

## Mulch

Mulch provides a protective covering for the soil—making it an important tool for creating a waterwise garden. Mulch reduces water loss from the soil by decreasing evaporation. It helps keep soil cool in summer, slows water runoff, inhibits weeds and can improve soil quality. Many organic and inorganic materials can be used as mulch.

### ORGANIC MULCHES

Organic mulches are the most popular because they can improve soil structure and add nutrients to the soil as they decompose. Because they do break down they should be topped up regularly.

The best organic mulches are made up of coarse material that allows rain or irrigation water to penetrate through to the soil.

Try to avoid mulch with too much fine material (such as sawdust) as it will absorb too much water.

**Composted and aged manure** are generally regarded as soil improvers (when dug into the soil) but can also be spread on the surface as mulch.

**Fresh grass clippings** can be used, but are best mixed with leaves, compost or twigs and left to decompose before use. Once broken down they should be spread thinly (30 mm) to avoid compaction and heat build up. When applied too thickly they can become water repellent. Grass clippings can be left on the lawn as mulch.

**Fallen leaves** can also become compacted and decompose slowly. They are best composted first or put through a garden shredder. They can also be run over with a lawn mower or mixed with coarser materials. Avoid Casuarina and pine needles as they can be acidic and often lead to water repellency.

**Sugar cane** is a popular bagged mulch. Spread it loosely to allow water penetration and loosen it if it becomes compacted.

**Tea tree mulch** blends in well with native gardens.

**Lucerne hay and pea straw** decay quickly and provide nutrients to the soil. They are very good around roses, perennials and flower beds, but may contain weed seeds.

Avoid using highly nutritious organic mulch on garden beds containing drought tolerant plants as it may over-stimulate them and reduce their drought tolerance. This type of mulch is best suited to cottage gardens and perennial beds.

**Other forms of straw** can be used and can look good on vegetable gardens, but may contain weed seeds.

**Wood chips and tree bark** look neat and save water, but they decay slowly, provide few nutrients and can deplete garden soils of nitrogen (nitrogen drawdown). If applied too thickly they can also stop water reaching the soil. With wood chips it is therefore essential that they be applied no thicker than 75 mm deep. Many landscapers apply them thickly to reduce maintenance. However these gardens seldom thrive and require much more water to remain healthy. If you use wood chips or tree bark, add some nitrogen-rich fertiliser or organic matter such as lucerne, manure, blood and bone or compost to the soil, before mulching.

**Composted horticulture bark**, usually bought in bulk from landscape suppliers, is coarse, doesn't create nitrogen drawdown and looks good.

**Shredded newspaper** can also be used as mulch, again best underneath organic material. Avoid thick layers of whole newspapers because these will prevent water and air reaching the soil, causing nitrogen drawdown.



### **Groundcover plants**

Groundcover plants act as 'living mulch'. They reduce water loss from the soil by providing shade. These are a great option for Canberra gardens. Refer to the Canberra Plant Selector on the ThinkWater website for groundcover plants suitable for your garden.

### **INORGANIC MULCHES**

**Gravel, scoria, pebbles, crushed rock** and other inorganic materials can be used as mulch. They are non-flammable and therefore useful in areas where it is important to minimise fire risk (e.g. against your house). However they may gather leaves and soil debris which can be difficult to remove.

**Woven plastic materials** such as weedmat can be used to provide better weed control. They need to be anchored in place and look better covered with organic mulch. A drip system must be installed underneath the weedmat if it is used on an area that requires irrigation.

Ordinary **plastic sheeting** should not be used as mulch. It prevents air and water passing into the soil and can greatly increase soil temperature and cook plant roots.

### **HOW TO APPLY MULCH**

- Remove all weeds before applying.
- Break up the soil surface and water well.
- Spread the mulch evenly across the soil surface—up to 75 mm deep for most organic mulches.
- Never mulch greater than 75 mm in depth. If mulch is too deep, it can reduce soil water absorption and can stop water reaching plant roots.
- Keep organic mulch away from trunks and stems to avoid collar rot.

### **MAINTAINING MULCH**

- Regularly pull apart mulch after watering to check if water is getting into the soil beneath.
- Check that mulch is not becoming too compacted, and loosen it if necessary to ensure water can penetrate.
- If mulch becomes too dry and repels water, rake it to break the surface crust, before watering. This is most likely to occur with small particle mulches.
- If weeds appear, remove or spray them before they can flower and seed.
- When removing weeds, be careful not to bring soil to the surface as this can encourage more weed growth.

#### **MORE INFORMATION**

For more information on water efficiency tools rebates and *Think water, act water* initiatives:

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