## **Pesticides**

Pesticides are meant to kill unwanted animals in gardens or crops. However, the first thing affected by pesticides is the soil quality. Pesticides decrease biodiversity (the number of different living things) in the soil because they do not just kill the intended pest; they often kill many of the other small organisms (living things) present.

When life in the soil is killed off, the soil quality deteriorates (gets worse) and this has an effect upon the soils ability to hold water. This is a problem for farmers particularly in times of drought. During droughts it is found that farms that do not use pesticides grow 20-40% better than farms that do use pesticides.

Soil fertility (the ability to grow plants) is affected in other ways, too. When pesticides kill off most of the active soil organisms, the things they do to help the soil are not done (like a worm making tunnels for air).

Plants depend on millions of bacteria and fungi to bring nutrients to their roots. When these things are disrupted plants become more dependent upon fertilizers, and need them to be applied more often. Even with adding the fertilizers, the interactions between healthy soil and plants cannot be fully replicated by the farmer with chemicals.

So the soil - and our nutrition - is compromised. We get large but watery vegetables and fruits, which often lack taste and nutrients and may even contain pesticide residues.