

Making the most of your garden waste

Treat compost as a crop, as valuable and beneficial as the vegetables you grow



Plants need nutrients to grow and any soil can lose its supply of nutrients over time if you don't replenish them. The best way to do this is to keep adding compost, well rotted manure, or good mulch every year, or more often. As these materials decompose, they release nutrients, maintaining soil fertility.

Composting means the controlled decomposition of organic material. It is the humus-rich material resulting from composting that contributes nutrients and beneficial life to the soil, improves soil structure, and helps prevent runoff. It also helps the soil absorb and retain nutrients and moisture, and helps plants resist diseases and pests. Better moisture retention means less watering, allowing you to conserve water.

Composting is a wonderful way to turn garden waste into a useful soil improver. Anything from vegetable peelings, grass cuttings and manure, to autumn leaves can make good compost. Diseased wood, leaves or fruit should be reserved for council composting. Avoid composting perennial weeds and seed heads, to restrict more weed growth on your plot. Alternatively, perennial weeds can be left to die off before adding to the compost by uprooting and leaving exposed, or sealing in a light proof bag until they die.

To speed up composting, use a shredder to chop up larger, woody prunings, or secateurs to cut through large stems and leaves. Try to balance soft green material such as grass clippings, vegetable kitchen waste or manure, with woody brown material such as shredded prunings, paper, cardboard, straw, wood chippings and autumn leaves.

If you have a large volume of one type of material, like autumn leaves, bag them and add small quantities over time to the compost. Autumn leaves can also be bagged, and left to rot down to make leaf mould. Keep the compost covered to stifle weed growth, and prevent evaporation in hot weather and excess moisture in the winter.

Do not be tempted to keep adding to the heap as it sinks but, once the pile has reached a reasonable size, or the bin is full, cover and start a new pile. A cubic metre is about the right size for effective composting.

Benefits of compost

Nutrients

Compost contains the full spectrum of essential plant nutrients and micronutrients, such as iron and manganese, that are often absent in synthetic fertilizers. It releases its nutrients slowly, over several months or years. Compost also balances both acid and alkaline soils, bringing pH levels into the optimum range for nutrient availability.

Soil structure

Compost helps bind soil together, resulting in tiny air channels and pores that hold air, moisture, and nutrients like a sponge. It helps sandy soil retain water and nutrients that would normally wash right through. In clay or silt soil it breaks up the structure, allowing roots to spread, water to drain, and air to penetrate. Compost also alters the texture and structure of all soils, increasing their resistance to erosion and making them easier to work and cultivate. Compost particles attract and hold nutrients, preventing them from washing out and making them available for plant roots to take up as needed.

Life

Compost introduces and feeds diverse life in the soil, including bacteria, insects and worms and they, in turn, support vigorous plant growth. Bacteria in compost break down mulch and plant debris into plant-available nutrients. Some soil bacteria also convert nitrogen from the air into a plant-available nutrient. Beneficial insects, worms, and other organisms are plentiful in compost enriched soil; burrowing through the soil keeping it loose and well aerated. Compost also suppresses diseases and harmful pests that overrun poor, lifeless soil.

Water retention

Compost increases soil's ability to retain water and decrease runoff. A 5% increase in organic material quadruples the soil's ability to store water. It promotes healthy root growth, which not only decreases runoff but can also reduce or eliminate use of synthetic fertilizers. It reduces the need for chemical pesticides, as it contains beneficial microorganisms that encourage healthy plants more able to resist diseases and pests.

What to compost

Most organic material can be composted but, for home composting, stick to the list below: consider composting as much of your organic waste as possible. For example, matches and even latex balloons can be composted.

An efficient compost pile is a mixed balance of dry and brown materials that contain carbon (like leaves, straw, or paper) and wet or green things that contain nitrogen (like vegetable food

scraps or rabbit droppings). For example, if you add a lot of shredded leaves or cardboard to the pile, you will need to balance and mix it with fresh grass clippings or horse manure, and probably some water to keep it damp.

What to compost

- Grass clippings (G)
- Leaves (B)
- Raw vegetable and fruit food scraps, lettuce, potato peel, banana skins, avocado skins, etc.(G)
- Coffee grounds, leaf tea (G)
- Young green weed growth (G)
- Black and white newspaper
- Printer paper (B)
- Cardboard (B)
- Herbivore manure and bedding, e.g. cows, horses, rabbits, hamsters, etc. (G)
- Poultry manure and bedding (G)
- Wood shavings or sawdust, but not from treated or painted wood (B)
- Urine diluted 20:1 with water (G)
- Hedge clippings (B)
- Herbivore bedding – hay, straw, shredded paper (B)

What not to compost

- Carnivore and omnivore manure e.g. dog, cat and human faeces
- Invasive weeds like bindweed or ground elder. Such weeds often re-grow from even small pieces of root. They can be composted but ensure they are dead before adding to the compost.
- Perennial weeds such as dandelions can be composted, but must be dead before adding to the compost.
- Food scraps containing animal products - meat, fat, dairy and bones. Eggshells can be used in an open compost pile, but make sure they are washed thoroughly before composting.
- Colour newsprint – although safe to compost colour newsprint, such as catalogues and magazines, should be finely shredded to speed up composting
- Diseased plant material

Application

One easy way to apply compost is as a mulch. Spread the compost in a thick layer on top of exposed soil. Worms and other creatures will help the soil absorb the compost. Mulching is not only an easy way to apply compost, but also keeps down weeds and helps your soil retain moisture. Alternatively, compost can be added as you dig your plot.