

BENEFITS OF BALANCED SOIL

DECOMPOSITION OF CROP RESIDUES

These materials will only decompose if certain species of fungi and bacteria decay them allowing recycling processes to occur to form large amounts of humus. The decaying function converts the food energy in fresh organic matter to a form that feeds other soil organisms.

RETENTION OF NUTRIENTS

The function of nutrient retention occurs when bacteria and fungi multiply and increase their populations, gathering up free nitrogen from the soil and converting it to protein in their bodies. Nitrogen in this form, will not leach away or be lost as a gas.

NUTRIENT RECYCLING

Once nutrients have been retained, other beneficial nematodes can be encouraged such as the protozoa that feed on bacteria, and beneficial soil mites that feed on fungi. These species cause nitrogen especially, but also phosphorus and other nutrients, to be released at a gradual non-stressful rate.

BIOLOGICAL CONTROL OF ROOT ROT & PARASITIC NEMATODES

A healthy soil that contains a broad diversity of microbial types, most often contains species that kill or suppress the kinds of fungi that cause root rot and nematodes that attack roots.

PRODUCTION OF PLANT GROWTH REGULATORS

All plants depend on the presence of certain species of soil micro-organisms in the root zone to produce various hormones that stimulate growth and development, other than those produced by the plant itself.

CLEAN UP OF HERBICIDE OR PESTICIDE CARRY OVER

Most herbicide and pesticide molecules can be “eaten” or degraded by certain kinds of microbes if those species are present in the soil. A healthy soil will tend to rid itself of agrichemical carry over and other forms of pollution.