

VermiCompost
Certificate Course

2022 - 2023

2022 - 2023

Nandyal

Request Letter

Date: 26-09-23

To

The Principal

P.S.C. & K.V.S.C Govt. College

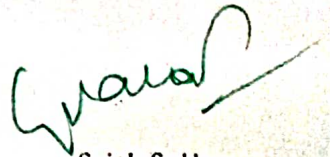
Nandyal

Sir,

Sub: - Requesting for conducting a Certificate Course -
on vermicompost regarding.

As part of academic activities we the Dept. of Zoology, is going to conduct Certificate Course on 02-01-2022 in this connection please grant me permission to conduct the above said programme and also related activities.

Thanking you sir,


Yours faithfully,


PSC & KVSC Govt. College
Nandyal-518 502, Kurnool(Dt) A.P.

2022 - 2023

Circular

Nandyal
1/1/2022.

All BA/B Com/B Sc Students are here
by informed to enroll your names into a
Certificate course in Vermi compost which
is going to be conducted from 2/1/2022
by Dept of Zoology.

Contact Smt. G. Srinomani

Lec in Zoology cell No: 9493285924

Enroll : On or before

G. Srinomani, M.Sc; M.Bol
Principal
PSCZ Govt. College
Nandyal
1/1/22
NANDYAL

2022 — 23

DEPARTMENT OF ZOOLOGY

CERTIFICATE COURSE ON

"VERMICOMPOST"

SYLLABUS

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5. VERMICOMPOST OF ADVANTAGES

REPORT ON CERTIFICATE COURSE IN VERMICOMPOST

We, The department of zoology have conducted Certificate Course in Vermicompost for the period of 3 months from January - March (01-01-2022 to 31-03-2022)

Totally 25 Students of IIIrd BZC, (EM, TM) underwent training programme and benefited in Vermicompost. The faculty of zoology. S. GOPAL, G. SIROMANI, G. MADHUSUDHANARAO. and non-teaching staff involved in this training programme as mentors.

Through this training programme (ie) Certificate course we have injected in.

- Organic food habits and usage of Natural Fertilizers.

VERMICOMPOSTING CERTIFICATE COURSE

SYLLABUS :-

1. INTRODUCTION TO VERMICULTURE
2. VERMICOMPOSTING
3. TECHNOLOGY USED IN VERMICULTURE
4. BREEDING
5. OPEN BEDDING SYSTEM
6. BED SYSTEM
7. COLLECTION OF WASTAGE & FILLING UP OF BEDS
8. SELECTION OF EARTH WARMS
9. MANAGEMENT METHODS FOR PREPARATION OF MANURE
10. METHODS FOR THE PREPARATION OF VERMICOMPOST
11. MANUAL METHOD
12. MECHANICAL METHOD
13. BIN METHOD
14. WINDOW METHOD
15. ECONOMICAL IMPORTANCE OF VERMICOMPOST

VERMI CULTURE :-

The excreta of earthworms is known as 'Vermi Compost'. Preparation of manure in Scientific method by using earth worms is known as 'Vermi Culture'. Due to the usage of chemical manures the irrigation lands are unable to give appropriate yield. Researches revealed that we will get more yield by using Vermicompost instead of chemical manure.

Now a days, the vegetables consumed by people are from the crops, where the chemical pesticides and fertilizers are used, the number of victims hospitalised is gradually increased. In order to reduce this and to get more yield, the farmers are becoming aware of the utilization of organic manures.

Apart from the organic manures, Vermicompost is the manure which is prepared by farmers at their own with low cost. by using different wastages, we obtain excreta from earthworms. These earth worm excreta is used as organic manure.

The earth worms used in the Preparation of Vermicompost belong to class oligochaeta of Phylum Annelida. They lead a fossorial mode of life and eat soil and detritus wastages. by Eating soil and wastages, they excrete organic manure and enhance the fertility of the soil. They enhance fertility and helps in the Enhancement of the yield of crops, So many called "Friends

of 'Farmers'.



VERMI COMPOSTING:-

Preparing organic manure by using earth worms is called as 'Vermi Composting'. In the Process of Vermi Composting, i.e. in the Preparation of organic manures by using earthworms, agriculture wastage, cattle wastage, Green wastage and other decomposed wastage are used.

Usually the Earth worms live in the burrows of land and moistured areas. They feed on Soil and other organic wastes and excrete organic manure. By adopting this principle, we can Prepare the vermicompost artificially.

Vermicompost is Prepared in various methods by using earth worms. In these methods chemicals are not used.

The main Components of vericomposting are Collection of Earthworms and organic wastes. Now a days in our Country many

apiculture region centres, making aware the farmers about the Preparation of vermicompost and the management methods. Initially the farmers Prepared vermicompost for their own Paddy fields, But now it became an employment and beneficiary industry.



Technology used in Vermiculture :-

In the Preparation vermicompost, the following Phases are these.

- 1:- Bedding or Formation of Bed
- 2:- Collection of wastages.
- 3:- Filling up of beds with wastage
- 4:- Selection of Earth worms.
- 5:- Management methods for the Preparation of manure.

1:- Bedding:-

The first Process in Vermicomposting is the formation of bed. Usually beds are constructed under the shades of trees or under the special sheds.

The beds constructed under the shades of trees are called as "open bedding System". Based on available resources beds are constructed in different ways.

Usually beds are constructed by hollow brick, Asbestos and stones. Beds are constructed at highest area. we should take care of temperature to be low.

The measurements for construction of bed are: The bed constructed with 2.5 feet height and 6 feet width.

- * The length of the bed may be enhanced as much we need.
- * The modern methods for the construction of bed is 'Four chamber bed System'.

In this method, 4 chambers are constructed rectangularly at a place. All the chambers are connected through holes. The measurement is also 2.5×6 feet. In this method we can get manure continuously. The 4 chambers are filled with waste with a minimum gap of one month. Due to the presence of holes in between the chambers, the earthworms migrate from one chamber to another after the completion of preparation of manure. No damage caused to earthworms while collecting manure.

- * In modern methods beds are constructed in big sheds. There by reduce water wastage. we can provide sufficient temperature for the Preparation of manure.
- * The base of the bed should be constructed with Concrete. otherwise the Earthworms make burrows in to the land.
- * Pots, Cement Jai tanks and wooden boxes are used for the Vermiculture insted of beds.

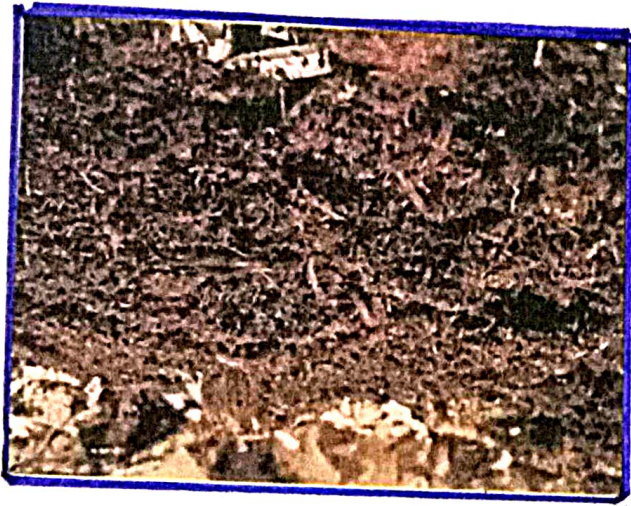


2:- Collection of wastage & Filling up of beds:-

- * After the Constroction of bed, in the Second Phase we should Collect wastage. USUALLY cattle dung, wastage of Jauwar, Corn and Cotton crops are used for the Preparation of manure.
- * If cattle dung is plenty, 60-70% dung and remaining agricultural wastes are used. If cattle dung is Scarce, 10-15% of dung and remaining agricultural wastes are used.
- * Precautions to be taken while Filling the bed:-
- * wastage's are arranged in an appropriate manner. Those which require

more time for decompose, are kept at bottom and those which easily decompose kept on surface. The wastages are arranged like layers, each layer should be a minimum of 8 inches.

* For every 100kgs of wastage, 10kgs of cattle dung, 10 litres of water, 4 kgs of Rock Phosphate or decomposed solution should be there.



3:- Selection of Earthworms:-

Different types of earthworms are living in the land. But some of them are used in vermiculture. The following are the earthworms that convert wastage into organic manure.

1:- *Eisenia fetida* (Red wigglers)

2:- *Pheretima elongata*

3:- *Perionyx excavatus*

4:- *Lumbricus rubellus*

5:- *Pheretima asiatica*

6:- Eudellus species

7:- Megascotex species

- * In our country *Eisenia fetida* and *Eudrilus eugeniae* are the earthworms mostly used.
- * These are red, brown in colour, 4 inches in length. They live on surface of land, so they are favourable for the preparation of manure.
- * Borrowing earthworms should not be used for vermicomposting.
- * After the arrangement of wastages in the bed, sprinkle the water daily once or once in 2 days. As a result of this wastages undergo fermentation and heat will be released out.
- * On 2nd day release earthworms on beds. 1 kg of earthworms are released for 100 kgs of wastages. usually 500-750 number of earthworms weighed for 1 kg.

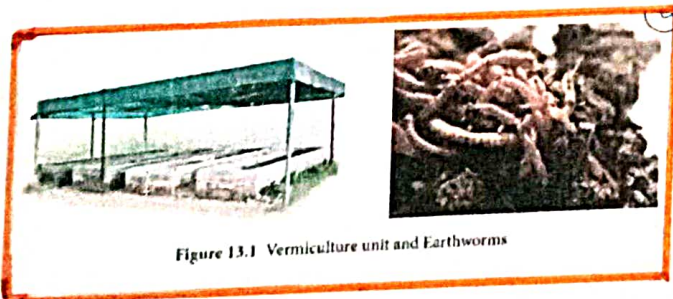


Figure 13.1 Vermiculture unit and Earthworms

Management methods for Preparation of manure :-

- * After filling up of beds and the release of earthworms, the following care should be taken.
- * Everyday or once in 2 days the beds should be soaked with water to maintain moisture.
- * Care to be taken, not too much of moisture in side the bed.
- * See the water should go out during rainy season in open bed.
- * Tanks are constructed beside beds to keep vermi wash.
- * The Population of earthworms increase tremendously after 2-3 months of release of earthworms on beds.
- * 75-90 days time taken for the formation of manure in beds. Piles of manure are made at surface layers of the bed, there by the earthworms go into down layers.
- * Manure collected from bed is sieved and stored in bags.
- * 600 kg's of vermicompost is produced for 1 tonne of waste.
- * In wastages not only the cattle dung and agricultural waste, but also Paper Pieces, ass, Saw Power, Concrete alloy are used as bed material. Add water to them and fill in the bed.



Methods for the Preparation of Vermicompost :-

Mainly two methods are used for vermicomposting.

1:- Manual method

2:- Mechanical method

1. Manual method:-

- * Manual method is hand made method. The farmers use this classical method for the preparation of vermicompost.
- * In this method beds are formed in open area. Every work made by humans. After digging pits, they are boxed with wastages. The surface is feed with cattle dung. Thereby the bed do not lose its moisture.
- * Sprinkle water on the beds daily.
- * Water spraying is stopped after the formation of manure. Earthworms go to down layers. Manure get collected, without causing any harm to earth worms.
- * After the collection of manure, it is sieved by humans and separate other material.

2:- Mechanical method:-

In this method machinery is used for the preparation of manure. There are two methods.

i:- Bin method ii:- window method

(i) Bin method:-

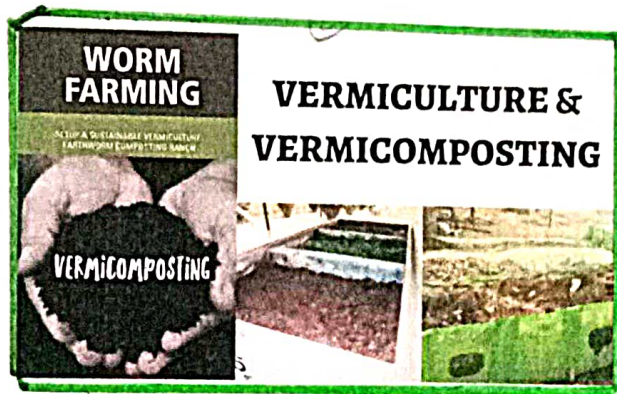
Earthworms are raised in containers or in bins. This method is called as Bin method. Half of the container filled with bedding material. Various wastages are used as bedding material. Mix it with sand. Bin is kept at proper ventilation. Bed should be kept at 70% moisture.

Earthworms are released on the surface of bed. They immediately enter inside and consume the wastages and prepare the manure.

ii:- Window method:-

- * Rearing of Earthworms in open areas is called as window method. Usually under the trees, where the temperature is low.

In the mechanical methods Vermicompost is produced in large scales. Different machinery is used in this method. In manual method limited quantity of manure is prepared, that is with labours of human beings.



Economical importance of Vermicompost:-

- * Vermicompost as the manure provides required nutrients to plants.
- * Vermicompost Comprise 1.5% Nitrogen, 0.8% Phosphorous 0.7% Potassium like macronutrients and micronutrients like Calcium, magnesium, iron and zinc.
- * Nutrients of Vermicompost give vitamins, hormones and enzymes to plants and make them grow fast.

- * It helps for the enhancement of disease resistance.
- * Repagates the Population of natural microflora of soil.
- * Vermicompost also used in mushroom Cultivation
- * Vermicompost is used in fish Ponds.
- * Vermicomposting become an industry and Providing employment for many unemployed.
- * Dairy wasteage Cattle barn wasteage, domestic wastages are get utilized by Composting methods.
- * Indian Institute of Technology Scientists Converting the wasteage collected from metropolitan cities into biological manure by earthworms. There by garbage Problem is solved.



adapt sustainable practices. The organization currently produces 5,000 tons of vermicompost annually. Its real achievement, however, has been in raising awareness among farmers, researchers and policy makers in India about regenerative food production methods. The group is directly responsible for 2,000 farmers and horticulturalists adopting vermicomposting. These converts have begun secondary dissemination of the principles they were taught.

In 1991-1992, Maharashtra Biotechs and the India Department of Science And Technology promoted the adoption of vermicompost technology in 13 states in India. The group has also established a vermicompost unit with Chitrakoot Gramodaya University, Madhya Pradesh which produces five tons of vermicompost per month. Educational institutes in Maharashtra & other states have started conducting certificate/diploma/regular courses on vermiculture, vermiculture biotechnology, and vermiculture & vermicompost technology. The duration of courses ranges from 10 days to six months. The Department of Zoology in collaboration with Geography & Botany Departments running this course.

Aims & Objective:

- ❖ Students will be able to compost in a limited space and describe the decomposing process.
- ❖ The interested students will get the knowledge of composting.
- ❖ Students will get the employment,
- ❖ They can generate employments,
- ❖ They will also turn towards organic farming,
- ❖ Will help to maintain the environment pollution free and
- ❖ Will get the knowledge of biodiversity of local earthworms.

➤ The detail of the course is as follows:

Focus:

To convert unwanted, organic matter, particularly food scraps and paper into fertile soil.

Name of the course: Certificate Course in Vermicompost technology

- **Level:** Certificate
- **Stream:** Science or any stream
- **Subject:** Vermiculture/ vermicompost

Eligibility Criteria: 10+2

REGISTER OF ATTENDANCE & FEES

Name of the Institute PSC & KVSC Govt Degree College

FOR THE MONTH OF January 2022-2023

Section Zoology Dept

Place Mandayal

Sl.No.		Admission No.		NAMES																																	No of days present		FEES Rs. P.		Date of payment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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New Year

SUNDAY

STANKRANTH

HOLIDAYS

SUNDAY

REPUBLIC DAY

SUNDAY

Introduction of Vermiculture
Vermiculture
Vermicomposting
Vermicomposting
Technology used in Vermiculture
Vermiculture
Bedding
Bedding

Open bedding system
Bed system
Collection of waste & filling up beds
selection of earth worms
open bedding system
Management methods for
Preparation of manure
Mechanical methods

0.5% roll at the beginning of month

Admitted during the month

Left No. on roll at end of month

No. of working days

Average attendance during the month

No on roll during the month

ABW

REGISTER OF ATTENDANCE & FEES

22 days
Name of the Institute PSC & KVSC Govt Degree College

FOR THE MONTH OF

Section Dept of Zoology Place Mandavul

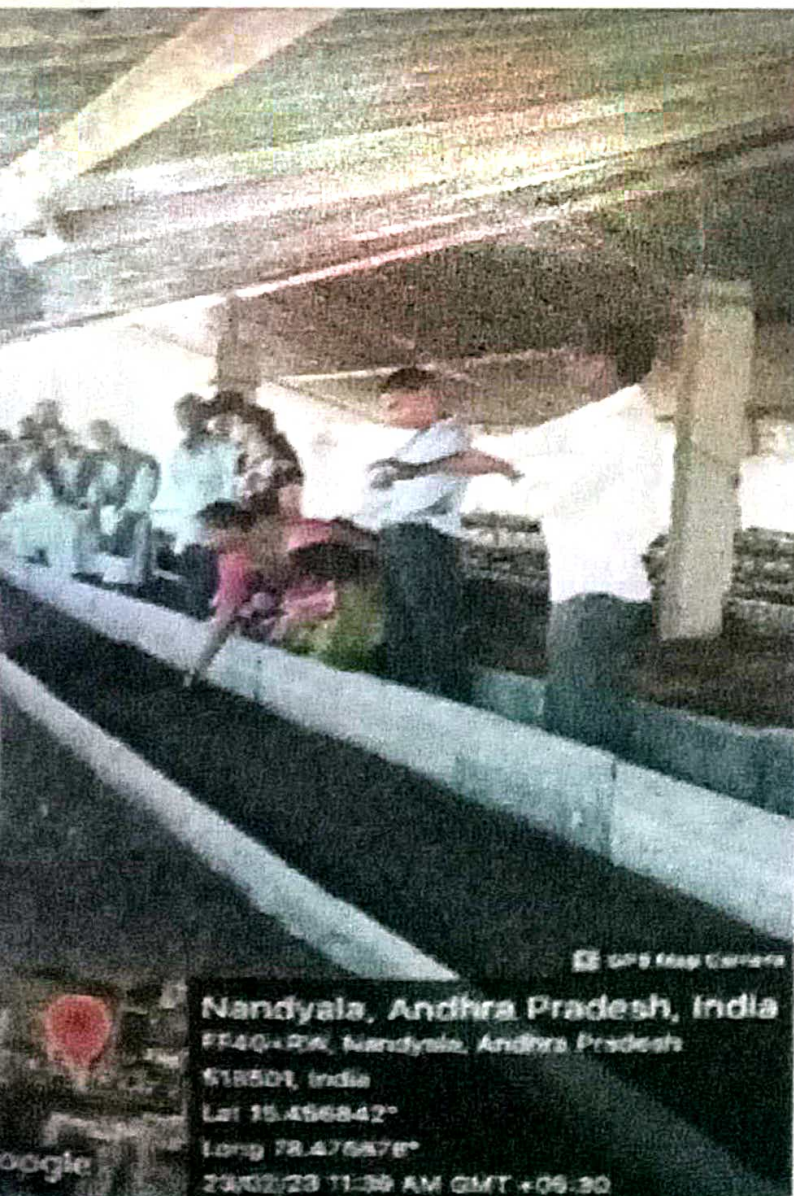
February

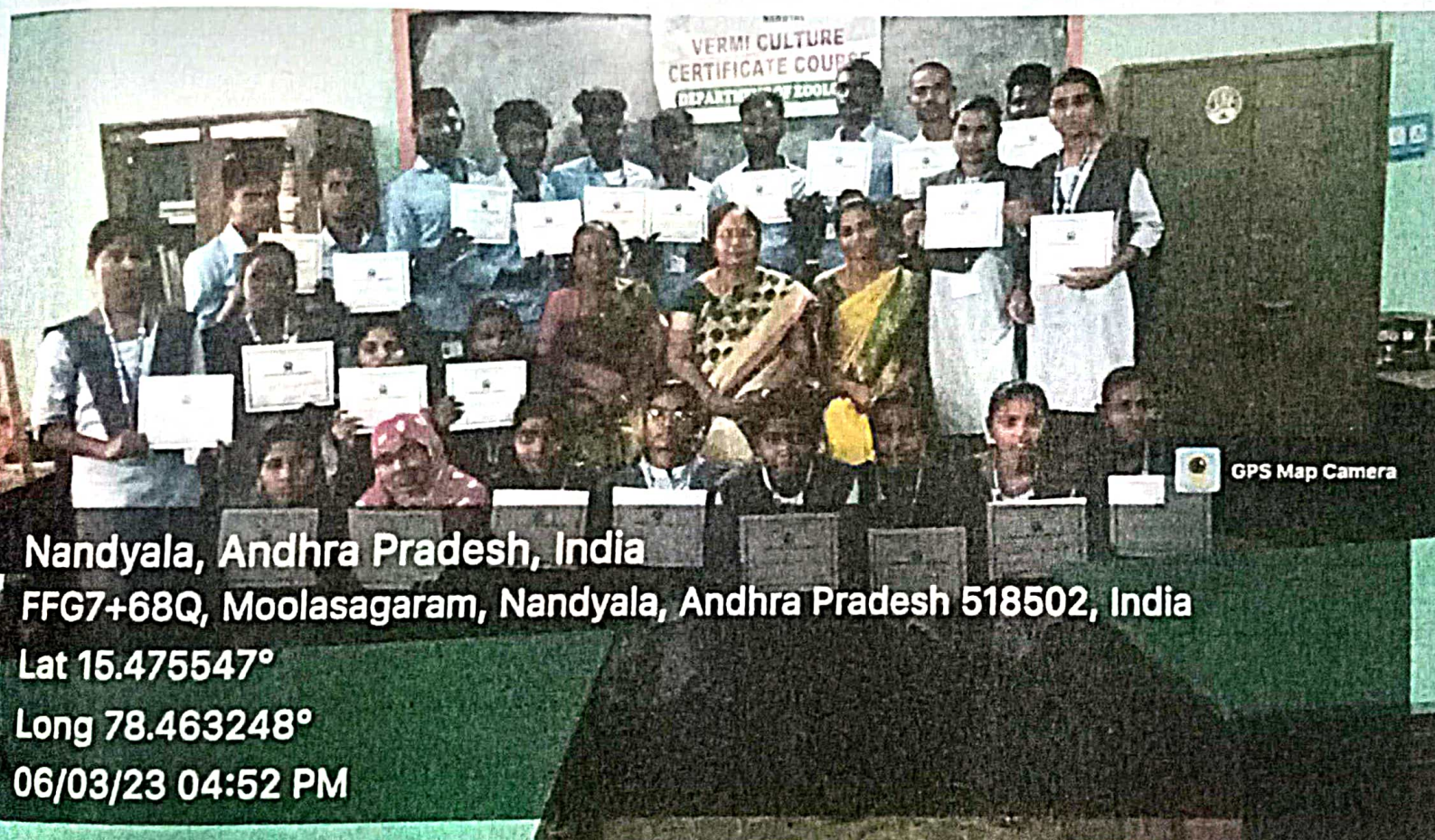
2023

Sl.No.	Admission No.	NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	No. of days present	FEES Rs. P.	Date of payment	
1		A. Prathyusa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
2		A. Ramesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
3		B. Arand	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
4		Gr. Sonaia rani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
5		Gr. Sallaja	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
6		Gr. Jayakumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
7		Gr. Deepika	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
8		Gr. Rani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
9		H. Arun Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
10		M. Aravind	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
11		M. Dinesh Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
12		N. Soni	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
13		N. Chandanasudhakar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
14		P. Kamalakar naik	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
15		P. Madhu suresh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
16		S. Sreelatha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
17		S. Durgaprasad naik	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
18		S. Azeezunnisa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
19		S. Lathejunnisa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
20		S. Sajitha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
21		T. Sini vasulu	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
22		V. Dhanaiah	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
23		V. Gayatri	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
24		M. Harshitha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
25		Mogbulhussain	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Number present M Daily E																																					
Initials M E																																					
Methods for the preparation of Vermicompost			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Manual method			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Types of Methods			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Mechanical method			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Types of Methods			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Bin method			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Bin method			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
window method			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Vermi wash			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
"Field Trip"			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Economical			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Importance of Vermicompost			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Vermi wash			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Vermi wash			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Usage of Vermicompost			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
"Field Trip"			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Processing			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Processing			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Earth worm			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
Species & Exam			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
21+22+23 days																																					

Department of zoology Activity Conducted Certificate Course and Visit
R A R (Reginal Research Station) Nandyal for the purpose of
Vermicompost Certificate Course today 16 - 2 - 2023 Staff 2, Students
6 members







FEED BACK outcome ON VERMICOMPOSTING

1. Vermicompost is a Rich Source of nutrients and growth hormones.
2. Vermicompost gives disease resistance to plants.
3. Nutrient content of vermicompost is higher than traditional composts.
4. It is a valuable soil amendment.
5. Vermicompost application enhances modulation in legumes and symbiotic mycorrhizal associations with the roots.
6. Vermicompost harbours certain microbial populations that help in "N" Fixation.
7. It improves taste, Lusture, and keeping quality of the produce.
8. Vermicomposting is associated with manures and decaying organic wastes.

* VERMICULTURE ADVANTAGES *

1. Eco-friendly material Porous, moisture absorbing
2. Increase the nutrient uptake
3. Rich in micro organisms
4. Increase the crop productivity
5. Soil conditioner
6. Rich in enzymes, nutrients (1.6, 2.2, 0.67% NPK)
7. Low CIN ratio
8. Cost effective
9. Vermicomposts are free of heavy metals, accumulated on the earth worms hence not use worms as dietary supplement for fish.

Vermicompost of advantages.

These are many advantages of vermicompost.

- * It provides efficient conversion of organic wastes, crop/animal residues.
- * It is a stable and enriched soil conditioner
- * It helps in reducing population of pathogenic microbes
- * It helps in reducing the toxicity of heavy metals
- * It is economically viable and environmentally safe nutrient supplement for organic food production.
- * It is an easily adoptable low cost technology.

Assessment Method - Evolution Method
2022 - 2023 (Objective type)

Dept
Vermi Compost

1. What is Vermicompost → Excreta of Earthworm
2. Earth worm Excreta is use as → Organic Manure
3. The first process in Vermicomposting is
4. The Modern methods for the construction of bed is → Four Chambered bed system
5. How many days taken the formation of manure in beds. → 75-90 days
Mainly
6. How many Methods are used in Vermicomposting → Two Methods.
7. What are the Names of Two Methods.
→ (1) Manual Method
(2) Mechanical Method.
8. Rearing of Earthworms in open areas is called as → Window Method.
9. Vermicompost Nitrogen → Comprise + How much % of 1.5 %.
10. Vermicompost is a Rich Source of nutrients and growth hormones → To plants.

2022 - 2023
PSC & KVSC Govt College
Nandyal
Dept of ZOOLOGY
VERMICOMPOST certificate course

1. What is vermicompost ?

Ans.

2. Earthworm excreta used as ?

Ans.

3. The first process in vermicomposting is ?

Ans.

4. The Modern methods for the construction of bed is ?

Ans.

5. How many days taken for the formation of manure in beds ?

Ans.

6. How many methods are used in vermicomposting ?

Ans.

7. What are the names of two methods ?

Ans.

8. Rearing of Earthworms in open areas is called as ?

Ans.

9. Vermicompost comprise how much % of nitrogen ?

Ans.

10. Vermicompost is a rich source of nutrients and growth hormones to ?

Ans.

P.S.C. & K.V.S.C. GOVERNMENT DEGREE & P.G. COLLEGE

NANDYAL-518 502. KURNOOL. A.P.

DEPARTMENT OF ZOOLOGY



CERTIFICATE COURSE ON VERMICOMPOST

Certified that Kumari / Sri..... A. Ramesh Ist BZC.....
of..... Underwent training in
certificate inn **VERMICOMPOST** at **P.S.C. & K.V.S.C. Govt. Degree College, Nandyal.**
From..... 2-1-2022..... to 28-2-2023.....

Dr. S. Gokul
**LECTURER IN
ZOOLOGY**

Lijal
**LECTURER IN CHARGE OF
ZOOLOGY DEPT.**
Govt. Degree College,
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Prabala
PRINCIPAL

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L. V. S. Rao
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P.S.C. & K.V.S.C. GOVT. COLLEGE
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CERTIFICATE COURSE ON VERMICOMPOST

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of..... FA B.Z.C. Underwent training in
certificate inn **VERMICOMPOST** at **P.S.C. & K.V.S.C. Govt. Degree College, Nandyal.**

From..... 2-1-2022 to 28-2-2023

Dr. S. Gopal
**LECTURER IN
ZOOLOGY**

L. Anand
**LECTURER IN CHARGE OF
ZOOLOGY DEPT.**

Prabhu
PRINCIPAL

Feed back on vermi compost

- ① vermicomposting is used for medium-scale on site
- ② organic farmers can use vermicompost as a natural fertilizer to the plants.
- ③ vermicompost applied near the crown region of the plants acts as natural mulch for the crop plants.
- ④ This earthworm compost can also be used as a pitting mix for urban garden

2 B2C
A. Prathyusha

Feed back on vermi compost

1. The major benefits of vermicompost to plants in vermicompost nutrients are easily available for the plants to uptake minerals and nutrients
2. Vermicompost is less cost rather than other fertilizers
3. It is very easy to produce or prepare vermicompost, Any farmer can make vermicompost at their own fields
4. Good benefit of vermicompost is its demand in the present market of organic farming days

2 B2C
G. Sailaja

Feed back on Vermicompost

- ① Vermicomposting can also be used as a technique for domestic wastewater management.
- ② Vermicompost can be used in Organic farming and small scale sustainable farming.
- ③ Vermicompost has several excellent properties and has many advantages when applied to the soil.
- ④ Vermicompost is an excellent nutrient-rich organic fertiliser, which helps plants to grow well and give better yields

I B2C

G. Soniya Rani

Feed back on vermicompost

- * vermicompost is ideal for most of the foliage or indoor flowering plants.
- * It maintains the color, size shape and overall appearance of branches by providing steady of nutrients.
- * vermicompost has vegetable farming kitchen gardening.
- * All kinds of fruiting underground and vegetables can be grown by using.

I B2C

B. Anand.

Feed back on Vermicompost.

- * Vermicomposting is a process in which Earthworms are used to convert organic materials into humus-like material known as Vermicompost.
- * A Number of researchers throughout the world have found that the Vermicompost.
- * Vermicompost can enhance soil fertility physically, chemically and biologically.

G. Deepika
1st BZC

Feed back on Vermicompost

Vermicompost uses
1. Incorporate into soil before planting cost

- prohibitive for large acreage.
- * Apply as Top-dress fertilizer
 - spread $\frac{1}{4}$ - $\frac{1}{2}$ inch thick
- * Brew Vermicompost Tea or Extract
 - Can mix with compost in tea.

S. Sathya
1st BZC

Feed back on Vermicompost

Uses of Vermicompost

- * Agriculture - organic farming
- * Green house.
- * Farmhouse
- * Fruit orchards
- * Lawns.
- * Garden plants
- * Parks and plants
- * Vegetable & chicken garden (kitchen garden)

M. Harshitha

1st BZC

Feed back on Vermicompost

Uses of Vermicompost

- * The use of vermicompost plants remain lush green
- * The use of vermicompost in the immune system of plants increases.
- * Vermicompost is easy to store and easy to use.
- * Vermicompost is best fertilizer for kitchen garden.
- * Soil moisture storage capacity increases and increase the number of beneficial bacteria.

V. Dharmakshmi

1st BZC