

Report on Vermi-Compost Production

09 April 2013

This is my first experience with Vermicompost farming



I received 3kgs of earthworms on Monday the 25th of February 2013 which was placed in three sections of compost and covered with wet paper. We (myself and Jacob Rutz) gave them spinach and beet leaves as well. We hope to harvest our first vermicompost within a month's time. We will be recording what food we give them in order to check if a certain plant product is favored over others.

The Sponsorship for the worms came from Letshego Namibia for 1Kg of Earthworms to start a Vermicompost project at Hope Village. The cost was of N\$ 1089.50.

The Vermicompost Farm has 3 sectors with measurements as follows:

Sector A: Length of 1.15m and width of 95cm

Sector B: Length of 95cm and width of 95cm

Sector C: Length of 95cm and width of 95cm

The 4th sector is:

Sector D: Length of 95cm and width of 95cm.

This is where we keep the leaves and papers that will be added as green manure to the other 3 vermicompost sectors.

The vermicompost farm was covered by strips of wood that were joined together to protect the worms from the harshness of the Sun.

Activities in the Farm

The progress of the vermicompost farm is progressing well, we check on it daily and one can see the change in the pile of leaves in the farm. One can observe the manure and leaf consumption of the worms which is amazing. Little bite marks on the leaves all the time. I also do some water sprinkling on the top of the paper to keep the farm moist and cool.

The worms seem to be eating really a lot. One morning as we came in there we found that there were no green leaves left from those that we put in the previous week and during the setting up. We also found a small grey snake in the farm which is dangerous.

New leaves are added to the vermicompost farm weekly, or as the need arises and the amount of leaves could be something like 6kgs. The worms seem to be eating a lot on a daily basis and my observation is that when there is no food, they try to dig deeper to try and find food. We have realized that we might have a problem with the green material in future as the ones from the tunnel gardens will not be enough. At this stage we can harvest vermicompost already, to begin feeding the plants. Unfortunately this will not be enough for one full tunnel and it seems that the farm we have will only feed one single row in a tunnel with about 65 planting bags.

There seems to be competition for food and sometimes you will find that the worms have retreated to one area, crowding in one place. There are silver bugs in there as well with some other insects that have made their residence in the farm due to the amount of food. The worms seem to be doing a good job in decomposing the cow manure and the green in the farm and this could be one of the reasons their presence is noticed all the time. I am still observing the way the worms seem to be eating every day. I am seeing little bite marks in the leaves and on the paper.

My observation with the paper is that it takes a long time to decompose. Of the previous ones that we put inside there are still some. When there is no more food the worms seem to retreat to a cooler place, which causes them to be over crowded. One morning as I was looking in farm A, I could not find any of them at all. Later on I found them in one single crowd. This might have been caused by the silver bugs. These bugs are in the vermicompost because of the cow manure that was brought in. I then added green manure of about 5kg's. I also removed some of cow manure to reduce the competition for it in the farm. In the future I will recommend using less cow manure to avoid these complications. These insects are attracting lizards and other predators which are feeding on them.

Conclusion

Jacob will still do the final reporting on this project as part of his internship program. He will harvest everything with me to feed some of the plants.

My suggestion is that we go organic on one tunnel and that we will need 3 more farms of the size that we have now. Kindly refer to the pictures we took when setting up the farm. The one kilogram of earthworms that we received was divided into 3 bags where one had about 500gr of earthworms which went to the larger Sector A and two of 250g each which went to Sectors B and C.

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