

TURENING CAMPUS WASTE IN WEALTH BY VERMICOMPOSTING.

1) Title of the Practice:- Tusing Campus waste in
wealth by vermicomposting

2) objective of the Practices:-

⇒ To convert organic waste to vermicompost.

⇒ To involve students in vermicomposting Preparation.

⇒ To use vermicompost college plantation.

⇒ To motivate students towards waste management
methods.

⇒ To Maintain vermicomposting unit Eco-friendly campus.

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 collected 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 waste, 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 vermicomposting bed preparation with dry leaves and cattle dung.

Phase-IV :- collection of earthworm after vermicompost 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, vermicompost having enriched macronutrients and micro nutrients. So, plants nutrition increases of porosity and 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 from the prepared vermi bed.
- * The vermin worm & vermin bed having very bad odour in the college campus.
- * Regularly monitoring.
- * Rainy season.



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

Eco - Friendly campus :-

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

* Vermicomposting attracted lot of interest in recent years due to increasing environmental concerns and use of sustainable fertilizers.

* 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 %

Copper - 2.2%

Iron - 135 ppm

Manganese - 90 to 118 ppm

Zinc - 40 to 77 ppm

molybdenum - 0.2 ppm

Baron - 0.3 ppm.

Organic Carbon - 14.8 to 26%.

(Source: Indian Agricultural Research institute.)

(~~Source~~ → Agricultural Research institutes of India.)

Vermicompost is the product of the composting process by various species of Earthworms. Beside above composition, vermicompost also contain biologically active substances such as plant growth regulators and microbes. vermicomposting can be done in large 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 & transport



Bhavani • Vermicomposting ^{earthworms} visit - ✓ Seed collection.



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

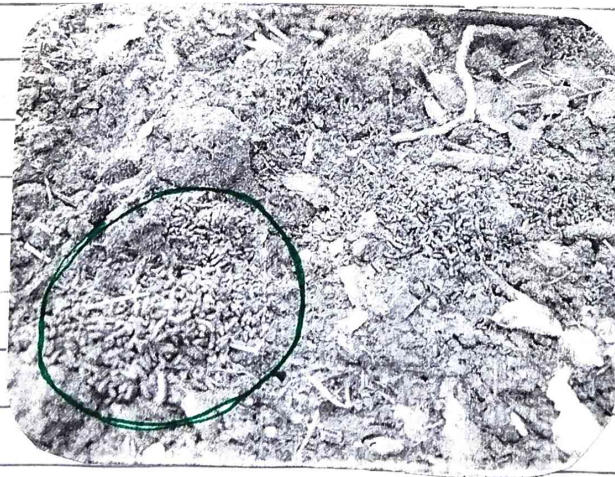


Students shifting the Dry leaves & waste material into vermi composting Bed.



Sathupally, Telangana, India
SH 42, Sathupally, Telangana 507303, India
Lat: 17.210812°
Long: 80.824986°
29/10/21 03:39 PM

'Earth worm in the Peepared bed'



verms composting Peepared in the showing green
coloured circle by the Earth worms.

* vermi - Wash *

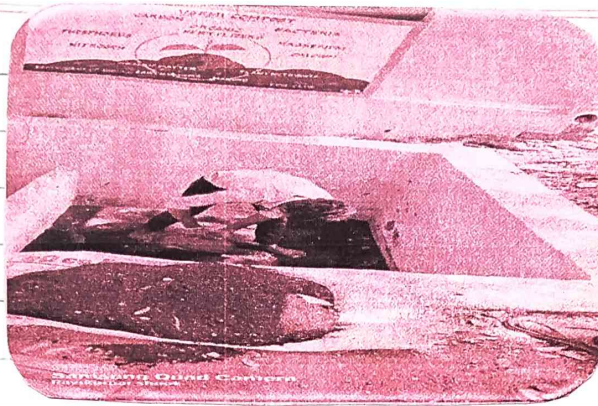


excessive water of the vermiculture bed collecting by the students. - vermi wash.



vermi wash using in the college garden plants. Regularly by students.

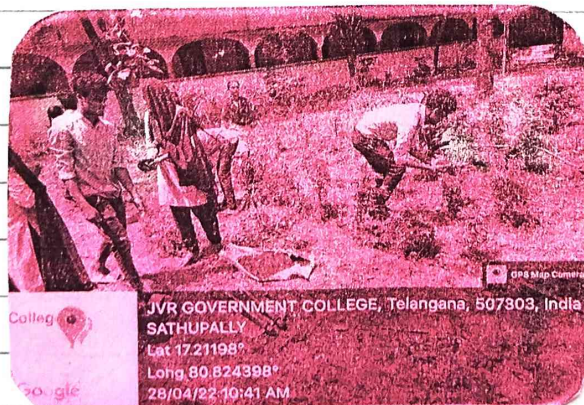
* collection of vermi & using *



collection of vermi without earthworms -
* Vermi compost *



Dr., K. vijaya Kumar Asst. prof of Botany using Vermicompost to Botanical garden in the JVR Campus.



kants.

Students using Vermicompost to Rose garden in the JVR Campus.