Compost Farming Public Sculpture as Recycling Benefits Learning Tool

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Compost Farming of Food Waste could Reduce Greenhouse Gas and CO2 Emissions In 2008, 31 million tons of food waste was disposed of in landfills, generating 68 million metric tons of carbon dioxide equivalent emissions, comparable to 12.3 million passenger vehicles per year. There, it decomposes to methane, a noxious greenhouse gas.

Food Waste Turned into a Compost Sculpture for Raising Environmental Awareness This technology offers an alternative food waste disposal method to landfills, while simultaneously suggesting an avenue through which to generate useful fertilizer for organic farming. Food waste is turned into compost and harvested with minimal effort from the user. As a sculpture that can be displayed publicly, this technology also serves as a teaching device that can instruct others about natural carbon, nitrogen, and phosphorous cycles.

Applications: • Displayed publicly as a sculpture to raise awareness about pertinent environmental issues • Generate compost, which can be used as fertilizer for organic farming • Use in schools or universities as an interactive learning tool

Advantages: • Because scraps are the primary feedstock, compost is essentially free to the consumer • Worms accelerate the decomposition process, presumably eliminating the need for electricity to speed the process • Worm refuse and compost are high in nutrients necessary for plant growth • Reduces greenhouse gas emissions • Reduces the need for trucks to carry food waste from homes to landfills

Patent Status: Patent Pending

Licensing Status: Available for Sponsored Research Support

Publications: R. Plunz, M. M. Stipisic, Sustainable Infrastructure: Considerations Not To Be Overlooked or ‘Early Morning Challenge’”

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