

# Plant Life



## Soil

Soil is all around us. Every field or mountain you see has some soil covering it. It forms a thin layer over the surface of the Earth and it is essential for life. Even if you live in the city, there is soil in your front or back garden, in the window boxes of your house and in the park near your home. Soil is made of living and non-living materials and helps to grow the plants that we need to survive.

Soil contains rock particles, water, air and organic matter. The texture of a soil and how it looks depends on the amount of each substance it contains. For example, **sandy** soil has lots of particles of sand, which means it is good for drainage and will not hold water for long. **Clay** soil contains lots of clay particles. Clay is sticky when wet so it holds lots of water. **Loamy** soil is a balanced soil and has a good mix of all these different particles, as well as plenty of organic matter. It drains well, yet holds water and is full of nutrients.

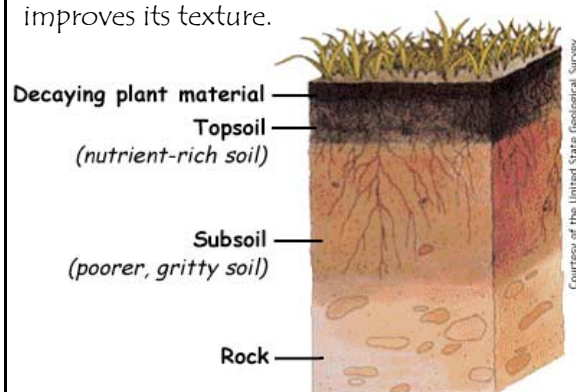
### Living Soil!

Not only is soil made up of rock particles, water, air and organic matter, but it also contains living organisms. It is these organisms that help to breakdown the organic matter and bring the air into the soil. One of the most obvious animals in soil are the earthworms and they play a very important role in keeping soil healthy. Nearly every bit of soil passes through the stomachs of earthworms and what comes out the other end is full of nutrients. *(For more information on worms see page 5 of the Winter 2009 issue of Nature's Web.)*



### TOP OF THE PILE!

The richest layer of soil is the layer at the very top, known as topsoil. The soil in this layer contains lots of decaying plant material, which, with the help of worms (see left), puts nutrients into the soil and also improves its texture.



### Soil Erosion

Soil erosion is caused by wind and rain over thousands and thousands of years.

Erosion can wear down mountains, create valleys and even change the course of rivers. Humans sometimes speed up soil erosion by such activities as building, clearing vegetation and mining. However, they can also help prevent soil erosion by planting trees and other plants, so that their roots help to hold the soil in the ground.



### The Soil in Your Garden

Dig up a little piece of soil in the garden (but not in the middle of a beautiful lawn!) and take a close look. If it is rich brown in colour and has a soft, crumbly texture then it should contain lots of nutrients for growing vegetables. If the soil is pale and contains lots of stones, compost may need to be added to improve the growing conditions for plants. It also depends on the type of plants you want to grow. There are roughly six different types of soil: sandy, silty, clay, loamy, peaty and chalky. While lots of plants prefer well-drained, food-rich loamy soil, some plants actually prefer the other types of soil.