## Report

of

## Value Added Course on Vermicomposting: An Effective Utilization of Biowastes for Production of Vermicompost

Agriculture is the primary source of livelihood for about 58% of India's population. More than a billion people work there. More than half of the land on the planet is made up of pasture and cropland, which provides food and habitat. Sustainable agriculture practices may protect watersheds, maintain important habitats, and enhance the health of the soil and the water supply. On the other hand, casual approach and actions have serious irreversible effects. Long-term resource management is now more essential than ever. Demand for Agricultural products rises along with the global population. Due to its close relationships to the global economy, human societies, and biodiversity, agriculture represents one of the most important conservation frontiers on the planet. Vermicomposting is a method of preparing enriched compost with the use of earthworms. It is one of the easiest methods to recycle agricultural wastes and to produce quality compost. Vermicompost is stable, fine granular organic manure, which enriches soil quality by improving its physicochemical and biological properties. It is highly useful in raising seedlings and for crop production. Vermicompost is becoming popular as a major component of organic farming system.

Integral Institute of Agricultural Technology and Sciences (IIAST) had organize a five-week virtual value added course on "Vermicomposting: An Effective Utilization of Biowastes for Production of Vermicompost" from 27th June 2022 to 30<sup>th</sup> July, 2022. This Value Added Course (VAC) was designed to learn, explore and apply sustainable techniques in the present time to develop a sustainable method of crop cultivation in the field. This course was specially designed for all the UG and PG course students of any department throughout the university. A total of 112 students were selected to complete all the registration formalities. The course was designed to cover the Sustainable Development Goals (SDGs) of the United Nations-2030 in the field of Zero Hunger and Responsible Consumption and Production.

This was a virtual mode course conducted for five days a week wherein lectures were delivered from Monday to Friday between 5:00-6:00 PM while a session for Quiz was conducted on Saturday(s) between 01:00 PM - 02:30 PM, respectively.

The Value-Added Course was conducted under the guidance of Dr. Saba Siddiqui, Head, Department of Agriculture, Integral University and was coordinated and facilitated by the following faculty members.

Mr. Nadeem Khan – Course Coordinator, Department of Agriculture, Integral University, Lucknow.

Dr. Mohammad Hasanain - Course Instructor, Department of Agriculture, Integral University, Lucknow.

Dr. Shipra Yadav - Course Instructor, Department of Agriculture, Integral University, Lucknow.

Dr. Pradeep Rajput - Course Instructor, Department of Agriculture, Integral University, Lucknow.

The Course modules were addressed by the following resource persons:

S. No.	Date		Course Instructor	Module
	From	To	1	
1.	27 <sup>th</sup> June 2022	2 <sup>nd</sup> July 2022	Dr. Mohammad Hasanain	Introduction of vermicomposting, history of Vermicompost production, present status in India, availability of earth worms for different climate Importance and need of Vermicompost, Biology and classification of earthworms, Important earthworms species used in India for vermicomposting.
2.	4 <sup>th</sup> July 2022	9 <sup>th</sup> July 2022	Mr. Nadeem Khan	Selection of site and physical requirements for vermicompost unit Methods and materials required for vermicomposting
3.	11 <sup>th</sup> July 2022	16 <sup>th</sup> July 2022	Dr. Shipra Yadav	Vermicompost preparation and characteristics Criteria for harvesting of Vermicompost Harvesting method of mature Vermicompost and earthworms
4.	18 <sup>th</sup> July 2022	23 <sup>rd</sup> July 2022	Dr. Pradeep Rajput	Post harvest management of vermicompost Care and precautions during vermicomposting Nutrient content in Vermicompost
5.	25 <sup>th</sup> July 2022	30 <sup>th</sup> July 2022	Dr. Shipra Yadav and Dr. Pradeep Rajput	Basic entrepreneurial activities for small enterprises Uses of Vermicompost and its cost analysis

All the participants who successfully completed the course were awarded e-certificates on the basis of their quiz test, feedback for every unit, attendance, general feedback, and moreover 50% qualifying criteria for the course.

## Key Highlights of the VAC:

- To attain basic knowledge and basic requirements of vermi production
- To acquire efficient and effective management of organic waste
- To make the student aware about different ways to manage organic waste
- An initiative towards sustainable development goal : Zero Hunger (SDG Goal 2) and Responsible Consumption and Production (SDG Goal 12) .

## Glimpse of VAC:

