Institutional Distinctiveness

Form Waste To Wealth: Vermicomposting

Vermicomposting has recently been recognized as one of the most appropriate methods to stabilize organic waste. In terms of a system for waste management, vermicomposting is sustainable, economically viable, and without detrimental effects to human health or to the environment. It can replace the environmentally hazardous manures. It is one of the easiest methods to recycle various wastes to produce quality compost. In this process earthworms are used. The earthworms consume the wastes and excrete in digested form called worm casts. This casts are known as BlackGold. The earthworms actually convert organic materials into humus - like material known as vermicompost.

In this process good quality compost production in ambient temperature can be done in short time. The earthworms being voracious eaters consume the bio-degradable matter and give out a part of it as excreta or vermicastings. The vermicastings containing nutrients is rich manure for the plans. It also supplies growth enhancing hormones to plants. It improves the soil structure leading to increase the water and nutrient holding capacities of soil.

We have introduced a 12 chambered vermicomposting unit in the campus of our college during 2020-2021 and using *Eisenia fetida* as earthworm of choice. The chambers of the units are kept shallow to avoid heat built-up that can kill earthworms. A moderate temperature is maintained to enable the earthworms to transform the materials into composts at ease.

Organic wastes from both the hostels and common water hyacinth from our college pond is used as raw materials for composting. The students of the hostels are successfully maintained a rooftop vegetable garden and using the vermicompost as organic manure. These final products can be sold to the local farmers at a considerable rate. The students can also learn the art of business by selling the manure to the farmers through the process of vermicomposting.