Compost as a Regenerative Agricultural Practice





Farm stewardship, sustainable farming and regenerative agriculture have become common words in today's farming practice due to the world's need for soil to sustain food for a growing global market. This requires much amendment to overused soils that have been negatively impacted by excess synthetic fertilizer, drier climates and lack of nutrients. COMPOST is a key ingredient to saving our soil.

Overview of USCC

The US Composting Council (USCC) was formed in 1990 to support compost production and use through education and training, outreach, and advocacy. USCC is a national non-profit organization dedicated to developing the composting industry. Our members include compost manufacturers, researchers and soil scientists, industry professionals, and environmental enthusiasts. USCC believes that compost manufacturing and compost utilization are central to creating healthy soils, clean air and water, a stable climate, and a sustainable society.

Role of Compost in Regenerative Agriculture

Both compost production and application play important roles in sustainable and regenerative agriculture. Municipal and community composting programs divert food scrap and organic material from the waste stream, reducing greenhouse gas emissions. The application of compost improves soil health, lessening the risk of erosion and runoff and increases nutrient density. Compost supports healthier crops and plant life, which are more resilient to disease and pests.

Restores and Improves Soil Health

Compost improves the biological, chemical, and physical characteristics of soil. Compost use rebuilds organic matter content in our soil, supporting the cycling of nutrients including carbon, nitrogen, and phosphorus. The USDA's Natural Resources Conservation Service defines soil health as "the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans." Soil amended with compost hosts diverse biotic communities – not only microorganisms within the soil, but more resilient plant life. Compost is a catalyst for soil health.

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Mitigates Climate Change

Recycling of organic materials through composting is one of the most important strategies to combat climate change. The application of compost to oil sequesters carbon from the atmosphere. Additionally, composting organic materials instead of disposing of them in landfills greatly reduced greenhouse gas emissions. Landfills are the largest source of anthropogenic methane emissions in the United States.

Preserves Water Quality

Replacing chemical fertilizers with compost application can reduce eutrophication, algal blooms, and other disruptions to aquatic ecosystems. Amending soil with compost can result in improved water retention, mitigating the risk of flooding and erosion. This means less risk of runoff or contamination of waterways.

Builds Community

Compost manufacturing provides opportunities to engage in entrepreneurship and support local economies. According to the Institute for Local Self-Reliance, composting sustains more jobs than disposal facilities on a per-ton basis. Compost not only creates low-barrier job opportunities, but also strengthens local and regional food systems. Composting food scraps and manufacturing compost for soil amendment provides educational opportunities, community connections, and more resilient food systems.

Sources

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