

Ground rules

Finding out which type of soil you have, and what will grow in it, is one of the first principles of gardening. So get a bucket of water and grab a fistful of dirt, says James Alexander-Sinclair

There are few certainties in life: fate has a habit of pushing us head first into the custard pie of misfortune if we begin to get overconfident. However, there are some things upon which we can rely, and one of those is that most gardeners will be unhappy with their soil. Those who break their backs on heavy clay will envy those with free-draining sand, and those with rocky chalk covet the deep peatiness of acid soils.

Roughly speaking, the garden soil in these fair islands will fit into one of six categories. There are various easy ways to find out which sort you have; the knowledge will not make it any better, although it will allow you either to move house or adjust your planting ambitions accordingly.

The simplest thing to do is to take a bucket of water and empty it on the ground: if it disappears very quickly, you have free-draining soil; if it loiters for a while, then you have soil that will retain moisture. The second (slightly more advanced) exercise is the squeeze test: take a handful of soil and squish it in your hand (if picky, wear gloves or ask a member of staff). If it remains compressed when you open your hand, you have clay soil. If it trickles away, you have sandy, free-draining soil. Silty soil feels slightly soapy; peat soil is darker and crumbles like a rich Dundee cake; while chalky soil will be stony and flecked with white. The teacher's pet of soil is loam: this is neither too wet nor too dry, easy to dig and full of nutrients. Gardeners with this type of soil have every right to be a little smug and the rest of us have an equal right to want to punch them occasionally.

The next thing to explore is whether your soil is acid or alkaline. This knowledge is essential because there are certain plants that will pine and look distinctly peaky if planted in the wrong sort. The most obvious examples of this are rhododendrons and the gorgeous, Everest-blue meconopsis (Himalayan poppy): if you do not have acidic soil then don't even think about planting them. The



Acid soil: Himalayan blue poppy



Poorly draining soil: swamp cypress



Alkaline soil: pasqueflower



Hot, dry, gravelly soil: rock rose

easiest way to find out in which camp your garden sits is either to buy a soil testing kit, or simply have a look in your neighbours' gardens to see what they are growing.

However, there is another soil category which will earn the sympathy of all gardeners with even the slightest humanity – for the sake of argument, we will call this Soil Spewed Up From The Depths Of Hell. This is not caused by the hand of nature but by builders who care not a whit for gardens. In the course of building, all the subsoil somehow ends up on top while the fertile topsoil gets buried beneath a thick layer of brick ends, clay, sandwich wrappers and amorphous bits of spilled concrete. If you have this soil, then do not despair: all is salvageable. My entire garden was composed of this when I first started but, after an initial bout of hard (and tedious) work, it is now glowing with fertility.

The secret to improving any soil is very simple: mulch, mulch and more mulch. The earth has an insatiable appetite for what is known as "organic matter". This can be pretty well anything: manure, home-made compost, bark chippings, newspaper, grass clippings, mushroom compost, green waste. You name it and, provided it is well rotted, it will do the trick. I even used the sweepings from an abattoir floor once, which was excellent but smelled revolting for a month. Mulch every year and the worms will be your friends, and with worms on your side the battle against problem soil is halfway towards glorious victory. ■

THE PICKY BUNCH

There are many plants that will grow anywhere, from the peatiest mountain to the sandiest shore. But if you have very fussy soil, here are a few corkers for specific conditions.

● FOR ACID SOIL

Lantern tree (*Crinodendron hookerianum*). A majestic evergreen shrub with lantern flowers the colour of a virgin's blush.

Chinese witch hazel

(*Hamamelis mollis*). Will cope with a neutral soil but will glow in acid. Deliciously scented spidery flowers in winter.

Himalayan blue poppy

(*Meconopsis betonicifolia*). The caliph of peaty soil. Coveted by all who see it, but grown only by a fortunate few.

● FOR ALKALINE SOIL

Buckthorn (*Rhamnus cathartica*). A great windbreak. Forms dense thickets of spiny leaves with greenish flowers in spring and red fruit in autumn.

Pasqueflower (*Pulsatilla vulgaris*). Native to chalk grassland, this has wide, purple lampshade flowers with yolky centres.

● FOR POORLY

DRAINING SOIL

Swamp cypress (*Taxodium distichum*). One of the acceptable conifers. Anything called swamp cypress should be able to cope with wet roots. Feathery leaved foliage turns bronze in autumn. Not for small gardens.

Hostas. So many varieties, so many leaf shapes. Absolutely perfect in a bit of damp shade.

● FOR REALLY HOT, DRY,

GRAVELLY SOIL

Lavender (*Lavandula angustifolia* 'Hidcote').

Pretty indispensable.

Rock rose

(*Cistus x corbariensis*). Evergreen with reddish wood. Shell-pink buds open into short-lived white flowers in midsummer.

