

“Tools”/Soil Balance Focus-Plant

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The biodiversity, in the soil, of the beneficial microorganisms provides: The solubilization of minerals, availability and maintenance of fertility, in the reduction of pathogenic microorganisms by antagonistic form and effect suppressive. Biological of the microorganisms beneficial, the better resilience the plants to the stresses abiotic, improves the quality physics and physiochemical of the soil. These organisms favor the decomposition of organic matter leaving available macro and micronutrients assimilable to the roots.

For soil improvement needs managements and tools that increase the soil organic matter content (Ideal > 5%) and soil cover such as: no-tillage, crop rotation, green fertilization and use of organic fertilizers.

Other “Tools” for the improvement of plant/soil balance is the increment of the soil CTC, how to correct the PH in the ideal range with limestone, plaster to deepen the roots, raise the level of phospholipids with the phosphate. In the illustration we see tools: nutrition, inoculants, biological control agents, agrochemicals, biofertilizers, green fertilization, crop rotation, no-tillage, cultivars with genetics and biotechnology, soil cover, soil pH, soil temperature, always adjusted on the product/handling right, amount right and in the “team” correct.

One of the highlights of the soil is the mycorrhizae, which are symbiotic associations between fungi and plant roots. Beyond of constitute an important relationship biological you favors a big amount of species of fungi and from vegetables, the mycorrhizae are essentials in the cycling of nutrients and in the maintenance the quality of the soil.

The set of groups of microorganisms, with their genomes and interactions in a given environment is called of microbiome. When in balance, makes up a strong defense against diseases and other sources of stress for the plants; beyond of make available big amounts of nutrients vital, elevating the levels productivity. The presence of unbalanced microbiomes, mainly due to the intense mechanization, absence of rotation of crops/fertilization green, various applications of defensive agricultural and excess of fertilization mineral.

In summary of the article, the illustration offers a broad View: The balanced soil will be more productive, with the use of fertilizers and fewer diseases and pests in the system.



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