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Gardennote

Growing Australian plants

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Dryandra praemorsa *var* splendens *(Photo by Aileen Reid)*

Like other ornamentals, Australian native plants, need a little care and attention, although some plants have slightly different requirements with respect to feeding, watering and other aspects of husbandry.

This Gardennote focuses on how to get the best from your Australian plants. Preparing your garden adequately is the best way to ensure you have healthy plants that are less likely to succumb to pests or diseases.

Choosing plants for your site and site requirements

Australian and particularly Western Australian plants have evolved, and are adapted to a wide range of soil types. Some may prefer sands while others may appreciate some clay or organic matter.

If your soil is alkaline or acidic choose plants that prefer those conditions. Many garden centres will do a quick pH test if you take in a soil sample.

If your pH is unsuitable for your desired species, grow them in containers where you can easily create the right conditions. Use a fairly open potting mix for container cultivation.

Consider also how well your soil drains, whether the site is sunny or shaded for all or part of the day and how exposed to wind it may be.

Find out history of your block. For example, in a new subdivision that has been built where a

market garden once stood, the soil may have high levels of phosphorus, which some Australian plants cannot tolerate. Other areas may carry the risk of diseases such as nematodes to which many natives are susceptible or root rot (including dieback).

Banksia 'Birthday Candles'

Staff at nurseries or garden centres that specialise in Australian plants will be able to recommend genera suitable for your site, including those that tolerate phosphorus.

Planting and watering

Autumn to early spring is the ideal time to plant Australian species. Planting in summer is possible but water daily or even twice a day on hot days, especially if the plants are small e.g. from tube-stock since those plants only have a rooting depth of 5–10 cm.

Plants from tube-stock often give the best results. Larger plants in containers may get root bound. It is hard to tell if a plant has been root-bound in the tube prior to potting into the larger container. Death by strangulation due to root binding two to four years on is the most common cause of death in garden plants. Always buy plants from a reputable accredited nursery.

Dry area species should survive just on the winter rains and, once established, will not need supplementary watering. They may look 'off colour' by the end of summer but that is normal and once winter rains start they will recover. Many Australian plants have low water requirements but not all are drought-tolerant. Ask garden centre staff about watering requirements, particularly for the first year. Some plants from the southwest such as boronias need a cool moist root run most of the year.

Gardens with overhead sprinklers may not be not ideal, especially for species with furry or felty leaves or flowers that may hold water for a long time. Water gathering on foliage creates humid conditions and encourages fungal disease. However, most Australian plants can tolerate a sprinkler system provided they are not over-watered. Over-watering reduces their flowering and produces lush growth that is more attractive to pests and diseases. In the case of species from dry areas, over-watering shortens their life and can kill them.

Other means of irrigation may be more efficient or effective depending on the situation. Drip irrigation can be a good means of watering native plants provided outlets are not placed too close to the main stem where they may encourage collar rots. Subsurface trickle irrigation may be an option in some situations. Each method has advantages and disadvantages. Drip is more visible and if problems occur they are easily noticed and fixed whereas with subsurface irrigation the first sign of a problem may be dead plants. Many drippers are adjustable and can be installed using lengths of 4 mm tubing which can be moved around as plants grow or plantings change. Because subsurface irrigation needs to be installed relatively close to the surface in sandy soils it is also easily broken when digging in the garden. Additional watering will be needed during establishment. Correct spacing of the lines relative to plants is crucial—in sands there is little lateral movement of water.

Mulching

Mulching is not essential for Australian plants. Whilst it does help to reduce evaporation and keep the soil cooler, in our coarse sands, reserves of water in the soil are limited and the ability of plants to extract water from the soil even more so, therefore the benefits of mulch in that situation are questionable.

Mulches can carry disease, particularly when contaminated with soil and may take nitrogen out of the soil when breaking down. Always use a coarse mulch such as wood chips. Fine mulches may blow around and encourage weed growth. Always buy good quality mulch from a reputable source so that you can be sure it is not harbouring fungal diseases.

Eucalyptus caesia *(Photograph courtesy of Botanic Gardens and Parks Authority)*

Anigozanthos *'Gold Fever'*

If you wish to mulch, one application at planting only of no more than 50 mm of mulch is recommended for perennial plantings. Keep the mulch away from the base of the plant to reduce the risk of collar rot. Repeated applications of mulch over time build up the soil level and promote a layer of organic matter on the surface which can cause problems. This is less of an issue in annual plantings where the mulch can be turned in and incorporated.

An Australian groundcover is a good, living alternative to conventional mulch if you are willing to be patient while it grows and spreads. Stones and well-placed rocks also act as a mulch, and can be beneficial for dry area plants that prefer less humidity around them.

Fertilising

Australian plants need only a little fertiliser, and the slow or controlled release type is recommended. Over-fertilising is counter-productive because, just like over-watering, it produces lush growth that attracts pests and diseases. Kangaroo paws are particularly susceptible.

For genera that cannot tolerate phosphorus, use a fertiliser specially formulated for their needs. General fertilisers containing phosphate can be used on genera able to tolerate phosphorus, allowing you to grow them in combination with exotics. Read the label to see whether it recommends a dosage suitable for 'native' plants, and always use a measuring cup.

Managing pests and diseases

Many Australian plants have small leaves and flowers or large flowers consisting of many small parts. So pest and disease damage creates minimal visual impact.

Some plants tend to attract birds and beneficial insects which keep the pests in check. To maintain this natural balance, you should have enough different plants to ensure there are flowers throughout the year. If a plant is chronically affected by insect pests or fungal disease, often it is easier to remove it and find a suitable substitute.

The most common problem in home gardens is root rot which may be dieback or a related species of *Phytophthora*. If dieback is present, ask your nursery or garden centre staff to recommend plants that are tolerant to this disease. Lists of plants and further information on dieback is available at the website for the Centre for Phytophthora Science and Management website at Murdoch University (http://www.cpsm.murdoch.edu.au/)

Verticordia grandis *(Photograph courtesy of Botanic Gardens and Parks Authority)*

Many Australian plants are susceptible to nematodes. Root knot is the most common type and can be prevalent in older gardens especially where vegetables or roses have been grown. If you examine the roots of the plant and they are covered with small 2 mm round balls or seem excessively branched, then that may be the problem. Your local nursery will be able to advise you on control measures.

Good garden hygiene prevents disease spread while pruning. Clean your pruners and loppers with methylated spirits after using them on a plant that you suspect may be infected—and this applies to exotics as well. Always get your plants from reputable sources.

Nematode affected root system

Pruning

Many Australian plants respond well to pruning. The best way to create a neat, dense, compact shrub is to trim it early in its life. This may mean sacrificing the first year's flowers, but the reward will be a nicely shaped shrub covered in flowers the year after. Continue to prune annually after flowering.

If you have mature Australian shrubs that have become straggly after some neglect, reshaping may be possible if the stems you want to prune still have foliage. But if the shrub has become too woody, so that the place where you want to prune each stem is devoid of leaves, it is unlikely to produce new shoots at those points.

As a last resort, try lopping it off at the base. This harsh treatment parallels natural events—such as bushfire or grazing by animals—and many Australian plants have special structure or lignotuber which allows them to respond by shooting afresh from the base.

By pruning lightly and regularly you can prolong the flowering period of certain plants, banksias being good examples. Nip out each flower once it is spent, this produces a more compact habit and new flowers. It is the same routine you probably already practise on your roses.

Taking a realistic approach

As with many exotics, certain Australian plants only perform well for a limited period of time. Some shrubs and trees may have a fairly long life but some herbaceous perennials should be regarded as short-term items, to be replaced periodically.

Red and green kangaroo paw (*Anigozanthos manglesii*), for example, is best treated as an annual. Hybrid kangaroo paws may last three or four years, after which their best performance is over. Lechenaultias also should be replaced after a year or two when they have lost their looks.

Be aware that over-watering and over-fertilising may shorten the life of Australian plants. They belong to an ancient flora that has never relied on outside help, and you can kill them with kindness by forcing them to grow at an unnatural rate, causing them to reach maturity—and old age—too soon.

Respecting the source

There are several specialist nurseries and garden centres dedicated to Australian and, particularly, Western Australian plants. Both common and unusual varieties from Western Australia are also grown by the volunteer group 'Friends of Kings Park' and sold at their plant sales twice a year. The Society for Growing Australian Plants (http://asgap.org.au/) has branches throughout Western Australia and these also hold regular plant sales.

Banksia media

Please never dig up plants from natural habitats. This practice is illegal. It impoverishes the environment, and it can also be a means of introducing pests and diseases to your own garden.

What you see growing in the bush may be the same species that you see at a specialist nursery, but often it will not be the same form. Plant selectors have brought into cultivation many different forms with more horticultural appeal, such as dwarf, compact and prostrate forms of certain shrubs and trees. Plant breeders have also developed cultivars with showier flowers or extended flowering periods.

There are now plenty of superb Australian plants—and, in particular, Western Australian ones—to suit every style of garden, from cottage to classic formal to minimalist courtyard.

Acknowledgements

Botanic Gardens and Parks Authority photographs by D Blumer; other photographs taken at Zanthorrea Nursery by the Department of Agriculture and Food.

Specimen identification requirements

When sending or delivering samples, the following information is required:

- Collector's name, location (where the specimen was found), full address, telephone number and e-mail address, description of the damage and date collected.

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