

The Complete Technology Book on Vermiculture and Vermicompost (Earthworm) with Manufacturing Process, Machinery Equipment Details & Plant Layout 3rd Edition

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Advantage of vermicomposting is that it composts the wastes of rural areas. They clean our villages by using unnecessary organic and non-organic materials. Improves the texture of the soil and its ability to store water. Improves root growth and the multiplication of beneficial soil microorganisms by providing optimum aeration to the soil.

Vermicompost (vermi-compost) is a mixture of decomposing vegetable or food waste, bedding materials, and vermicast created by the decomposition process using various species of worms, usually red wigglers, white worms, and other earthworms. This is known as vermicomposting, and the practise of raising worms for this purpose is known as vermiculture. Sewage treatment can also be done with vermicomposting.

The Global Vermicompost Market is reach growing at a CAGR of 16.74%. The Growth of the global vermicompost market is caused by various factors, such as improved soil aeration, improved water holding capacity, better nutrient cycle, and enriched soil with micro-organism, helps in plant root growth and structure, enhanced germination. The vermicomposting method is used in organic farming. Increasing the use of sustainable agricultural practices, such as vermicomposting along with Government support for organic farming is significantly contributing to the global vermicompost market growth. Vermicompost offers plants with necessary nutrients and helps in plant diseases suppression. Worm castings often comprise 7 times more phosphorus, 11 times more potassium, and 5 times more nitrogen than ordinary soil, which are crucial minerals required for plant growth.

Vermiculture and Vermicompost (Earthworm), as well as their manufacturing methods, are all covered in depth in this book. It also offers photos of equipment as well as contact information for industrial providers.

This book is a one-stop shop for everything you need to know about the Vermiculture and Vermicompost (Earthworm) industry, which is ripe for manufacturers, merchants, and entrepreneurs. This is the only book that goes into great detail about Vermiculture and Vermicompost. It's a genuine feast of how-to material, from concept to equipment buying.

1. INTRODUCTION

Advantages of Vermicomposting

Vermicomposting in Daily Life

Vermiculture v/s Vermicomposting

Vermitechnology (VT)

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Turning Garbage into Money
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Biogas Slurry

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- Principle

- Materials

- Procedure

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- Principle

- Materials

- Procedure

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- Principle

- Materials

- Procedure

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Procedure
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Storage
Identification

15. VERICOMPOSTING: A WORLD SCENARIO

Grace McKellar Centre, Geelong, Victoria, Australia

Hobart City Council, Tasmania, Australia

National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina,

United States Newcastle City Council, New South Wales, Australia Oregon Soil Corporation,

Beaverton, Oregon, United States

Pacific Southwest Farms, Ontario, California, United States

Resource Conversion Corporation/Canyon Recycling, San Diego, California, U.S.

Rideau Regional Hospital, Perth, Ontario, Canada

San Quentin Prison, California

Seattle Kingdome Stadium, Seattle, Washington, United States Sovadec, La Voulte, France

Vermiculture Production Center, Pinar del Rio Province, Cuba Vermicycle Organics, Inc.,

Charlotte, North Carolina, United States

India

Green Cross Society of Mumbai, India

Indian Aluminum Co. Ltd, Belgaum, India

M.R. Morarka - GDC Rural Research Foundation, Jaipur

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Organic Farming

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Production of Cheap Animal Protein

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Soil and Vermi Cast

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Decomposition of Bio-Degradeable Wastes and Vermicomposting Vermiculture in Pollution Abatement

20. VERMICULTURE

General and Planning

Selection of Suitable Species

Basic Characteristics of Suitable Species

Description of Suitable Species

Family : Lumbricidae

1. *Bimastos parvus* (= *Allolobophora* (*Bimastos*) *parvus* Eisen)

2. *Eisenia foetida* (Sav.)

Family : Eudrilidae

1. *Eudrilus Eugeniae* (Kinb.)

Family : Megascolecidae

1. *Lampio mauritii* (Kinb.)

2. *Metaphire anomala* Mich. (= *Pheretima Anomala*)

3. *Metaphire Posthuma* (= *Pheretima posthuma*)

4. *Perionyx Excavatus* E. Perr.

5. *Perionyx sansbaricus* Michaelson

Family: Octochaetidae

1. *Octochaetus* (*Octochaetoides*) *Surnensis* Mich.

2. *Ramiella Bishambari* (Steph.)

Sub-family : Diplocardinae

1. *Dichogaster Bolau* (Mich.)

2. *Dichogaster Affinis* (Mich.)

3. *Dichogaster Curgensis* (Micha.)

4. *Dichogaster Saliens* (Bedd.)

5. *Ramiella Bishambari* (Steph.)

6. *Erythodraeodrilus Suctorius* (Steph.)

7. *Ocnerodrilus* (*Ocnerodrilus*) *Occidentalis* (Eisen.)

Family : Moniligastridae

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2. *Drawida Willisi* (Mich.)

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21. VERMICOMPOSTING

General

Advantages of Vermicomposting

Vermicomposting Materials

Preliminary Treatment of Composting Material

Small Scale or Indoor Vermicomposting

Large Scale or Outdoor Vermicomposting
Other Types of Vermi-Composting
Requirement for Vermicomposting
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Vermicomposting Schemes
Maintenance of Vermicomposting Beds
Vermicomposting Efficiency
Collection of Vermicompost
Transportation of Live Worms
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Rotary Drum Dryers
Vermi Compost Maker
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Leaf Waste Shredder Machine
Packing Machine
Waste Fully Automatic Compost Machine
Rotary Twin Drum Composter
Fertilizer Granule Machine
Waste Compost Tumbler
Waste Compost Machine
Fertilizer Drum Granulator Machine
Fertilizer Granulator Machine

25. PLANT LAYOUT & PROCESS FLOW CHART

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