

Vermicompost- Maintenance and Utilization

AIMS:

- To develop the use of Vermicompost as best practice in college.
- To reduce and recycle the college degradable waste
- To create some research projects

OBJECTIVES:

- To provide students educational experience practically
- To create awareness for the students on campus garden and landscape soil fertility
- To encourage the students think about the importance of ecology in maintaining sustainable environment
- To help the students in developing start-up ideas by exploring partnership with local business
- To provide students an opportunity for participating in research projects related to vermicompost

Establishing, maintaining, and utilizing a vermicomposting system created and managed by students in a college setting can be a rewarding as a best practice in a college environment and also an educational experience.

Began with an educational campaign by informing students and staff about the benefits of vermicomposting and its environmental impact. Suitable location was identified, prepared a pit and filled it by bedding material such as shredded newspaper, garden waste and composting worms. Vermicomposting involves the use of earthworms to break down organic waste into nutrient-rich compost.

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 nutrient profile in vermicompost is generally higher than traditional compost. In fact, vermicompost can enhance soil fertility physically, chemically and biologically. Physically, vermicompost-treated soil has better aeration, porosity, bulk density and water retention. Chemical properties as pH, electrical conductivity and organic matter content are also improved for better crop yield. Although vermicomposts have been shown to improve plant growth significantly, the application of vermicomposts at high concentrations could impede growth due to the high concentrations of soluble salts available in vermicomposts. Therefore, vermicomposts should be applied at moderate concentrations in order to obtain maximum plant yield. Future prospects and economy on the use of organic fertilizers in the agricultural sector are also examined.

A schedule is established for monitoring and maintaining the vermicomposting system. Regularly checking the temperature, moisture levels, overall health of the composting worms and issue as adjusting the carbon-to-nitrogen ratio or troubleshooting any odours is done.

Harvested vermicompost when it reached maturity and used in campus gardens, landscaping projects.

In conclusion by incorporating vermicomposting into college practices, not only does the institution contribute to environmental sustainability, but it also provides valuable educational and research opportunities for students and contributes to the broader community.