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BEST PRACTICE REGISTER

DEPARTMENT OF ZOOLOGY

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BEST PRACTICE

TURNING CAMPUS WASTE IN WEALTH BY VERMI COMPOSITING

1. Title of the Practice: TURNING CAMPUS WASTE IN WEALTH BY VERMICOMPOSITING.

2. Objective of the Practice:

- To convert organic waste to Vermicompost.
- To involve students in Vermi-composting.
- To use vermi compost college plantation.
- To motivate students towards waste management methods.

3.The Context:

JVR Degree college campus having 12.25 acres area. It is covered with more than 300 trees. Those are 120 varieties of plants daily 2 to 3 kgs of (approx.) of dry leaves as a waste materials. Students collect the dry leaves store in a particular place to prepare to Vermicompost to turns waste to useful produce.

4. The Practice:

Phase –I: Processing involving collection of wastes, mechanical separation of plastic waste, metal, glass and other ceramics stored the collected waste at specific place .

Phase – II: That dry leaves waste mixed with cattle dung.

Phase – III: Preparation of Vermi composting pit with concrete material one meter deep and 1.5 meters wide. Preparation of Vermi-composting bed preparation with dry leaves and cattle dung.

Phase –IV: Collection of earthworm after vermi compost collection. Release the earthworms regular monitoring and adding fresh source.

5. Evidence of Success:

- After using vermi compost to garden plants showed luxuriant their growth, vermi compost having enriched macronutrients and micro nutrients. So, plants nutrition increases of porosity and microbial activity in soil which improved water retention and aeration.
- Regularly using vermin compost to plants is place of chemical fertilizers. The cost of the garden /plantation maintenance is cost effective.
- Plants showing high rate of yield.

6. Problems encountered & resources required:

- Collection of the waste material / dry leaves from the garden.
- Some worms keep escaping for the prepared vermi bed.
- The vermin worm & vermin bed having very bad odour in the campus.
- Regularly monitoring.
- Rainy season.

Vermi composting Pit in the J.V.R campus.

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Eco - Friendly campus :-

* It is a healthy and clean way to eliminate waste going in to our landfills, which improves the environment.

* vermipasting attracted lot of interest in recent years due to increasing enviromental concerns and use of sustainable fesilizers.

* The vermicomposting is becoming very popular due to a way to treat organic wastes more quickly.

* It is the Eco-friendly method of converting organic waste into nutrient rich fertilizer.

Composition of vermicompost :-

- Nitrogen - 1.5 to 3 %
- phosphorous - 1.05 to 2.20 %
- Potash - 1.10 to 1.75 %
- calcium - 0.9 - 1 to 10 %
- Magnesium - 0.4 to 0.5 %
- Sulphur - 0.15 to 2.9 %

Calcium - 5.5%

Iron - 7.5 ppm

Manganese - 50 to 15 ppm

Zinc - 45 to 77 ppm

Molybdenum - 1.2 ppm

Boron - 0.3 ppm

Nitrogen: Carbon - 14.5 to 25%.
(Source: Indian Agricultural Research Institute)
~~(Source: Agricultural Research Institute of India)~~

Vermicompost is the product of the composting process by various species of Earthworms. Besides above composition vermicompost also contain biologically active substances such as plant growth regulators and microbes. vermicomposting can be done in huge scale at farm and small scales at house.

Students separating the plastic waste, metal, glass and other ceramics stored the collected waste / dry leaves.

Boys Students working for cattle dung collection & transportation

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Bhavani - vermicomposting visit - ✓ Seed (earthworm) collection.

Bed preparing - Dry leaves of banana leaves on the bottom of the bed.

Students shifting the Dry leaves & waste material in vermi composting Bed.

'Earth worm in the Pseparing bed'

Verms composting Pseparad in the showing green coloured circle by the Earth worms.

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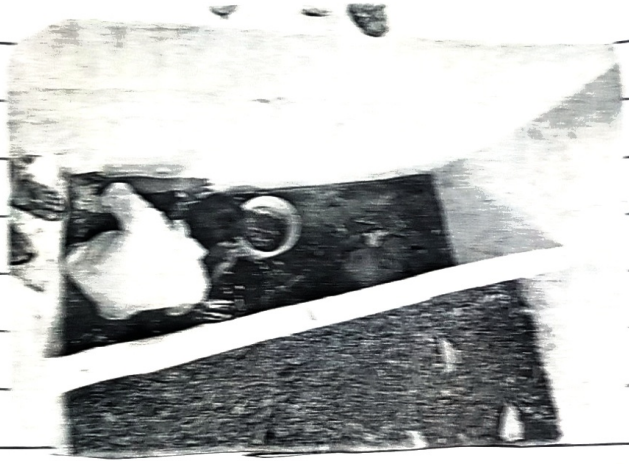
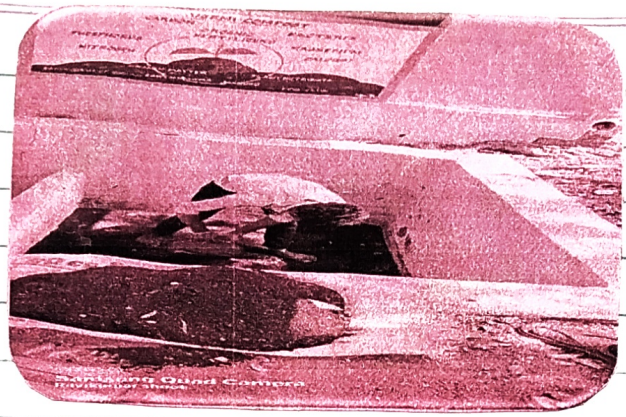
* Vermi - Wash *



excessive water of the vermiculture bed collecting by the Students. — Vermi wash.

Vermi wash using in the college garden plants Regularly by: Students.

* collection of vermi & using *



collection of vermi without Earthworms -

* Vermi compost *

Dr. K. vijaya Kumar Asst. prof of Botany using vermi compost to Botanical garden in the JVR campus.

Students using vermi compost to Rose garden in the JVR Campus.

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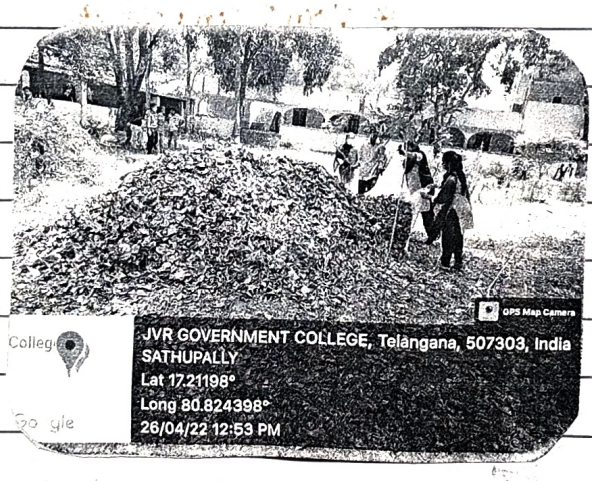

collection of Dry leaves & stored in a place for next bed preparation stage.

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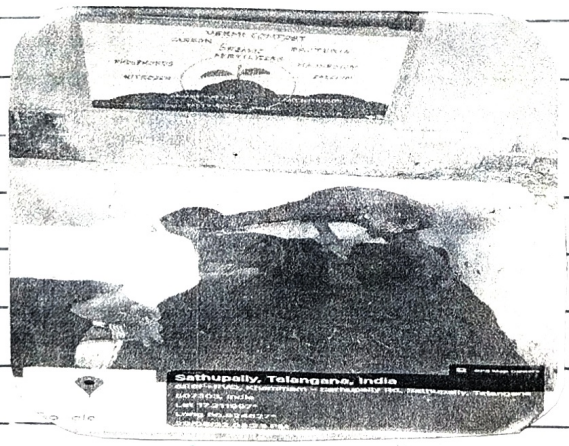
Dry leaves shifting in to vermicomposting pit



Dry leaves and cow dung mixing process in the vermi composting pit.

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Artifical Sparrow Nest Building

Introdution:-

⇒ House Sparrow passer domesticus belongs to passeriformes order and passeridae family.

⇒ They are distributed world wide living in all continents and many of oceanic Islands.

⇒ Some of the Ecologists believe that this bird is a symbiotic specieces with Human, hence recognizing and identified as a bird species depended on human Environments.

objectives:

1). To provide a Suitable location for Parents to lay their eggs and/or raise their offspring.

2). To provide Safe and Protected places for Sparrow

3). To provide Wates during the Summer Season.

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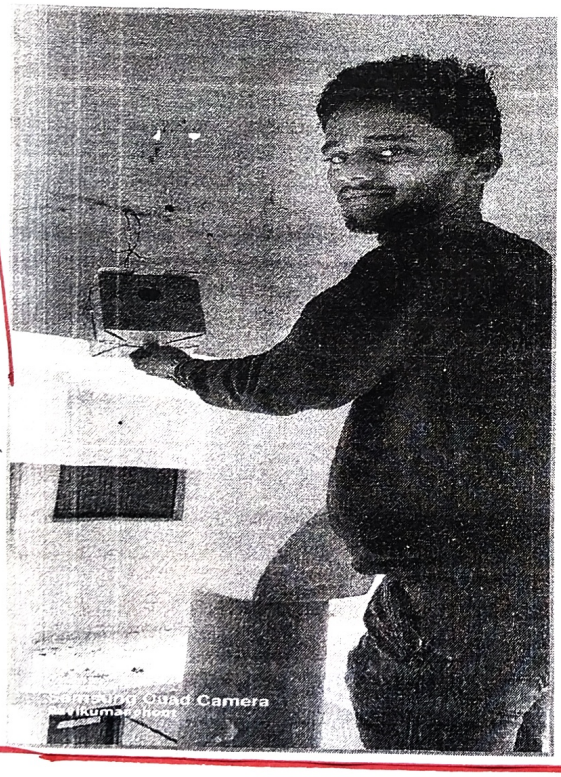

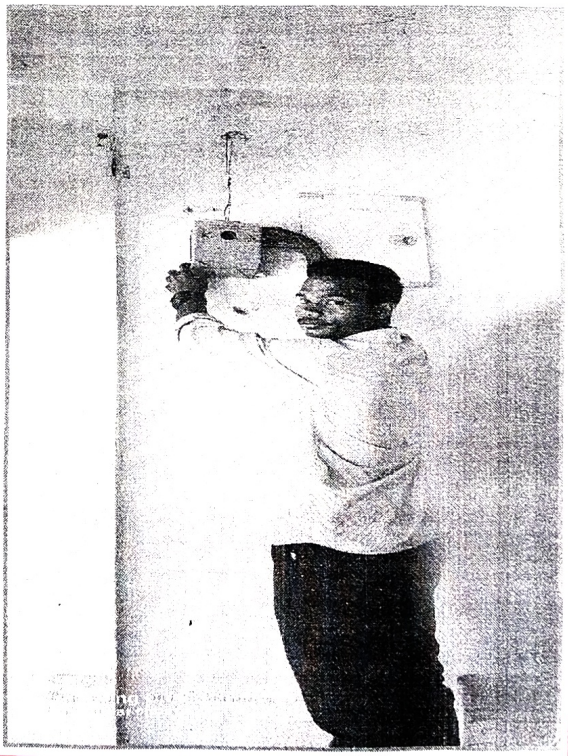

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