Biodegradation, Organic Waste Management and Production of Vermicompost (Bio-fertilizer) from Solid Waste of Kristu Jayanti College Campus

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ABSTRACT

The present research was conducted with the objective to manage the solid organic waste by converting into compost by using earth worms and also evaluation of nutritional value of the vermicompost so produced. An experimental study was conducted to obtain the vermicompost using organic solid waste such as fruit, vegetable, paper wastes. The earthworm species used for this process was *Eudrillus eugeniae*. The microorganism culture *Pleurotus* was added to enhance the degradation process. Moisture content was maintained by spraying proper percentage of water. The partially decomposed organic waste was converted into castings by earthworms. The castings was obtained on the top surface of the bin were in the range from 20 to 30 days depending on the type of solid waste used. The castings obtained were sieved, dried, tested and used as Bio fertilizer. Thus the vermicomposting process helps in the management and disposal of organic solid waste in a safe, economic and useful manner.