

D*rosera capensis* is an easily-grown carnivorous plant indigenous to moist areas around Cape Town. It is grown widely overseas by carnivorous plant enthusiasts because of its size and easily met cultural requirements.

It is one of over 100 species of *Drosera* or sundew. All are carnivorous in that they are able to retain and digest small arthropods which alight on, and are probably attracted to, the leaves. The upper surface of the leaves have an array of sensitive hairs 2 - 5 mm

long; the longest hairs projecting from the edge of the leaf. Each hair is topped by a gland which secretes a colourless drop of viscous, sticky liquid. Any small arthropod coming in contact with a mature leaf soon encounters some of the sticky glandular secretion. They are delayed in moving away from the leaf and generally come into contact with more beads of sticky fluid from adjacent hairs. The arthropod becomes increasingly held fast and the glands which have cap-

tured it slowly bend to bring the animal to the centre of the leaf, into contact with more hairs, where it may suffocate. The glands also secrete acids and enzymes which dissolve the soft parts of the prey. These are absorbed by the plant. Once consumed, a process which may take from several hours to days depending upon the size of the

which is native to the coastal plains of Carolina, USA. Like other types of carnivorous plants they prefer impoverished and, at least seasonally, wet soils as they are able to supplement their diet with nutrients obtained from trapped arthropods.

The Cape sundew is a showy, evergreen *Drosera* species which has semi-erect linear leaves up to 12 cm long and 4 mm wide. In addition to the leaf movement outlined above, this species is capable of folding the entire leaf around trapped prey, the effect of which is

to increase contact and the efficiency of digestion.

The sparse root system is composed of relatively thick (2 mm diameter) succulent roots, which grow 15-20 cm long and branch infrequently.

From mid-spring and mid-autumn each mature plant produces one to three one-sided racemes (a flower cluster with the separate flowers attached by short equal stalks at equal distances along the central stem), which carry from ten to over

THE CAPE SUNDEW

Drosera capensis: know it and grow it.

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prey, the hairs move back to their original position and reveal the chitinous remains of their meal. The sticky fluid is re-secreted and the leaf is once more set for a meal.

As shown from the nature of the floral parts, sundews are closely related to what is probably the most famous of all the carnivorous plants, the Venus fly-trap, *Dionaea muscipula*,

The rosette-shaped plant of *Drosera capensis*, the Cape sundew or 'doublom'.



forty flowers. Each small flower is about 2 cm in diameter, with five petals and sepals. The flower lasts a day and opens from early morning to the early afternoon on sunny days. Seed is invariably set by most, if not all, flowers, even outside their native South Africa, as each flower is able to self-pollinate as it closes. The seed ripens four weeks later and each seed pod contains over 100 small black filiform, viable seeds which germinate readily on most substrates.

Two basic forms of this species exist, the wide-leaf and narrow-leaf forms. The leaf sizes of the two forms are typically 120 mm long by 4 mm wide and 100 mm long by 2.5 mm wide respectively. Only the former is able, albeit slowly, to form a brown stem, which can grow up to 10 cm (or more) tall. The wide-leaf form has apple-green leaves and scapes with red retentive hairs. The petals are rose-pink. Three distinct colour forms of the narrow-leaf type occur. The most commonly cultivated form has similar colouring to the wide-leaf form, but its petals are pale pink. A red leaf form has abundant red pigment in both the retentive hairs and leaf blade. The white flower form is a true albino and totally lacks red pigmentation.

Cultivation

All forms of this species are easy to grow and make an attractive display. They can grow in a range of potting media which need to be kept low in nutrients and can include entirely, or in combination, any of the following: peat moss, sphagnum moss, sand (not from beaches), perlite and commercial unfertilized potting mixes. I prefer to use a combination of peat moss and sand or live sphagnum moss. This mix is placed in a full-length plastic pot 10 - 15 cm in diameter. The plant is inserted and watered. The mix needs to be kept continually moist, best achieved by placing the pot in a saucer 1 - 3 cm deep. The plant is assured of sufficient water if the saucer is

frequently topped up. For best results the plant needs as much sunlight as possible so the pot and saucer should be given an easterly or northerly aspect. There is no need to fertilize the plant or catch insects for it. The healthy plant has fully bedewed, well-developed leaves and flowers freely.

This species is easily propagated by both seed and vegetative means. Fresh seed germinates quickly on any moist potting material which mature plants can tolerate. They grow quickly and can reach flowering size within a year.

Root cuttings and leaf cuttings also work. A mature plant can be uprooted and a healthy living root selected. This can be cut into segments 2 - 3 cm long which are placed just under the surface of moist potting mix and the parent plant carefully repotted. In 4 - 6 weeks a few plantlets emerge. Similarly, entire, fully bedewed leaves may be cut from a plant - the cut being made as close as possible to the base of the leaf. The leaf may be placed either horizontally or vertically on moist potting mix, the basal part of which is buried. Plantlets form as the leaf dies away. As a variation a plant may be decapitated. The detached top, when placed in a suitable mix, develops roots and the remaining basal portion develops a new growing point. All such plantlets grow more rapidly than seedlings.

In cultivation plants of this species may suddenly die for no apparent reason. This is particularly pronounced in older plants of the wide leaf form which have developed appreciable stems. When this happens the plant invariably re-shoots from the roots. The parts of the plant above the



The flowers of *Drosera capensis*.

ground are also killed by repeated exposure to frost. As long as the soil and roots do not freeze the plant should resprout from the roots in early spring.

Despite the fact that this species is carnivorous it is still prone to insect attack, particularly by caterpillars and aphids. A dilute pesticide may be applied, however there are better alternatives. If the infestation is not great the pests may be removed by hand, or with a paintbrush dipped in the retentive fluid of the plant. In more severe attacks the entire plant may be submerged for a few days in clear, fresh water, or the above-ground parts of the plant removed. Prolonged and repeated attacks may be a sign of incorrect growing conditions and may warrant the removal of the pot to a different area.

The Cape sundew is an easily grown South African plant. It is attractive, free-flowering, reproduces easily and its carnivorous nature makes it a fascinating houseplant.

Further reading

- Slack, A. (1980). *Carnivorous plants*. A.H. and A.W. Reed, Sherbourne, England.
Slack, A. (1986). *Insect-eating plants and how to grow them*. Alphabooks,