



Protea Family Care Instructions:

The most popular members of the Protea family are Protea, Leucadendron (Cone flower), Leucospermum (Pincushion flower), Banksia and Grevillea. Most of these plants are native to South Africa and Australia and are typically drought-tolerant and deer-resistant. Some plants are easier to grow than others, but the same general care instructions apply to the group as a whole.

- **Protea**: Medium to large leafy shrubs that have some of the showiest flowers. The flowers of the most popular varieties look like cups of fur-tipped bird feathers with fuzzy centers. From South Africa.
- **Leucadendron (Cone flower)**: Medium to large shrubs with waxy tulip-like flowers in shades of yellow, gold and red. Handsome foliage year-round. From South Africa.
- **Leucospermum (Pincushion flower)**: Medium-sized spreading to upright shrubs, typically with grey-green foliage. Flowers resemble exploding balls of fireworks in yellow, orange and red tones. From South Africa.
- **Banksia**: Shrubs of various heights and widths up to tree-like proportions. Leaves are typically leathery and serrated. Unusual flowers look like large bottle-brushes in yellow, gold and orange. Woody and unique seed pods look like extraterrestrial play toys. From Australia.
- **Grevillea**: A vast array of growth habits ranging from ground-covers to medium and large shrubs and trees. Flowers are spider-like, toothbrush-shaped or drooping clusters in an array of colors including pink, cream, orange, red and gold. From Australia.

Planting: In general, the Protea family dislikes heavy clay soils, alkaline (high pH) and waterlogged conditions. Lighter, well-drained soils are preferred; however clay soils with good drainage can be amended to create a better growing environment. Planting mixes that include redwood sawdust, finely ground bark and perlite are recommended at a rate of 30-50% mixed with native soil. Manure based products are not recommended. Acid Planting Mix is popular to use when planting in the ground and is the preferred planting mix to use in pots mixed with Cactus and Succulent Planting Mix at 2/3 Acid mix and 1/3 Cactus mix. *See our Planting Guide Diagram for instructions on elevated planting techniques to increase drainage.*

Fertilizing: The Protea family members are not heavy feeders and require only a light amount of nitrogen and also micronutrients such as iron and magnesium to flourish. They are primarily intolerant of phosphorus (P) so any fertilizer used should contain less than 5% phosphorus. Recommended fertilizer amendments are Iron sulfate and Cottonseed Meal. Annual applications of Soil Sulphur can be beneficial to counteract soil alkalinity and pathogenic soil fungi. Other fertilizers that may be used are ammonium sulfate and blood



meal. Liquid fish emulsion is also an excellent fertilizer for pots or landscape plants in that it's quicker than dry fertilizers which last longer but don't work as fast in feeding the roots.

Watering: Once established, the Protea family is very drought tolerant. Young, growing plants will need regular watering during the first year. Newly installed plants should not be allowed to completely dry out between waterings. Plants should receive an average of one to two gallons of water every week for the first two months continuing afterwards during the dry season of first year. During the dry season of the second year, plants may need monthly waterings of 5-10 gallons of water to sustain active growth. Hand-watering can suffice but a drip-system may be more practical. Protea family plants in pots during the non-rainy season will need water once a week if in cooler weather and twice a week if in hotter weather and also depending on how much total sunshine the pot(s) get in their location(s) will factor into the once or twice a week needs. If hot weather is coming it's best to water when the soil is cool, preferably in the early morning or late evening. This is very important for plants in the ground as well. Watering when the weather and soil are hot can promote plant killing soil fungi. Try to water a day or two ahead of the heat wave.

Mulching: Mulch is essential in providing moisture retention, weed suppression and erosion control, as well as providing a beautiful, finished aesthetic. Mulches range from ground sawdust to bark chips to shredded redwood bark. Apply mulch approximately two to three inches deep on all planted areas, being careful not to smother the crown or lower branches of new plants.

Pruning: Should be done on an annual basis. In general, Protea family plants need to be cut back after flowering. Most plants are finished blooming by May or June and subsequent pruning will shape, invigorate and properly direct growth for the coming season. Protea, Leucadendron, Leucospermum and Banksia benefit from cutting finished blooming stems halfway between spent flower and previous year's growth point. In general the Protea family does not like hard pruning on stems over ¼" in diameter, hence the need for an annual pruning program. The exception is Leucadendron which can take harder pruning on thicker stems.

Diseases: The most common protea family problem is soil fungus which can quickly kill the feeder roots and cause the plant to suddenly look dried out and brown. Most plants will not come back. Good drainage, lots of sun, good regular air movement and acidic soil conditions will thwart soil fungi. Also not watering plants during the heat of the day. Other diseases caused by situational problems are black sooty mold and white mealybugs. The cultural conditions described above will help prevent this, but if needed, Neem Oil or Insecticidal Soap can be sprayed on the affected leaves and stems to help control the affliction. Wiping off mealybugs and sooty mold by hand is effective as well, especially in the early stages. Visually monitoring your plants regularly will alert you to these conditions early on if they exist.