IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 8, May 2024

Vermi Transformation for Sustainable Development – A Mini Review

Tamseel Shakeel Shahjahan, Dr. Sajid F. Shaikh,
Mehrab Masud Hukkebardar, Zombarkar Sanobar Irfan
Anjuman Islam Janjira Degree College of Science, Murud-Janjira, Raigad, Maharashtra, India

Abstract: *The world population is increasing at an alarming rate and tremendous quantity of waste is getting produced due to urbanization, industrialization, increase in human population, and various anthropogenic activities that cause serious problems of disposal and management. In developing countries, the most common practice of waste processing and management includes (i) land-filling (ii) incineration (iii) unscientific dumping, and (iv) vermi- composting. The first three methods have one or another drawback including, contamination of soil and groundwater, environmental pollution by burning biomass, and impacting human health and hygiene of the environment. One of the safest methods for managing organic waste is vermi-composting, an eco-friendly bioremediation process mediated by earthworms for the conversion of organic waste into compost in a sustainable and eco-friendly manner. Earthworms play very important roles in human welfare such as waste decomposers, bio-fertilizer manufacturers, land reclaimer, protein producers, food and vitamin source, natural detoxicant as bio-indicator of pollution, bait, industrial raw materials, and above all drug sources. However, the contribution of earthworms is still underdetermined in modern human society. In this article, efforts have been made to summarize the current scenario of waste management, vermi-composting, and the potential of earthworms in waste decomposition to find a sustainable, eco-friendly, and economic solution to manage organic waste.*

Keywords: Waste management, Earthworms, Vermi composting