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# The importance of soil food web for healthy environment and sustainable development

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**Abstract**
Soil food web is a natural network of consumer resource interactions among different functional groups of soil organisms which are occur in the soil ecosystem. Soil is a complex, unconsolidated mixture of inorganic, organic, and living material that is found on the immediate surface of the earth that supports many important functions for plants, animals, and humans. The soil food web is very dynamic, complex and interchanging depending on its ecosystem. Nutrients in soil in their most basic form come from fully decomposed organic matter which we call compost. Decomposition of organic matter is largely a biological process that occurs naturally. The organisms found in the soil food web carry out a large amount of microbial processes such as decomposition, mineralization, immobilization, respiration, and fixation along with many others. Without soil food web, plants would not obtain the nutrients which are necessary for growth. Nutrient exchanges between organic matter, water and soil are essential to soil fertility and need to be maintained for sustainable production. A diverse and complete soil food web where soils are well structured and fertile through an increasing organic matter percentage is the goal of modern day regenerative agriculture, organic gardening and permaculture design system. Healthy soil is the foundation of the food and food web system.

**Keywords:** Organic matter, Soil organisms, Nutrient cycle, Soil food web and Sustainable development.