



Contact Renaissance Soil at Revivesoil@gmail.com with questions or comments!

**Please note that these definitions are in relation to soil and that protozoa and nematodes exist in other environments as well

Soil Health Key Terms -

Abiotic Factors - Non-living things that impact the soil (e.g. rain, sun, wind, etc)

Aerobic - Plentiful oxygen

Aggregates - Clumps of soil that are produced by sticky glues from bacteria along with fungal hyphae; they build soil structure

Amoeba (Pl. Amoebae) - Type of protozoa that thrives in aerobic conditions; consumes bacteria and poops plant-available nutrients

Anaerobic - Lacking oxygen

Bacteria - Extremely diverse kingdom of microscopic, single-celled organisms that exist in every ecosystem on Earth

Beneficial - The great majority of microbes on Earth that cycle nutrients, produce important compounds, and help larger organisms avoid pathogens

Carbon - The elemental backbone of life on Earth; energy

Ciliate - Type of protozoa that thrives in anaerobic conditions

Dirt - Parent material of the soil (e.g. sand, silt, clay, rocks)

Exudates - Carbon compounds (sugars, carbohydrates, proteins, fats) released by plants through their roots in order to attract and feed soil microbes

Flagellate - Type of protozoa that thrives in aerobic conditions; consumes bacteria and poops plant-available nutrients

Fungi - Extremely diverse kingdom of life that includes mushroom-producing species, yeasts, molds, and plant symbionts called mycorrhizal fungi



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Hypha (Pl. Hyphae) - The growing body of fungi made up of an outer carbon pipe filled with active cytoplasm (active cell material)

Microbe = Microorganism - Bacteria, fungi, protozoa, nematodes, microarthropods...

Microarthropods - Microscopic arthropods (e.g. mites, springtails)

Mycorrhizal Fungi - Types of fungi that form symbiotic relationships with over 90% of land plants; exchange nutrients + water for carbon energy supplied by plant

Nematode - Diverse group of microscopic worm-like soil animals that consume bacteria, fungi, other animals, and plants depending on the species

Nitrogen - Element essential in photosynthesis; forms include N₂ gas, NH₄ Ammonium, and NO₃ Nitrate - plants can only use the last two

Organic Matter - Organic in this context means chain of carbon; almost all plants and animals are made up of carbon which started in the air as CO₂ and was converted into carbon chains (e.g. sugars, carbohydrates = chains of carbon) through photosynthesis

Pathogens - Disease-causing microorganisms that typically thrive in anaerobic conditions, especially in soil and compost

Protozoa - Diverse group of single-celled soil-dwelling creatures that primarily eat bacteria and produce plant-available nutrients in their manure

Soil Structure - Passageways and pores created by soil life through their motion or by glues that they produce, which bind soil particles together; soil structure is essential for air and water infiltration as well as for microbe habitat

Soil - Dirt PLUS microorganisms, organic matter, and abiotic factors

Sugars - A diverse group of simple molecules made up of carbon (carbohydrates are more complex carbon chains and proteins are carbohydrates with nitrogen attached to them)