Who says they are boring?

Grow South African Pelargoniums and discover the diversity of these beautiful plants

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Above: Pelargonium praemorsum a semi-succulent shrub with showy flowers, a good pot or rockery subject.

Right: Pelargonium auritum a winter rainfail geophytic species that can be treated as a spring bulb.

Our indigenous species of Pelargonium have played a vital role in the development of the ornamental hybrid Pelargonium (or 'Geranium' as it is commonly but incorrectly known). The introduction of southern African pelargoniums into Europe began in the early 17th Century, with Pelargonium triste being one of the first. But it was not until the last decade of the 18th century that pelargoniums became popular. The cultivars are still very popular plants world-wide, but what about the more than two hundred species? Why have these plants been relegated to collections? They deserve a place in your garden or on your balcony. What other genus offers you herbaceous perennials, small shrubs, ground covers, succulents and bulbs?

In the garden they are quick-growing and rewarding plants, offering interesting foliage and in many cases, showy flowers. The larger species can be used as quick-growing shrubs eg P. papillonaceum, P. citronellum and P. cucullatum. The floriferous smaller species, like P. inquinans, P. tongense and P. pelatum, make good bedding plants which, in very harsh areas, can be replanted annually, much in the same way as the cultivars are treated in Europe. A herb garden is enhanced by the addition of scented pelargoniums eg P. tomentosum, P. crispum and P. graveolens. A well drained rockery would provide a suitable home for the more succulent species eg P. magentum, P. ionidiflorum and P. fulgidum. The geophytic species may be used in the same way as bulbs, either in mass displays or in rockery pockets eg P. ollognostum, P. incassatum and P. auritum.

All the smaller, succulent, scented and geophytic species make good pot subjects for the steep, patio or windowsill. Pelargoniums are found distributed in a wide range of habitats, over most of southern Africa, so it is impossible to lay down one set of growing conditions to suit all species. The most important consideration when growing the indigenous species is to note the natural habitat, the soil type, the amount of shading, the amount of rain and when it falls etc, and then to attempt to simulate natural conditions as closely as possible. Many species have wide tolerance limits and are therefore easier to grow.

The basic requirements for growing pelargoniums are good drainage, plenty of light and free air circulation.

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Water
Water is the most critical factor in controlling the growth conditions of Pelargonium species. The amount and frequency of watering depends on the growth medium, the climatic conditions, the species requirements and if applicable, the container type. DAY-NIGHT species require more water than plastic pots. A general rule of thumb is to water only when dry, as under-watering is preferable to over-watering. For ease of maintenance, it is simpler to group the species according to growth habit.

1. Geophytic pelargoniums which have underground storage organs and are seasonally dormant. These in turn need to be subdivided into winter-rainfall species eg P. nubecule, P. triste, P. lobatum and P. incressatus or summer-rainfall species eg P. bowkeri, P. schizopetala, P. iuridum and P. coffrum. These species require regular water during their growing season but must not be over-watered or the tubers will rot. In their dormant season they require no water and if the storage organ is wet it will rot. Dormant plants can either be stored dry in their pots, preferably in a cool place, or can be lifted, treated with fungicide, such as Kapton (5 g per 5 l), and stored in a cool, dry place, in the same way as bulbs. Excessive heat and desiccation will damage the dormant plant, so if it is not possible to store
the pots in a cool place, they can be cooled by lightly dampening, but not soaking, the surface of the pot.

(2) Succulent and woody pelargoniums which are dormant or semi-dormant in summer. These grow mainly in the Karoo and more arid areas, eg P. carnosum, P. crithmifolium, P. praemorsum, P. antidyserenicherum and P. centrostylum. These species need a well drained medium and must not be over-watered as they are prone to rot. It is advantageous to position these plants at a shallow level in their growth medium with a layer of grit on the surface. This reduces the chances of rot at the surface by being very well drained, but still providing support. Water only when completely dry at all times of the year.

(3) Herbaceous, evergreen pelargoniums which grow all year and come from the southwestern and southern Cape, eg P. cordifolium, P. fruticosum, P. cujulatum P. panduriforme and P. betulinum. These species require regular water to maintain optimum growth but must not be waterlogged.

Soil
Good sandy loam soil will suit most pelargoniums. The pH is not a critical factor and a neutral to slightly acid pH is suitable for most species.

Shade
Contrary to popular belief, light shade or full shade for part of the day is of benefit to most Pelargonium species. In their natural environments they are found growing in the shelter of bushes or rocks where, even if the leaves are exposed, the roots have a cool run. None of the species grows successfully in heavy shade as they become very etiolated.

Pruning
Pruning is essential for the vigorous species to rejuvenate and to increase the life-span of the plant — P. denticulatum, P. glutinosum, P. scabrum, P. capitatum and P. graveolens all require this treatment. The plants can be cut back about two thirds to just above a node, and any weak growth should be removed. The best time to prune is late summer to early autumn, which gives the plant time to grow again before winter. The pruning can be used for cuttings if healthy.

To encourage bush formation it is a good practice to pinch out the growing tips of young plants.

The succulent and geophytic species do not require pruning except possibly to improve shape or remove disease. Dead leaves of geophytic species should be cut off and not plucked as the leaf base protects the growing tip from desiccation and damage.

Feeding
Feeding of potted plants is recommended. Use a balanced fertilizer, such as Wuxal or Chemicult, about every tenth watering, when in active growth. Care must be taken not to overfeed as this can result in lush growth which is prone to disease. It can also result in a high salt build-up which has toxic effects. Plants in the garden should be fed with a balanced, slow release fertilizer, eg 2:3:2 at the beginning of their growing season.

Potting
Vigorously growing plants should be potted on into larger containers before the plant becomes root-bound. This must be carried out with minimal disturbance to the roots so that growth is not stopped. Well established plants should be repotted every couple of years while in a dormant or semi-dormant state. This involves the careful removal of the old, exhausted medium from the root ball, and repotting the plant in the same size container. During this process geophytic species may be divided. Roots should be washed and any damaged or diseased roots removed. They may be treated with fungicide before repotting. In the case of the herbaceous, evergreen species it is advisable to prune the top of the plant as well to compensate for root loss.

Pest and diseases
Many pelargoniums grow happily in the open, free of disease, but when the same plant is grown indoors or in a glass house, the warmer conditions and lack of free air circulation encourage the appearance of many serious pests. Table 1 lists the major pests, their symptoms and control.

Pelargonium Promotion
A wide selection of species suitable for garden and pot culture will be on sale at the Kirstenbosch Garden Shop on the weekend of 5 and 6 October 1991. A Horticulturist will be available from 10:00 to 13:00 on both these days to offer advice on pelargoniums.

Further Reading

Table 1. PESTS AND FUNGAL DISEASES

<table>
<thead>
<tr>
<th>PESTS</th>
<th>SYMPTOMS</th>
<th>CONTROL</th>
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<tbody>
<tr>
<td>Aphids</td>
<td>Small green insect, winged or wingless, attacks stem tips sucking plant sap, causing wilt.</td>
<td>Primrose, Durban, Malathion, Parashoot, Dazzel 436</td>
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<tr>
<td>Stem Borer</td>
<td>Sections of stem turn black and soft, small penetration hole visible.</td>
<td>Orthene</td>
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<tr>
<td>White Fly</td>
<td>Small white, winged insect on underside of leaf. Suck sap cause leaf to curl</td>
<td>Parashoot, Ripcord, K. ethrin, Garden Gun</td>
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<tr>
<td>FUNGI</td>
<td></td>
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<tr>
<td>Rust</td>
<td>Brown spots on underside of leaf, yellow spotting on upper surface</td>
<td>Capreavit, Koprox, Bilitox, Funginex, Dithane.</td>
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<tr>
<td>Powdery mildew</td>
<td>Whitish powdery growth on leaves.</td>
<td>Benlate, Funginex.</td>
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