

KNOW YOUR SOIL

KEY POINTS

Getting to know your soil
Soil texture and soil structure
Improving sandy soils
When to use gypsum

The main aim of this chapter is to enable you to maximise the retention of water by your soil and hence its ability to supply water to your plants. The first step is to find out a little about what soils are made of.

We see in road cuttings, excavation sites and cultivated fields that there is not just one uniform covering of soil across our planet. Soils in different areas look different from one another. They have different colours, the way their particles are fitted together is different, and they feel different when we rub them with our fingers. But despite these differences, all soils have five main components:

1. Inorganic particles – minerals that have been produced from rocks by weathering, together with unchanged particles of rock.
2. Organic materials – humus, and the dead and decaying parts of plants and soil animals.

3. Water – the ‘soil solution’, in which nutrients for plants are dissolved.
4. Air – which fills the spaces between soil particles that are not filled by soil solution.



Natural soils often vary in colour and other properties with depth.