

Rayat Shikshan Sanstha's

Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

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**Short Term Course on Vermicomposting
Year 2022-23**

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Rayat Shikshan Sanstha's

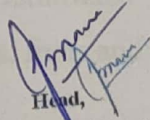
Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

NOTICE

Year 2022-23

All the students of Zoology Department are hereby informed that, the short term course on Vermicomposting will be conducted from **21st August 2022 to 25th November 2022**. All the students should remain present for the lectures in time.


Head,
Department of Zoology
Department of Zoology
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)

Rayat Shikshan Sanstha's

Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

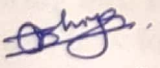
Year: 2022-23

Short term certificate course in


VERMICOMPOSTING

OBJECTIVES:

- ❖ To study various types of organic wastes in farm
- ❖ To study different varieties of earthworm for vermicompost technique
- ❖ To manufacture the vermicompost by low cost technique
- ❖ To study various methods of preparation of vermicompost and vermiwash
- ❖ Application of vermicompost and vermiwash for different crops, fruits and vegetables.


Incharge of Course

(Momin A.M.)


Head,
Department of Zoology
Department of Zoology
Dr. Patangrao Kadam Mahavidhyalaya,
Ramanandnagar (Burli)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

Short Term Course: Vermicomposting

Syllabus

Year: 2022-23

1. Introduction to Vermicomposting:

- Definition and importance of vermicomposting
- Benefits of vermicompost for soil and plants

2. Types of Earthworms:

- Identification of suitable earthworm species for vermicomposting
- Characteristics of red wigglers (*Eisenia fetida*) and other common species

3. Vermicomposting Setup:

- Container selection and preparation
- Bedding materials and their preparation

4. Feeding and Care of Earthworms:

- Proper feeding techniques
- Monitoring and maintaining optimal environmental conditions

5. Harvesting and Handling Vermicompost:

- When and how to harvest vermicompost
- Storage and packaging of vermicompost

6. Troubleshooting Common Issues:

- Addressing problems such as odor, pests, and overpopulation

7. Applications of Vermicompost:

- Using vermicompost in gardening, agriculture, and landscaping
- Benefits of vermicompost for sustainable agriculture

8. Environmental and Economic Benefits:

- Sustainability and waste reduction through vermicomposting
- Economic opportunities in vermicompost production

9. Case Studies and Success Stories:

- Real-world examples of successful vermicomposting projects

10. Hands-on Practical Sessions:

- Setting up a vermicomposting system
- Feeding, caring for, and harvesting vermicompost

11. Practical Demonstrations:

- Study of useful species of Earthworm
- Dissection of digestive system of Earthworm
- Dissection of reproductive system of Earthworm
- Study life cycle of earthworm
- Rearing of Earthworm
- Setting up of vermicomposting Unit (maintenance of physico-chemical factors, harvesting of vermicompost and vermiwash)

Rayat Shikshan Sanstha's

Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

Short Term Course: Vermicomposting

TIMETABLE

Theory and Practical (Per week)


Year: 2022-23

Time	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
10.15-11.15 am	AMM	ABM	AAP			
08.30-10.30 am					AMM	AAP

AMM- Mrs. A. M. Momin

ABM- Mr. A. B. Mane

AAP- Ms A. A. Patil


Head,
Department of Zoology
Department of Zoology
Dr. Patangrao Kadam Mahavidhyalaya,
Ramanandnagar (Burli)


Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

Short Term Course: Vermicomposting

Student List

Sr. No.	Roll No.	Student name
1	1701	Bhole Usha Vijay
2	1702	Chavan Aishwarya Shrikant
3	1703	Chavan Arati Santosh
4	1704	Jadhav Netra Sangram
5	1705	Jadhav Vaishnavi Vasant
6	1706	Pawar Pranoti Babaso
7	1707	Suryawanshi Komal Rajaram
8	1708	Toraskar Deepak Balasaheb
9	1709	Yejgar Abhishek Ashok


Head of Dept.
Department of Zoology
Dr. Patangrao Kadam Mahavidhyalaya,
Ramanandnagar (Burli)

Short Term Course: Vermicomposting

Student List

Attendance Sheet

Department of Zoology
Department of Zoology
Dr. Patangao Kadam Mahavidyalaya,
Ramnandnagar (Burlit)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)
Department of Zoology
Short Term Course: Vermicomposting
Student List
Attendance Sheet

Sr. NO.	Student name	11/9/2022	21/9/2022	31/9/2022	4/9/2022	5/9/2022	6/9/2022	7/9/2022	8/9/2022	9/9/2022	10/9/2022	11/9/2022	12/9/2022	13/9/2022	14/9/2022	15/9/2022	16/9/2022	17/9/2022	18/9/2022	19/9/2022	20/9/2022	21/9/2022	22/9/2022	23/9/2022	24/9/2022	25/9/2022	26/9/2022	27/9/2022	28/9/2022	29/9/2022	30/9/2022
1	Bhole Usha Vijay	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
2	Chavan Aishwarya Shrikant	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
3	Chavan Arati Santosh	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
4	Jadhav Netra Sangram	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
5	Jadhav Vaishnavi Vasant	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
6	Pawar Pranoti Babaso	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
7	Suryawanshi Komal Rajaram	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
8	Toraskar Deepak Balasaheb	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
9	Yejgar Abhishek Ashok	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

Head,
Department of Zoology
Department of Zoology
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burl)

Department of Zoology
Short Term Course: Vermicomposting
Student List

Attendance Sheet

Sr. NO.	Student name	Attendance Sheet																													
1	Bhole Usha Vijay	11/10/2022	21/10/2022	31/10/2022	4/11/2022	5/11/2022	6/11/2022	7/11/2022	8/11/2022	9/11/2022	10/11/2022	11/11/2022	12/11/2022	13/11/2022	14/11/2022	15/11/2022	16/11/2022	17/11/2022	18/11/2022	19/11/2022	20/11/2022	21/11/2022	22/11/2022	23/11/2022	24/11/2022	25/11/2022	26/11/2022	27/11/2022	28/11/2022	29/11/2022	30/11/2022
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6	Pawar Pranoti Babaso	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
7	Suryawanshi Komal Rajaram	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
8	Toraskar Deepak Balasaheb	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
9	Yeagar Abhishek Ashok	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

Head,
Department of Zoology
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burl)

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)
Department of Zoology
B. Sc. III
Short Term Course: Vermicomposting
Question Paper
2022-2023

Date 25/11/2022

Marks 20

Q.1 Select the correct alternative and rewrite the sentences

1. What is the primary purpose of vermicomposting?
 - a) Producing electricity
 - b) Generating heat
 - c) Recycling organic waste
 - d) Purifying water

2. Which type of worms are commonly used in vermicomposting?
 - a) Earthworms
 - b) Millipedes
 - c) Snakes
 - d) Ants

3. What should the ideal temperature range be for a vermicomposting bin?
 - a) 50-60°C
 - b) 25-30°C
 - c) 0-5°C
 - d) 80-90°C

4. Which of the following materials should NOT be added to a vermicomposting bin?
 - a) Fruit peels
 - b) Coffee grounds
 - c) Plastic waste
 - d) Newspaper

5. What is the end product of vermicomposting that is rich in nutrients and excellent for plant growth?
 - a) Vermi-castings
 - b) Vermi-juice
 - c) Vermi-fertilizer
 - d) Vermi-soil

6. In vermicomposting, what is the role of microorganisms in the decomposition process?
 - a) They are not involved
 - b) They break down organic matter
 - c) They help maintain temperature
 - d) They are harmful to the worms

7. How frequently should a vermicomposting bin be checked and maintained?
- a) Once a year
 - b) Monthly
 - c) Weekly
 - d) Daily
8. What is the key advantage of vermicomposting over traditional composting methods?
- a) Faster decomposition
 - b) Requires more space
 - c) No need for worms
 - d) Produces more odors
9. What pH level is considered optimal for the vermicomposting process?
- a) Highly acidic (pH 2-3)
 - b) Slightly acidic (pH 6-7)
 - c) Highly alkaline (pH 12-13)
 - d) Neutral (pH 7)
10. Which of the following is a suitable container for a home vermicomposting setup?
- a) Metal drum
 - b) Plastic bag
 - c) Wooden crate
 - d) Plastic bin with ventilation



RAYAT SHIKSHAN SANSTHA'S

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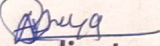
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Certificate/ Add-On/ Value added Certificate

2022-23


Certificate

This is to certify that, Mr./Ms./Miss.....
participated in the Certificate/ Add-On/ Value added Certificate on **"Vermicomposting"**
Organized by Department of **Zoology**, Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar
(Burli), Sangli (Maharashtra).


Coordinator


Head of Dept.
Department of Zoology
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)




Principal
Principal,
Dr. Patangrao Kadam Mahavidyalay
Ramanandnagar (Burli)
Tal. Palus, Dist. Sangli.

Rayat Shikshan Sanstha's
Dr. Patangrao Kadam Mahavidyalay, Ramanandnagar (Burli)

Department of Zoology

Year: 2022-23

Short term certificate course in Vermicomposting

REPORT

Department of Zoology has conducted the three month certificate course of "Vermicomposting". Now a days chemical fertilizers and pesticides are creating many problems such as decreasing fertility of soil and ultimately affecting on soil microfauna. To overcome these problems there is great need of vermicomposting. To solve the problem of salinity and infertility of soil up to certain extent, department of zoology has started the certificate course in vermicomposting for of B. Sc. III students. Department of Zoology has established vermicomposting unit in college campus. Two vermicomposting beds having size 15X4X3. We have introduced the species of earthworm *Esinia foetida*. The course includes study of earthworm species, production of vermicompost and vermiwash. The vermicompost beds were maintained properly by watering and other management. The objectives of this course are to provide the students to understand the detailed knowledge of vermicomposting, vermiwash, maintenance of beds, proper supply of organic matter etc. The vermicompost produced was used in college garden for healthy growth of plants. This course was conducted during the **21st August 2022 to 25th November 2022.**

During this period the lectures and practical were conducted by faculties. During this course the students get knowledge about the vermicompost. Students were sincerely attended and get hands on training of preparation of beds. In this course the every resource person inculcate the awareness about the vermicomposting, vermiwash, different species of earthworms, their role in increasing fertility of soil etc. Students getting the ideas and they will be involve in establishment of vermicompost beds in their native areas and also they aware the society for the use of vermicompost, vermiwash etc.



Esinia foetida



Vermicomposting



Harvesting of vermicompost of solid waste

(Signature)
Momin A. M.

Head of Dept.
Department of Zoology
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)

(Signature)
(Momin A. M.)
Incharge of
course.

(Signature)
Principal,
Dr. Patangrao Kadam Mahavidyalaya
Ramanandnagar (Burli)
Tal. Palus, Dist. Sangli.

