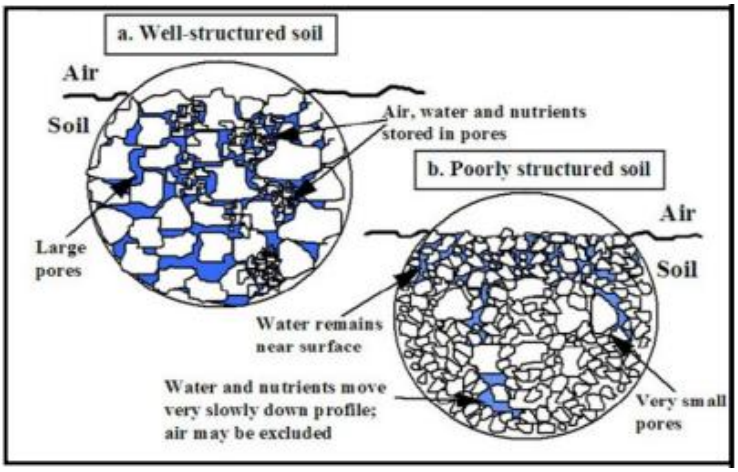
# EARTHGEN215, LLC

March 2026 Newsletter

Time to CHEER ON YOUR SOIL and ask for the 10% discount when you call!!!

Healthy soil is biologically active. It is a porous medium that has developed in the earth's uppermost six to eight inches, or deeper. Ideal soil contains approximately 45% minerals, 25% air, 25% moisture, and 5% organic matter that is fully decomposed into humus. The content of soil depends largely on its parent material deposits. Parent material refers to what has been deposited by ancient glacial flows, as well as sediment delivered from weathered bedrock, and materials delivered by wind or water. Parent material influences soil texture, structure, and its content of minerals.

Management choices do not influence the basic texture of a producer's soil, but those choices can and usually do influence the structure of soil. Applying the product line EarthGen215 distributes as recommended helps build healthy soil structure by improving activities of beneficial soil organisms and those activities promote larger soil pore spaces. The graphic to the right below illustrates how well - structured soil contains large pore spaces which allow air and nutrients to flow better, as well as better holding capacities for soil moisture and nutrients essential for crop production.

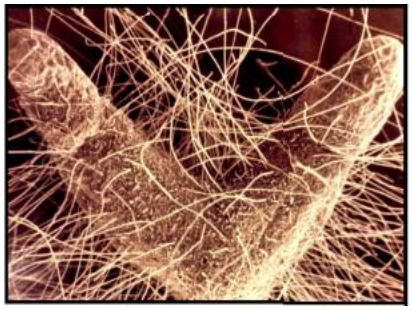



Seeds germinate more vigorously in well-structured soil that has large pore spaces. Vigorous germination fosters development of stronger root structures that can take up soil nutrients and moisture efficiently, when and as needed to fuel growth, maturation, and production of crops. Working soil when it is too wet, or overloading soil with herbicides, pesticides, fungicides, or other man-made chemicals destroys development of soil aggregates and larger pore spaces. Soil lacking soil aggregates and large pore spaces becomes compacted, and diminishes potential crop growth, maturation, and production.

Soil aggregates are another essential component of healthy, well-structured soil. Soil aggregates are composed of particles of sand, silt, and clay, fully decomposed dead matter from plants and animals, and robust activities of soil microorganisms and soil macro- organisms (i.e., earthworms, dung beetles, centipedes, etc.). Beneficial bacteria and fungi are crucial for decomposing dead matter in soil, transforming it into humus, and binding that humus with particles of sand, silt, and clay. The activities of beneficial soil organisms produce sticky substances that literally glue together, lightly, the humus and particles of sand, silt, and clay. The product line EarthGen215 distributes boosts the activities of beneficial soil organisms encouraging their reproduction and vigor, enhancing their decomposition abilities, and their corresponding production of sticky materials for soil aggregates formation.

Soil moisture is also essential for forming and maintaining soil aggregates. These Products typically can function as intended when soil is moist enough to germinate seeds planted for crop production. Soil aggregates provide some protection for soil against wind and heavy rain erosion.

Actinomycetes are an example of bacteria that break down dead matter, thereby contributing to formation of soil aggregates. The picture on the left shows colonies of actinomycetes on corn stalks and leaves remaining in the field after the corn was combined. In addition to decomposing dead matter, actinomycetes produce antimicrobial materials that protect plants and their roots from diseases and various pests. Actinomycetes are among the beneficial bacteria bolstered by applications of the product line EarthGen215 represents.



The lower picture to the right shows mycorrhizal fungi, magnified significantly. Mycorrhizal fungi produce sticky material that promotes development of soil aggregates. Mycorrhizal fungi form symbiotic relationships with all plant roots, extending plant roots' access to nutrients and moisture that otherwise are beyond the reach of the plants' own root systems. It is especially known for enhancing the uptake and assimilation of phosphorus from soil. Mycorrhizal fungi development is also boosted by applications of the product line EarthGen215 represents

The more beneficial microorganisms there are thriving in soil, typically the more earthworms are in the soil. Each of the three pictures below is taken of soil in different hay-producing fields. The field on the far left is from a field producing alfalfa. It has the sandiest soil. The middle picture shows earthworm castings in a field producing alfalfa/orchard grass mix hay, and its soil contains more silt. The picture on the far right is a timothy grass hay field. Its soil contains more clay. Each of these fields has been treated with the product line EarthGen215 distributes for a number of consecutive years, and soil in each is teaming with activities of beneficial microorganisms and earthworms. Earthworms also play a crucial role in formation and stabilization of soil aggregates. Healthy, stable soil structure is the foundation for producing crops of all kinds, in all types of soil textures.

Have a super afternoon and feel free to call at any time with your thoughts, your orders or your questions! Talk soon!

Tom

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