

## Soil Organisms

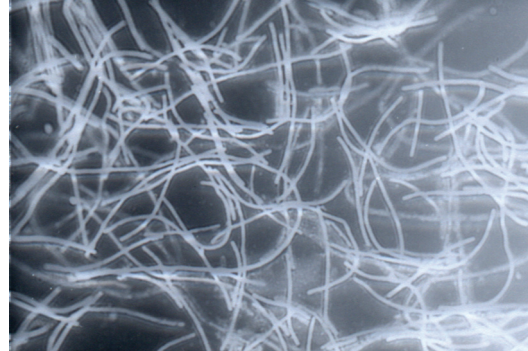
Soil is made up of tiny pieces of rock, minerals and organic matter such as old plant roots and leaves.

Many millions of micro-organisms live in soil. Some of them are shown below.



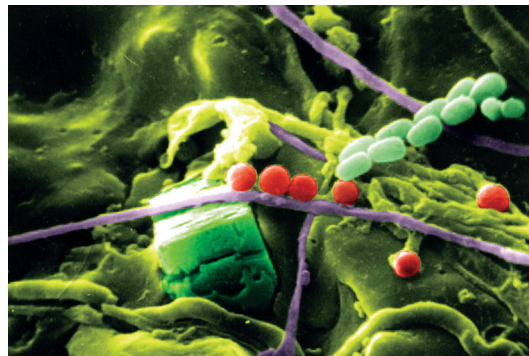
### Soil mites

There can be as many as 4,500 to 9,500 mites in each sq metre of soil



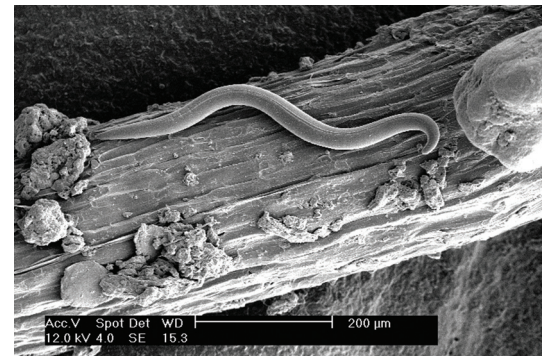
### Filamentous bacteria (actinomycetes)

There are approximately 1 million to 20 million actinomycetes in 1 gram of soil



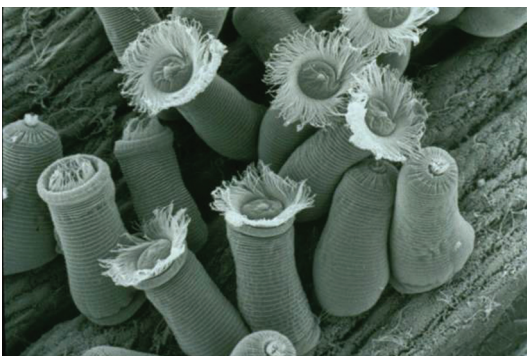
### Bacteria & Fungi

There are approximately 3 million to 500 million bacteria and 5,000 to 900,000 fungi in 1 gram of soil



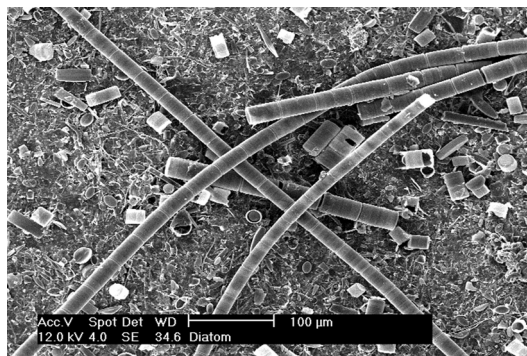
### Nematode

There are approximately 500 nematodes in 1 gram of soil



### Protozoa

There are approximately 1,000 to 500,000 protozoa in 1 gram of soil



### Diatom (algae)

There are approximately 1,000 to 500,000 algae in 1 gram of soil

Soil organisms rarely live by themselves so by working together they help each other to break down the nutrients in food. Very complex molecules, such as those found in plant material eg lignin and cellulose are first broken down by fungi. This produces simpler molecules which can be further used by plants and other soil microbes.