

RAYAT SHIKSHAN SANSTHA'S
RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR
DEPARTMENT OF ZOOLOGY
CERTIFICATE COURSE IN VERMITECHNOLOGY(2020-21)
COURSE REPORT

Department of zoology started Certificate Course in Vermitechnology from Academic year 2020-21 for students. The main objective of this course was to build entrepreneurship skills among the students and to encourage the students for organic farming with the help of vermitechnology. This course is of 3 month duration with 2 credits. Course fee for this course was 300/- rupees per student. Due to COVID19 pandemic this course was inaugurated on online mode and all the lectures as well as practical's were conducted by Departmental faculty members. Online Examination (MCQ) and Oral Examination were conducted. Each Student who successfully completed this course were awarded course Certificate. Outcome developed from this course was two of our students established their own vermibeds in their farm. This course created awareness regarding organic farming among the Student's.

DA
Course Coordinator
(Smt. D.A. Malvkar)

Head
Head
Department of Zoology
Rajarshi Chh. Shahu College, Kolhapur.



Photo: Certificate Distribution to Students (Certificate Course in Vermitechnology)



Photo: “Gandulsheti Booklet” written by Prof. Dr. R. S. Dubal Distribution to Students

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CERTIFICATE COURSE IN VERMITECHNOLOGY (2020-21)
TIME TABLE**

Day	Thursday	Friday	Saturday
Time			
10:00 a.m. to 11:00 a.m.	RSD	DAM	GRK
3:00 p.m. to 4:00 p.m.	-	-	Practical

Rayat Shikshan Sanstha's
RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR.
DEPARTMENT OF ZOOLOGY
Certificate course in Vermitechnology (2020-21)
List of admitted students

Sr. No.	Roll No.	Name of Student
1	SIII-102	Dipali Rajaram Bhole
2	SIII -103	Gayatri Chandrakant Mane
3	SIII -104	Jyoti Krishnat Kale
4	SIII-105	Nivedita Nandkumar Gurav
5	SIII-106	Omkar Ratnappa Gangadhar
6	SIII-107	Pooja Ravindra Wadekar
7	SIII-108	Pranali Prashant Dakare
8	SIII-109	Priyanka Maruti Patil
9	SIII-110	Rutuja Sitaram Patil
10	SIII-111	Shradha Shrikant Patil
11	SIII-112	Shreya Shekhar Ingal
12	SIII-113	Suhas Vitthal Gadage
13	SIII-137	Awalekar Prashant Gundu
14	SIII-139	Mulik Roopali Shivaji
15	SIII-140	Patil Tushar Vitthal

"Education through self-help is our motto"-Karmaveer



Rayat Shikshan Sanstha's,

**RAJARSHI CHHATRAPATI SHAHU COLLEGE,
KOLHAPUR.**

NAAC Reaccredited 'A' Grade (with CGPA 3.07) 3rd Cycle

CERTIFICATE

This is to certify that, Sri/Smt. JYOTI KRISHNAT KALE

Mother's Name KALPANA

Class B.Sc III of Department of Zoology College RCSC

has successfully completed the Career Oriented/Certificate Course in VERMITECHNOLOGY

organized by **Rajarshi Chhatrapati Shahu College, Kolhapur.**

Course organized academic year 2019-20

Course Coordinator

Miss D.A. Malvkar

(Miss D.A. Malvkar)



Principal

Principal

Information regarding Skill Development Courses/Career Oriented Courses

Name of the Department: Zoology

Course name: “CERTIFICATE COURSE IN VERMITECHNOLOGY”

Course Coordinator name & Contact number: Smt. D. A. Malvekar (9067197523)

Duration : 03 months

Course Fee: 300/-

Eligibility:12th Passed student

Minimum intake Capacity: 15

Objectives of the Course:

1. To build an interest about Vermicompost, Vermiwash & Vermiculture among the students
2. To build entrepreneurship skills among the students
3. To encourage students about culture & management of Earthworms
4. To encourage the students for organic farming with the help of vermitechology.
5. To aware the students about diseases and pests of Earthworm.

Learning Outcomes :

1. Students can construct their own compost in farm & can get monthly income.
2. Students/ farmers by using vermicompost can increase the productivity.
3. Students can produce vermicompost on small scale for garden/household plants.
4. The candidate can generate income by supplying vermiculture, vermiwash, & vermicompost.
5. He/she will directly or indirectly help to reduce environmental pollution.

Syllabus:

Sr.No.		Periods
1.	Unit 1: Introduction	07
	1.1 Vermicomposting : Introduction and Scope, History, their value in maintenance of soil structure, role as four r's of recycling : reduce, reuse, recycle, restore. 1.2 Types of Earthworm and Classification Epigeic, Endogeic, Diageic species . Useful species of earthworms. 1.3 Life history of Earthworms (Earthworm Species : <i>Eisenia foetida</i> / <i>Eudrillus euginae</i>) 1.4 Objectives of Vermicompost.	
2.	Unit 2:	06
	2.2 Methods of Vermicomposting: Small and large scale Bed method, Pit method . 2.3 Vermicompost Production : Establishment of Vermicomposting and Vermiwash unit 2.4 Pests and diseases of Earthworms	
3.	Unit 3 :	06
	3.1 Management of vermicompost bed 3.2 Harvesting the Compost & Vermiwash 3.3 Storage and packaging of vermicompost 3.4 Physico- chemical analysis of vermicompost	
4.	Unit 4 :	06
	4.1 Components of vermicompost and their role in agriculture 4.2 Importance and use of vermicompost 4.3 Importance & use of vermiwash 4.4 Marketing & awareness for farmers by organising farmers meet	

Practicals:**15**

1. Classification of Earthworm
2. Study of external morphology of Earthworm- *Eisenia foetida*
3. Study of habit and habitat of Earthworm- *Eisenia foetida*
4. Study of Digestive system of earthworm
5. Study of Reproductive system of earthworm
6. Study of cocoon and juvenile stages of earthworm.
7. Study of Pests and diseases of Earthworm
8. Establishment of vermicomposting unit: Pit method
9. Establishment of vermicomposting unit: Bed method

10. Establishment of vermiwash unit
11. Vermicompost production, harvesting and packaging.
12. Study the effects of vermicompost & vermiwash on crops.

Suggested readings:

1. Pragatshil sheticha Rajmarg : Gandulsheti ,Dr.R.S.Dubal
2. Bhatt J.V. & S.R. Khambata (1959) “Role of Earthworms in Agriculture” Indian Council of Agricultural Research, New Delhi
3. Dash, M.C., B.K.Senapati, P.C. Mishra (1980) “ Verms and Vermicomposting” Proceedings of the National Seminar on Organic Waste Utilization and Vermicomposting Dec. 5-8, 1984, (Part B), School of Life Sciences, Sambalpur University, Jyoti Vihar, Orissa.
4. Edwards, C.A. and J.R. Lofty (1977) “Biology of Earthworms” Chapman and Hall Ltd., London. 4. Lee, K.E. (1985) “Earthworms: Their ecology and Relationship with Soils and Land Use” Academic Press, Sydney.
5. Satchel, J.E. (1983) “Earthworm Ecology” Chapman Hall, London. 8. Wallwork, J.A. (1983) “Earthworm Biology” Edward Arnold (Publishers) Ltd. London.

Examination:

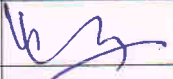







Examination will be conducted as follow:

Multiple choice questions	30 Marks
Oral	10 Marks
Total Marks:	40 Marks

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RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR

Department of Zoology (2020-21)
Certificate course in Vermitechnology

Board of Studies

Sr.No.	Name	Designation	Current status	Sign
1	Prof. Dr. V. V. Killedar	I/C Principal	Chairperson	
2	Dr. S. P. Pawar	IQAC Coordinator	Member	
3	Dr. S. S. Lavekar	Chairman, Criterion I	Member	
4	Dr. M.K. Kannade	Chairman, Skill Development courses	Member	
5	Smt. D. A. Malvekar	Course Coordinator Head, Dept. of Zoology	Member	
6	Smt. G. R. Katkar	Asst. Professor, Dept. of Zoology	Member	
7	Mr. S. S. Jagtap	Asst. Professor, Dept. of Zoology	Member	
8	Dr. J. A. Chavan	Asst. Professor, Dept. of Zoology , Rajaram College, Kolhapur	Expert	



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Miss

Course Coordinator

(Miss D.A. Malvetae)

Principal

Principal

