

How to Identify Water Efficient Plants at a Glance



**WESTERN
WATER**



Choosing the correct plants is a vital aspect of establishing a water efficient garden. There are many beautiful plants that are well suited to hot climates such as ours.

Some Australian native plants, as well as some of the plants from the Mediterranean, South Africa or the west coast of America are adapted to survive dry conditions.

These plants survive dry conditions by:

- Storing water;
- Reducing water loss; or
- Accessing water deep in the soil.

When you are choosing new plants for your garden please look for the following features:

Small Leaves

Small leaves are an adaptation to dry and arid conditions. Most water efficient plants have small, tough leaves, often rounded or needle-like to minimise surface area.

Light Leaf Colours

Foliage colour is a good indicator of plant water usage.

High water use plants which have developed in shady areas have a soft dark green surface.

Water efficient plants tend to have light green, blue-green or grey-green foliage which reflects the light and keeps the leaf cooler thus reducing transpiration.

Hairy Leaves

Hairy leaves are an indication of water efficiency. Hairs surrounding the plant pores act like a windbreak, slowing down air movement over the pores and thereby reducing moisture loss.

Tough Surface

Water efficient plants have a tough, hard and sometimes waxy surface to their leaves.

While most moisture loss is through the pores, there is some loss through the actual leaf surface.

Australian native plants such as *Callestemon*, *Melaleuca* and *Eucalyptus* have these tough surfaces as do other species of plants like *Ceanothus*, *Rhaphiolepis*, *Pyracantha* and *Elaeagnus*.

Strong Internal Structure

Tender plants wilt in the heat when they cannot take up water fast enough to replace that lost by transpiration.

Though they recover from short periods of wilting, if it is prolonged the structure of the plant can be damaged.

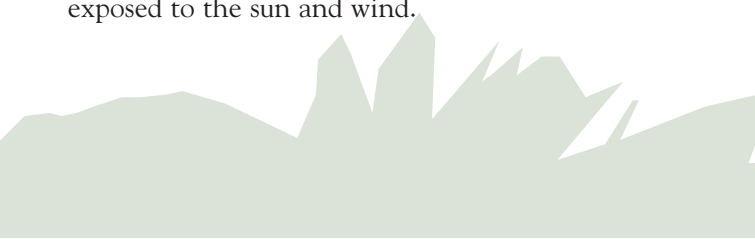
Water efficient plants have a strong internal skeleton which prevents this wilting. This combined with reduced transpiration ensures they can survive extended periods of heat stress.

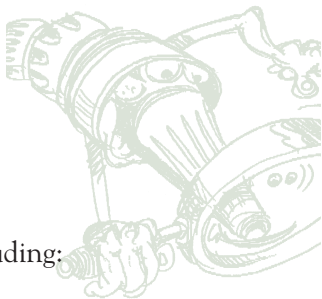
Protected “Pores”

The leaves of plants contain small pore like openings called *stomata* through which most of the moisture is lost through transpiration.

They can be likened to the sweat pores in our skin.

Water efficient plants have fewer of these pores or protect them to minimise water loss. Water efficient plants also have most of their *stomata* on the underside of the leaves where they are less exposed to the sun and wind.





Internal Water Sources

Water may be stored in many different parts of a plant including:

- The trunk
- A swollen root system
- In the leaves.

Some examples include:

Trunk:	Boabab Tree and Barrel cacti
Root System:	Kurrajong
Leaves:	Pigface, Crassula and Kalanchoe.

Deep Root Systems

Many plants can develop very deep root systems which enable them to reach down into the ground in the search for water.

Some of the native plants develop these extensive root systems which tap into the water table, so that once they are established, they need no further supplementary watering.

**Need further Information on
Water Efficient Plants?**

**Speak with your local Nursery
Industry Professionals**

**They will be able to recommend
plants which are native to your area
and which suit your climate**

Victorian gardeners use 406,800,000 litres of water a day

The “WaterWise in the Garden” initiative has been introduced to help gardeners reduce their water consumption.

The Benefits of Being WaterWise

There are three major benefits to being WaterWise in your garden:

A WaterWise Gardener will Save Money ...

When we save water, we save money. By applying the “WaterWise in the Garden” ideas, you have the potential to cut your outdoor water use by up to 50% whilst still maintaining a green, pleasant and rewarding garden.

A WaterWise Garden is a Low Maintenance Garden ...

With smaller lawn areas, clever use of mulching and landscaping and a well designed irrigation system, WaterWise gardens are a *lot less work* than conventional gardens.

A WaterWise Garden is more natural and helps to save our environment ...

A WaterWise Gardener helps save our environment by:

- Reducing use of fertilisers and chemicals.
- Reducing water run-off to the stormwater system (which runs straight into our waterways).
- Helping to delay the need for further dams.

**WaterWise Gardening ...
Benefiting the Individual
and the Community**

WaterWise Gardening

Saves Water
Saves Work
Saves Money and
Saves Our Environment

Want More Information?

The “WaterWise in the Garden” initiative is designed to help gardeners by providing expert information on how to maintain a high quality garden but at the same time conserve water. Western Water and the Nursery Industry Association of Victoria are eager to help Victorian gardeners to be WaterWise.

For further advice, information and practical assistance on water conservation in the garden, speak to your local nursery industry professional or call:

Western Water
1300 650 425



Nursery Industry
Association of
Victoria
(03) 9576 0599



Brochures available in this series

- WaterWise Watering & Irrigation Systems
 - Successful Pot Plants Using Less Water
- How to Identify Water Efficient Plants at a Glance
- You Can Have Beautiful Flowers and Still Conserve Water
 - Saving Water and Money with Your Existing Lawn
 - Water Efficient Shrubs

Western Water
www.westernwater.com.au