

Composting weeds and diseased plants

We all know that home made compost improves the soil and gives all our plants the nutrients for strong, healthy growth. Most, but not all, of our garden clearings can be composted, but it never fails to amaze me that some people don't compost their weeds. And, there's the thorny question of blighty tattie shaws, or foliage, and other diseased plants.

How you deal with weeds and diseased plants partly depends on the temperature of your compost bin. Composting goes through 2 stages. During the first 2 or 3 months, the compost heap should be hot enough to bake an egg. This is followed by a slow, cool period when the rough compost is converted into fine, fertile soil. The higher the temperature during the early stages, the more you can compost. Seeds and pathogens are killed off by very high early temperatures.

You'll achieve greater heat when you place a compost bin in a sunny spot, put in a good mix of different materials and pray for a fine, hot summer. And the larger the volume of material, the higher the temperature. There's also no doubt that fresh grass clippings do more to boost the overall temperature than anything else. If you don't believe me, just watch the steam rising from a pile of grass or try touching the heap. I do feel sorry for people who want to make good compost but have done away with the lawn.

Weeds are a fact of life. Short of mulching the entire garden, we can't prevent them. And even if we poison the soil by constantly drenching it with weedkiller, weeds will still appear. We can't do anything about the soil's rich seed bank or stop weed seeds blowing in from neighbouring gardens. So, you'll get weeds, regardless of what's in the compost.

Obsessively tidy gardeners get rid of weeds by hoeing or digging them out before flowering. This way they can relax and safely compost the offending foliage and still avoid weedy compost. But if, like me, you let the groundsel flower, you're doomed. Most seeds survive the composting process unless a bin temperature is higher than 62C for 30 days. Plastic compost bins rarely get warmer than 35C, and even larger wooden boxes struggle to maintain a temperature of 60C over a long period.

The roots of perennials, like docks and ground elder, work differently to seeds. They die if denied light for 2 years, so they should be killed off when you use a wooden New Zealand box and harvest the compost after 2 years. If you take compost from a plastic unit every year, you may need to throw back any roots that are obviously still alive. Another year will kill them.

Alternatively, drown the roots in a large plastic bucket. They'll be slimy and dead after a few weeks so can safely be added to the compost. Throw the nutritious liquid from the bucket into the compost bin or use it as a liquid feed. Have a relaxed attitude to weeds, they are plants, after all.

Dealing with diseased plants is quite different. Like seeds, pathogens are only killed by higher temperatures than domestic compost bins usually achieve. Experiments conducted by A. Drenth¹ and colleagues at Wageningen Agricultural University, Netherlands in 1992 showed that the oospores of potato blight, *Phytophthora infestans*, were only killed when temperatures were higher than 40C for 48 hours. [Astonishingly, they survived temperatures down to -80C.]

So, if you have a large wooden compost bin, a New Zealand box, you may be able to compost blighty shaws. My large plastic bays work between 58 and 62C during the summer. For extra heat, I cover the diseased foliage with a good layer of fresh grass clippings. But if you're in any

doubt and think your bin isn't hot enough, stuff the shaws in your green bin. As a general rule, it's always best to dispose of diseased plants and not compost them.