Reference

DUNCAN, G.D. 1998. *The Lachenalia handbook*. National Botanical Gardens, Kirstenbosch, Cape Town

<http://lachenalia.blogspot.com>, the lachenalia homepage, the accessed on 16 July 2014

Further information can be obtained from

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2014

Published by

Department of Agriculture, Forestry and Fisheries
Private Bag X144
PRETORIA
0001

Lachenalia

— bulb flower —



agriculture,
forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Classification

Kingdom:	Plantae
Family:	<i>Hyacinthaceae</i>
Genus:	<i>Lachenalia</i>
Species:	<i>bulbifera</i>
Common names:	Rooinaeltjie, Cyrillo, lachenalia

Background

Origin and distribution

Endemic to the western and southern coastal parts of the Western Cape, *Lachenalia bulbifera* usually grows in large colonies. It grows in full sun or light shade and often encounters flowering on sea-facing dunes just above the high water mark. The flowers vary in colour, length and flowering time, depending on wild locality. Bulbs occurring in the southern Cape tend to flower from mid- to late autumn (April to May) and have relatively short, pale or dark orange flowers. Bulbs that occur from the West Coast and the Cape Flats flower in mid-winter (June to August) and have longer flowers in various shades of red and orange.

Description

MATURED BULB

Lachenalia bulbifera is a deciduous, winter-growing geophyte of up to 0,3 m high. The subterranean storage organ is a shallow or deep-seated, fleshy, flattened bulb surrounded by membranous outer tunics.

LEAVES

The plant produces one or two narrowly or broadly egg-shaped, fleshy, sub-erect leaves that may be plain green or heavily spotted or blotched with dark brown or purple on the upper surface.

FLOWER

The plant produces a sturdy, erect, plain or spotted flower stem covered with a delicate grey bloom. The numerous long, tubular flowers are pendulous and borne on short or long, red or orange flower stalks. The flowers are unscented and have a distinct perianth tube that is 6 to 8 mm long. Flower colour varies from pale to deep orange or red and occasionally pure yellow specimens also occur. The outer tepals have a dark red or brown

swelling near the tip and the slightly longer inner tepals usually have green tips, flanked by two purple zones.

Production areas in South Africa

The lachenalia bulb flower is mainly produced in the Cape region of South Africa, where most botanical species are found.

Climatic and soil requirements

Temperature

Lachenalia bulbs grow in winter, so they need some moisture during that time of the year. They are normally dormant in summer, when they receive little or no precipitation in their habitat. In cultivation, they appear to tolerate some frost in winter and some moisture in summer. Exposure to low temperatures of at least -18°C may be tolerated in a short period. Excessive heat or low light levels result in limp and lanky plants that may not flower well.

In cold climates areas, lachenalia bulb should be grown in containers. Since they grow and flower in winter, they need to be grown in a frost free but brightly light location. They do best with cool temperatures and bright sunshine when growing.



Soil requirements

Most South African bulbs are found in rocky soils that are poor in nutrient, therefore it is better to simulate this soil for cultivation. It is best to grow these bulbs in a mixture of three parts bark, one part grit and one part sand in pots. Sand mixed with some compost may be also used.

They should be planted in sandy, well-drained soil. *Lachenalia* bulb is found on deep, acid or alkaline sand dunes, as well as on granite outcrops in gravelly clay and humus-rich soils. The soil pH suitable for the growth of lachenalia bulbs range from 6,6 to 7,5.

Cultural practices

Soil preparation

The existing vegetation should be killed off by registered pre-sprouting herbicides, removed or smothered before any work is done on the soil or loosened-up in order to prepare the flower bed area for planting. This can be done with a tiller or by hand, using a spade and garden fork. If the soil is very compacted or has never been tilled, a tractor can be used to do the initial passes. Thereafter, a lightweight tiller or a spade should be sufficient.

Propagation

Propagation method is usually through tissue culture and leaf cuttings. It is also propagated through dividing rhizomes, tubers, corms or bulbs.

Planting

Lachenalia bulbs are planted in deep seed trays or pots in a sterilised medium of equal parts fine compost or loam and river sand. *Lachenalia* seeds should be sown thinly to prevent overcrowding and fungal infections and also to allow sufficient room for each seedling's bulb to develop. After planting, cover with a thin layer of sand, and keep moist and shaded. Germination should occur within five weeks. Planting period for lachanelia bulb is from March to May.

Fertilisation

During active growth of lachenalia bulbs, a dilute solution of a soluble, high quality fertiliser is mixed and applied