Protea laurifolia | Plantz Africa

Introduction

Protea laurifolia is a bearded protea with large, pale pink or cream flower heads during the winter months. It is also frost hardy, water-wise and tolerates a wider range of soil types than most proteas.

![Protea laurifolia](image1)

Description

Protea laurifolia is a large, upright, well-branched shrub, 3-5 m tall, or small tree up to 8 m high, with a short, stout main trunk up to 300 mm in diameter and branching from about 200 mm above ground level. Leaves are elliptic, broader in the middle and tapering to the base and apex, 80-140 x 10-55 mm. The petiole is very short, 3-20 mm, and the apex is tipped with a short spine (mucronate). The midrib is prominent and the margins are very prominent and heavily thickened. The leaves are covered with minute soft hairs when young but hairless when mature, and the leaf surface is coated with a whitish to blue-green bloom that can be rubbed off (glaucous), giving the whole bush a greyish green colour.

![Protea laurifolia](image2)
The *Protea* flower is not a flower, but a flower head or inflorescence, made up of many individual flowers grouped together on a rounded base or receptacle. What looks like the 'petals' of the protea 'flower' are modified leaves known as floral or involucral bracts. Look inside the cup of involucral bracts and you'll see many long narrow flowers massed together in the centre.

The flower head is oblong, 100-130 x 40-60 mm. The involucral bracts are a silky silvery pink, or faded pink, or cream, with a thick beard on the inner bracts. The beard can be purple-black, white or mixed white and black. The individual flowers are 75-90 mm long and are also densely covered with purple-black or white hairs. The main flowering time is during autumn-winter (May to July), but flower heads can be found from autumn until early summer (April to November).

The fruit is a small, dry, hairy nut. Seeds are held inside the flower until the branch or bush dies. For harvesting purposes, the seeds should be left on the bush to ripen for a period of about seven months. Only a few viable seeds are produced per head.

*Protea laurifolia* is very similar to *P. neriifolia* and is often confused with it. They can be told apart by their foliage: *P. laurifolia* leaves are elliptic (broader in the middle) and have heavily thickened, horny margins and a grey bloom that can be rubbed off, whereas those of *P. neriifolia* are dark to bright green and narrowly oblong with margins that are parallel for most of their length, and are not heavily thickened and don't have a greyish bloom. Also, *P. laurifolia* has a petiole, even though it is very short, whereas *P. neriifolia* has no petiole at all. There are variants of *P. laurifolia* that have less of the greyish bloom on their leaves and some *P. neriifolia* plants with blue-grey leaves, which are more difficult to distinguish.

**Conservation Status**

**Status**

*Protea laurifolia* is not threatened, it is one of the most common of the proteas, with a wide distribution.

**Distribution and habitat**

*Protea laurifolia* occurs on the inland mountains of the Western Cape from the Bokkeveld escarpment near Nieuwoudtville southwards along the Gifberg, Cedarberg, Olifants River, Koue Bokkeveld, Tulbagh, Bain's Kloof, Du Toit's Kloof, Paarl and Franschoek Mountains to Villiersdorp, and then eastwards from the Riveronderend Mountains to McGregor. Populations also occur on Heerenlogementberg, Piketberg and Paardeberg, and further inland it skirts the western edge of the Karoo, occurring along the Cedarberg, Swartruggens Escarpment, at Karoo Poort, on the Bonteberg, Witteberg and on the Worcester Hex River Mountains, the Langeberg and Anysberg. *P. laurifolia* covers vast stretches of mountainside between 400 and 1200 m.
It grows mainly on sandstone or quartzite-derived soils, or Cape granite, but will also grow on Bokkeveld shale, which most proteas cannot tolerate. Where it receives more moisture, it forms dense stands, but it typically favours the drier, very well-drained sites where the plants are more widely dispersed, forming low open woodland. *Protea laurifolia* is very drought tolerant and can be seen surviving in very inhospitable places, and is a common sight on the bleak, semi-arid landscapes of the Cedarberg and Koue Bokkeveld.

**Derivation of name and historical aspects**

**History**

The genus *Protea* was named by Linnaeus after the Greek god Proteus who could change his form at will, because the proteas are so different in form. The species name *laurifolia* means laurel-leafed, referring to the resemblance of the foliage to that of the laurel, *Laurus*.

*Protea laurifolia* was described in scientific literature in 1803 by Carl Peter Thunberg from specimens that he collected himself during his visit to the Cape between 1772 and 1775. In 1802, plants raised from seeds collected by James Niven, flowered in George Hibbert’s conservatory in Clapham, London. In 1803, Henry Andrews published a coloured engraving of a flower head taken from one of Hibbert’s plants.

The Proteaceae is a family of ± 75 genera and ± 1350 species that occur in Africa, Madagascar, southeast Asia, Malaysia, Pacific Islands, Australasia and South America. There are 16 genera and ± 360 species in southern Africa. The genus *Protea* contains ± 112 species, all of which occur only in Africa and 89 (79 %) of them in southern Africa, mainly in the Western Cape.

**Ecology**

*Protea laurifolia* is pollinated by the Sugarbird, *Promerops cafer*. Nectar is found at the base of each flower. To get to it, the Sugarbird has to push its head between the massed flowers to reach the nectar at the base; while doing this, pollen is rubbed off onto the bird’s head. It then flies off to another bush and transfers its load of pollen to other flowers while it picks up some more. Sugarbirds pollinate many species of *Protea*. 
Inter-species hybrids do occur, particularly where some species that don't occur together naturally are being cultivated near each other. This has become a problem where the hybrids are occurring in natural areas, which indicates that nearby cultivated plants are contaminating the gene pools of wild species. Should the hybrids set viable seed and continue to breed with the wild species, it could permanently alter or even wipe out the wild species. Natural hybrids of *P. laurifolia* with *P. nitida* and with *P. magnifica* have been found, and *P. laurifolia* is known to hybridize naturally with *P. burchellii*.

The flower heads are also visited by many insects, including the protea beetle, which comes in search of pollen and nectar. The protea beetles are large and brush the pollen onto themselves as they move through the flower head and do effect pollination, but a study by the Agricultural Research Council has shown that insect-pollinated seeds have lighter embryos, lower seed set and slower germination than bird-pollinated seeds. Sunbirds also feed on the nectar, but they do not effect pollination as they 'cheat' by sticking their beaks into the side of the flower heads straight to the base of the flowers, bypassing the pollen.

*Protea laurifolia* plants are killed by fire but they release thousands of seeds that are stored in the old flower heads, the seeds are dispersed by the wind, and germinate *en masse* after the autumn rains.

Protea seeds are covered in long hairs. These hairs aid in dispersal and germination: by expanding as the flower head opens, forcing them out of the head; once they are out, the hairs allow the seeds to be more easily moved by the wind; and once they land on the soil the hairs help to anchor the seed to the ground; and finally, the hairs help orientate the seed the right way round and channel water towards it.

**Uses**

**Use**

Although *Protea laurifolia* is an excellent, long-lasting cutflower, it is not grown for the export market. It is a valuable source of firewood particularly in the more arid regions of its distribution range where it is often the only woody species in the veld.

**Growing Protea laurifolia**

**Grow**
Protea laurifolia is slow growing, taking up to seven years to flower for the first time from seed, but very long-lived for a protea, outliving most other proteas in the garden and still looking good after 30 years or more. Some of the larger wild specimens are estimated to be 70 or 80 years old. It is easy to grow in that it is tolerant of a wider range of soil types than most proteas. The soil must be well-drained, but it will thrive in acidic, neutral or slightly alkaline soil.

Like other proteas, it is a light feeder with a sensitive root system that is adapted to very nutrient-poor soils. It will not tolerate strong fertilizers and manures, but should be fed with well-rotted compost and if using chemical fertilizers, choose a slow-release one or apply very low doses. Proteas don't like phosphates (P), so choose a fertilizer that has little or no P in its formula.

Plant P. laurifolia in a sunny position with free air circulation - the more shaded and sheltered its position the more likely it will be affected by fungal infections. P. laurifolia is very drought tolerant and does not need much supplementary watering once established. Allow it at least two summers with regular watering to become established. Keep root disturbance to a minimum; protea roots are very susceptible to infection so try not to break them by digging around their base inside their drip-line, rather put down a thick layer of mulch once or twice a year and leave them undisturbed.

Protea laurifolia is hardy to cold and frost and should survive outdoors in zone 9 (-7 to -1°C/20-30°F).

Grow Protea laurifolia in the water-wise garden, the fynbos garden, or the arid garden, or in that difficult, hot, dry and windy spot where nothing else seems to thrive. It is a large, long-lived, dense and bushy shrub and is suited to background planting or screening. It provides a steady supply of beautiful flowers for the vase throughout the winter months.

Protea laurifolia is easily raised from seed, sown in autumn, in well-drained soil, lightly covered with clean sand or fine-milled bark and kept moist but not wet. Germination occurs after about 30 days. Treating the seed with a fungicide increases the number of surviving seedlings. Transplant into individual containers as soon as the first pair of true leaves have developed. Seedlings are slow-growing, and the first flowers can be expected in its seventh year.

It can also be propagated by semi-hardwood cuttings taken from the current season's growth, in autumn or spring. Remove the leaves from the basal third of the cutting, treat with a rooting hormone, and place in a well-drained rooting medium under intermittent mist with a bottom heat of 25°C.

References


Credits

Alice Notten
Kirstenbosch National Botanical Garden
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