

Australian Plants for Sandy Soils

Soils are classified according to their particle size, with gravel being the coarsest (larger than 2mm) and clay the finest (less than .002mm)

In between these two extremes are the sandy soils and the sandy loams.



Range of plants growing happily in sandy soil i.e. *Syzygium* hedge (bottom left). Dwarf Banksia, 4 to 5 *Baeckea virgata* (dwarf) growing in mounds, with *Eremophila* in the background

Sandy soils

The individual grains of sand can be seen, ranging in size from very fine to coarse and gravelly.

Sandy soils will drain extremely well. However, they are usually very low in organic material, therefore they will dry out very quickly.

Sand has a low nutrient content because of the leaching effects of water draining through it. This can show up with poor plant growth due to a deficiency of some minerals. Beach sand is a good example.

To improve a sandy soil

Sandy soils need the addition of large amounts of organic material, as there are no clay particles with which this material can bind. Organic material must be added to the soil regularly.

Sandy loam usually:

- is a good draining soil with a high proportion of sand,
- contains varying amounts of silt and clay particles within a soil sample.

This soil type is regarded as excellent for plant growth.

Frequent use of fertilizers

During the growing season, regular applications of either slow-release or soluble fertilizers should be applied. Soluble fertilizers should be applied every 2 or 3 weeks, whilst slow release fertilizers can be applied once or twice a year.

Adding clay to very sandy soils

In very sandy soil conditions, garden beds can be improved by adding a clay top soil.

The amount of clay top soil needed is about a quarter of the sand being treated. About 10cm of organic material should be added at the same time. This material needs to be mixed through the sand by using a rotary hoe or a garden fork.

This will allow the soil microbes to begin to produce the valuable humus.

Water-repellent sandy soils

Some sandy soils can become water repellent and difficult to wet. This is caused by fungal activity producing a waxy material on the decomposing organic material.

The use of a wetting agent is the quickest and simplest way to overcome this problem. Wetting agents are slow biodegradable detergents that when used at the recommended rates are not harmful to plants. Wetting agents are generally only suitable for sandy soils. They have little effect on the heavier clay soil types.

The addition of clay, worked into the top 10cm. will also solve this water repellent problem.

Watering

To encourage the roots to grow down deep in search of moisture, sandy soils require deep thorough soakings, rather than a light sprinkling of water. Light watering will only encourage surface roots, which in dry periods places the plant under stress.

Water absorbing crystals can only be regarded as a short term fix. Most will break down within a few months of application.

Suitable plants for sandy soils

Actinotus helianthin, Flannel Flower: 1 x 0.5m, soft silver grey foliage. White star-like inflorescences with soft white flannel-like bracts (petals) each tipped with green. Flowering spring and summer. Local.

Anigozanthos flavidus, Kangaroo Paw: 1 x 1m, bright green strap-like leaves. Green yellow to red flowers on branching stems to 2m during spring and summer. Many colour forms are available.

Baeckea virgata 3 x 2m, large bushy shrub. Produces masses of small single white flowers.

Bauera rubioides, Dog Rose: 1 x 1m, rosy pink flowers throughout the year, with a main flush in spring. White flowering forms are available.

Boronia denticulata 1 x 0.6m, aromatic foliage. Pink star shaped flowers in spring.

Calytrix tetragona 1 x 1m, small bright green foliage. White through to deep pink star shaped flowers in spring, followed by reddish brown fruiting capsules.

Correa "Dusky Bells" 0.5 x 2.5m, showy pink bell shaped flowers in autumn.

Correa reflexa 1.2 x 2.5m, many forms available. Green through to red bell shaped flowers during autumn and winter.

Correa "Mannii" 0.5 x 1.5m, dusty pink flowers in autumn and winter. Dense growth habit.

Dianella revoluta 0.5 x 1m, flax like leaves. Bright blue flowers in spring, followed by deep blue globular fruit.

Grevillea x gaudichaudii 0.3 x 3m, vigorous groundcover with deep red toothbrush like flowers in winter and spring.

Grevillea 'Honey Gem' 4 x 4m, large shrub with orange toothbrush-like flowers for most of the year. Bird attracting.

Grevillea 'Moonlight' 4 x 3m attractive cream toothbrush-like flowers.

Grevillea 'Poorinda Royal Mantle' 0.3 x 3m, vigorous groundcover. Dark red flowers in spring and summer. One of the best ground cover grevilleas.

Hardenbergia violacea, Happy Wanderer: trailing plant 1 to 3m. Useful spring flowering climber. Purple, pink or white pea shaped flowers.

Hibbertia scandens quick growing twining plant. Large bright yellow flowers in spring. Useful as a ground cover.

Melaleuca hypericifolia 2 x 4m. Dense shrub. Brick red bottlebrush flowers in late spring and summer.

Melaleuca thymifolia 0.6 x 0.6m, small shrub with elliptical leaves. Mauve or white claw-shaped flowers for much of the year.

Micromyrtus ciliata 1 x 1m, very small leaves. In spring the plant is covered with small white flowers, which age to pink. Suitable as a cut flower.

Myoporum parvifolium Prostrate to 1.5 m. Dense ground covering plant. Green or purple leaf forms with white or pink flowers. Hardy.

Prostanthera rotundifolia 1.5 x 1.5m, small round leaves, often with toothed margins. Masses of purple flowers in spring. Pink flowering form also available.

Westringia fruticosa 2.5 x 2.5m, blue green foliage. White flowers throughout the year. A hardy front line coastal plant.

Xerochrysum bracteatum syn. *Helichrysum bracteatum* 'Dargon Hill Monarch' 0.6 x 0.6m. Large grey-green leaves. Large everlasting daisy type flowers during spring, summer and autumn. Colours range from bright yellow to orange and white.

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