



ноw то Mulch your garden

What is mulch?

Anything that covers the soil and protects it could be termed mulch. This includes organic waste: grass clippings, leaves, straw, wood chips, bark chips, cocoa husks, sawdust, paper and compost. Compost is partially decomposed organic waste. It is less bulky, but has higher nutrient levels than other mulches. Cover crops such as lupin, rye and clover can also work to shade the soil or to prevent erosion over winter. They can be used in both commercial and home gardening situations.

Non-biodegradeable materials may also be used to mulch the soil. Gravel in large, small or mixed size particles is good for larger areas. For small areas you may consider decorative glass beads or brick or marble pebbles.

Why mulch?

Mulch keeps soil moist, controls weeds and protects the soil from erosion. Dark coloured mulch can raise soil temperatures in spring to enhance growth. Organic mulches decompose, improving soil quality and making more plant food available. Finally, mulches can provide a clean dry surface for plants like strawberries, zucchini and melons so they won't rot.

When you improve soil structure by adding organic matter you make it easier for water to enter the soil and stay there. The organic matter, partly decomposed twigs and leaves, stops the soil packing down and creates many tiny spaces for air and water and habitat for tiny soil organisms. This makes it easier for plants to get food from the soil.



When?

Apply mulch to your garden following a thorough tidy up in winter or early spring. If you live in a part of the Wellington region that suffers from severe winter conditions you may want to mulch in the autumn to protect your plants from damaging winds or frost. Always try to have the mulch spread by the beginning of the growing season and reapply it throughout the year if it starts to become too thin to keep the soil moist.

It is never too late to put mulch on the garden. If the ground is dry, remember to water first before putting the mulch down.

Where?

Put mulch around any plants that will suffer during dry weather. Established shrubs may only seem to suffer during exceptionally dry years but they need regular mulching too. Annual mulching will



mean they suffer less stress from competition for water and food because there will be fewer weeds and water will remain in the soil for longer. This means that your shrubs and trees will be able to protect themselves better from attacks by insects and disease.

And how?

Spread mulch around plants taking care not to heap it up close to the stems. You don't want to trap moisture against the stem of plants and cause them to rot. Make the mulch at least 10 cm deep, pile it higher if you can because it settles over the growing season. There is no point in scrimping with mulch and 20cm is always better than 10 cm if you want your mulch to be really effective. Ideally cover all exposed soil in the garden. If access is a problem or you only have a small amount of mulch place a doughnut shaped pile around each plant with a small hole in the middle for the plant stem rather than spreading it thinly across the soil surface.

Mulch problems

The most frequent problem with mulch is collar rot, where moisture is trapped close to the plant stem causing it to rot. Fine mulch, such as grass clippings, can also form a barrier or mat to block air and water moving into the soil. This means that any rain will not penetrate the mulch and reach the soil for your plants to use. Alternatively, the soil may become waterlogged and anoxic (lacking in air) and suffocate the plant roots.

A very porous mulch can also be a problem. Nuggets of bark and coarsely chopped branches have large air spaces between the individual particles that allow moisture to evaporate from the soil. These mulches may actually draw the moisture from the soil. Shredding or chopping plant material before applying it or adding fine material to fill the spaces should help.

The most frequently asked question about mulches is the one of nitrogen depletion. This happens when nitrogen is taken from the soil to aid in the decomposition of the mulch material. Although it is true that nitrogen is needed for the decomposition process, this can be drawn from the atmosphere as well as from the soil. If you are worried, add some fertiliser such as blood and bone to the soil before spreading the mulch.



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