

# Recent Trends in Composting Technology, 1/e

Bikas R. Pati & Santi M. Mandal



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## About the Book

This book describes the uniqueness of compost at various geographic regions. The importance of process control parameters are described details which are very much meaningful for the preparation of quality compost. Important addition is the technology incorporation to enrich the compost through designing of composting method, selecting appropriate substrate, their proportionate blending and fortification of micronutrients for the site specific application. Extensive role of microbial activities and different types of composting preparation procedures summarized in details. This book uniquely describes how Indian cities become near zero waste following India's six new waste management rules of 2016.

This book provides the updated concepts and technologies in composting manure preparation, and basic knowledge on composting technology and their large-scale management. It also describes a variety of composting types and their beneficial role for both farmers and the ecosystem. The book has been divided into fourteen chapters that balance the composting enrichment process with value addition, top to bottom composting process from raw materials to municipal waste, and their uses in different parts of India. Role of microbial diversity in multistep composting process has been well described. One chapter is dedicated to recent updates on nanofertilizers and their future concerns. This book is highly relevant to the students of Environmental Studies, Microbiology, Biotechnology, Botany, Zoology, Plant Protection, Agriculture and Agronomy.

## Salient Features

improvement of soil quality through continuous application of nutrient enriched (phospho-sulfo-nitro) organic compost along with normal quantities of mineral additives.

process control parameters for the preparation of quality compost.

technology to enrich the compost through designing of composting method, selecting appropriate substrate, their proportionate blending and fortification of micronutrients for the site specific application.

nanotechnology as a potential tool to achieve nutrient need to plants for luxuriant growth and minimize disease conditions.

role of microbial activities and types of composting preparation procedures

India's new waste management rules of 2016.

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#### **About the Author**

**Bikas R. Pati** :- Bikas Ranjan Pati obtained his PhD from University of Calcutta on the topic concerning biological nitrogen fixation. His academic career began with Scottish Church College, Kolkata and later he moved to Vidyasagar University in the Department of Botany in 1990, and in 2001 he founded the Department of Microbiology. He also established the Bioinformatics Center in the University. He has collaborations with other universities and published 110 papers, a major part of which is concerned with nitrogen fixation, liquid biofertilizers and vermicomposting. He has completed several projects funded by the UGC, CSIR, DRDO, AICTE, DBT, UNDP, etc.

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