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Track 4
Industrial Technologies & Miscellaneous

ICMIT/IT39

Green-Waste Composting: Sustainable Approach

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ABSTRACT

Regular disposal of garden-wastes e.g. ground grass, plant leaves etc needs a lot of waste land for disposal and it also produces fouling smell that is unhygienic to the community. A comparative study of aerobic composting using Acetobacter and anaerobic composting using Bokashi process bacteria (Lactobacillus) has been tried here. The possibilities for reuse of the compost as a seed material for further composting was also studied. All the parameters relevant for a fertilizer are measured and the quality of manure produced is analyzed and found satisfactory. A reactor design was also made in CAD for making a laboratory model for the same.

Keywords: Garden-waste, Compost, micro-organisms, Re-use, Aerobic digestion, Anaerobic digestion