

▣ **SOIL DEGRADATION** ▣

According to soil scientists, artificial fertilisers have destroyed the structure of soil in many areas, releasing sulphuric acid, creating toxins in plants and some sickness in animals and humans.

Soil Scientist Dr. Elaine Ingram, says an abundance of micro nutrients were present in soils before chemical use, but now on average, they have been depleted by 80% weakening plants, making them vulnerable to insect attack and the encouragement of weeds, therefore requiring eradication with chemical sprays, which further deplete microbial numbers.

The CSIRO estimates billions of dollars worth of Phosphate is locked up in soils because they have become unbalanced due to reduced microbial activity and cannot be utilised by crops.

▣ **SOIL RESTORATION** ▣

BIOTA: The collective mass of all soil constituents i.e., animal, plant, microbes and myccoryzae fungi which, with their fine hairs, are able to access soil crevices where roots cannot.

Enzymes, Humus, Vitamins & Fungi in biota encourage:-

A) Plant nutrition. B) More efficient uptake of water, Phosphorus and Zinc. C) Improved economy and water retention.

Soil Biota can be enhanced by a) Crop rotation b) Minimum till
c) Addition of organic supplements.

(Dept. Primary Industries - Soil Pathology)

The Soil FOODWEB is a beneficial group of microbes which develop soil structure, breaking down residues, capturing Nitrogen, Calcium, Iron, Potassium etc.

CARBON: Non-metallic chemical element, occurring as diamond, graphite and charcoal, in carbon dioxide, in carbonates **and in all organic compounds.**
(Concise Oxford Dictionary)