

Soil Microbes - Defense system of soil

Lush green gardens, lawns covered with grasses, plants laden with fruits and flowers - for most us, this is what we can see above the ground. The single greatest leverage point for a sustainable and healthy future for the seven billion people on the planet is arguably immediately underfoot: the living soil, where we grow our food. Soil which forms the outermost layer of earth is enriched with highest levels of organic matter and comprises of micro-organisms which converts organic matter by decomposition into nutrients and replenish them timely. Soil when completely balanced with its all natural properties is itself sufficient for plants to develop in a healthy and sustainable way.

Every gram of soil contains at least a million of these tiny one-celled organisms and highly fertile soils can have as much as 650 million bacteria per gram

This much of bacteria are needed for plants to grow, develop and bloom in healthy soil

Many researchers world wide have proved how important are the microorganisms for plants to thrive in a best possible way. ***"Just as human body has well coordinated immune system working against various diseases and act against any foreign particle disturbing normal functioning of the body. Soil Microorganisms work as an immune system for plants when present in right and proper amount."*** Thus this immune system of plants should be kept intact to have good greenery all around.

Just as we have disturbed our human immune system through overdose of antibiotics and drugs, in the same way reckless use of chemical fertilizers, absence of organic matter (food for microbes) and heavy tillage destroyed soil microbes. Soil Microbes acts in symbiotic association with plant roots, decompose organic matter, convert it into nutrients and make them ready for plants. Thus they also helps them in building immunity with right amount of nutrition

Organic methods of gardening which involves organic, natural fertilizer can be a perfect substitute for gardens to grow well. Organic methods rather than suppressing population of beneficial microbes help them to colonize more in soil and restore natural properties of soil. Thus these tiny creatures make the soul of good soil.

Organic fertilizers helps in increasing these **"natural soldiers"** in soil and thus making soil healthy and alive. Organic fertilizer provide soil with all necessary organic matter and elements which will be needed by the soil microbes for their proliferation. More importance given to organic ways of gardening will enable to restore soil properties time to time and this can probably provide us the way to raise dead soils to life.

Soil fed in organic and natural way with organic fertilizers will give organic food and thus promote organic way of living. This will give us a healthy and natural way of lifestyle without disturbing the whole natural ecological chain.