

Home composting as a sustainable process

As disposal of domestic waste becomes problematic due to environmental concerns, home composting is increasingly seen as a sustainable alternative to disposing of bulky garden rubbish, and provides valuable organic matter for garden use. PAUL ALEXANDER outlines the process.

Utilising garden waste

Good garden management generates a lot of waste plant material, and home composting is the most environmentally friendly way of dealing with this organic matter. Putting garden rubbish in the dustbin is wasteful of both landfill space and potentially nutrient-rich humus.

Many local councils operate green-waste collection schemes whereby the green material is collected separately and composted, or a service is offered at a local civic-amenity site where green waste can be taken for composting. Some councils will give the composted material back to their community, some will sell it back and others use it in landscaping schemes. Alternatively, bins may be provided at a subsidised cost to encourage home composting. Unfortunately, council policy varies dramatically countrywide.

Composting kitchen and garden waste will produce a free, environmentally friendly source of organic matter which can be used throughout your garden. Composting is simply a biochemical process whereby organic matter is decomposed by naturally occurring micro-organisms.

The site and container

An earth base under a heap allows drainage and access to the organic material by soil organisms. An open heap of garden waste piled into a corner outside will decompose slowly and produce compost eventually. A bin, however, will help insulate the heap, prevent organic matter blowing around the garden and accelerate the process of decomposition. A wide range of containers is available 1, 2, 3 all of which will produce compost. Better-quality compost is usually produced more quickly from larger initial volumes of waste. A good size to aim for is 1 cu m (1.3 cu yd).

What to compost

The most important aspects of composting are the raw materials. Aim for between 25 and 50 percent soft, nitrogen-rich materials 4 (such as grass clippings, annual weeds, vegetable kitchen waste or horse manure). The remainder is made up of woody, carbon-rich material 5 (including prunings, wood chippings, paper, cardboard, straw or dead leaves).

Most materials of organic origin will decompose eventually, including citrus, rhubarb and clippings of conifer, ivy, laurel and yew. Woody materials will decompose more quickly if they are shredded. Importantly, remember to not



let any single material dominate the heap.

Avoid diseased plants, perennial weeds, mowings where weedkillers have been used, weed seedheads, meat, fish and cooked food scraps, and cat or dog waste.

Compost should be turned periodically 6 to introduce air (aerobic composting). Household waste tends to be added in small amounts and easily becomes compacted. Aerobic compost breaks down quickly and generates warmth, killing some weeds, seeds and diseases. Without air the process is slower, cool and termed anaerobic. The end result is usable, but aerobic compost is preferred.

When is it ready?

Garden compost can take between six months and two years to reach maturity. Mature compost 7 will be dark brown, with a crumbly soil-like texture and a smell resembling damp woodland. Not all the material in the heap will be like this. In an unturned heap, the top is usually dry and undecomposed, the base will be wet and have a bad odour while the core of the heap may be mature compost. Separate these portions so they can be recomposted, and use the mature core.

Leafmould

If you have a glut of leaves in autumn, these can be used to create leafmould. Simply collect the leaves and put them in a plastic bag (such as a bin liner). Moisten dry leaves to help them rot, pierce the bag a number of times, tie the top loosely and then place them out of sight for a year or two. Alternatively, wire or plastic mesh could be rolled into a cylinder and stood on its end to create a bin for leaves to prevent them from blowing away.

Well-rotted leafmould is usually produced in two years (according to the species) but can be used before this time. Material less than two years old is suitable for use as a mulch, a soil improver and an autumn topdressing for lawns. If it has matured for more than two years, it can also be used as a seed-sowing mix or as a potting compost (mixed equally with sharp sand, garden compost and loam).

Producing garden compost is both easy and satisfying. It reduces the requirements for buying in material for use in the garden while at the same time lessening the pressure on waste disposal. In short, it is an environmentally friendly approach which can be adopted by all gardeners, no matter how small their plot.