

## HOLY CROSS COLLEGE, AGARTALA

Accredited by NAAC with 'A+' Grade (Cycle: 02)

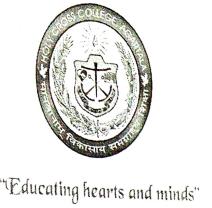
# Department of Zoology



Collaborative Activity Training Program on Vermicomposting and Vermi-Culture for Students and Non-teaching Staff

Venue: Maya Nursery Khowai

Date: 18th May 2023



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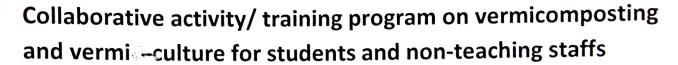
Tripura University Reg. Code: 17

Jubatara, P.O. Lembucherra, Tripura West Pin-799210

Phone: 0381-2915930, +91 9402315672

email-principalhccagt@gmail.com

Web: www.holycrosscollege.in



18/05/2023

On 18<sup>th</sup> of May the students of the 4<sup>th</sup> semester Zoology (Major) went to Maya Nursery, Khowai for the field visit and gaining knowledge on practical application of vermitechnology. College bus started from the campus of Holy Cross College, Agartala around 10 am in the morning. The student group was guided by Dr. Subhalaxmi Bhattacharjee and Dr. Rumki Nath Sen.

During the journey the students observed several hilly areas which were being prepared for jhum cultivation. The bus also stopped briefly at Setacchara Tourist Park where they observed wild banana plantations which are endemic to Tripura. The bus arrived at the destination at 11:45 am.

The guide and the owner of the nursery Mr. Bijoy Gope took the students on a tour around his farm and educated them regarding the use of vermicompost for better yields.

The whole nursery was free of chemical fertilizers or pesticides. It was like a place of inhaling fresh air oxygen without having any pollutants or chemicals in it.



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At first he guided the students to a green house where new plantations were being grown, like strawberries (<u>Fragaría ananassa</u>), mint(<u>Mentha sp</u>), coriander(<u>Coríandrum satívum</u>), wax gourd(<u>Beníncasa híspída</u>) etc. After seeing that site they headed towards exploring the other sites and plantations. There they saw dragon fruit (<u>Hylocereus sp</u>)plantation by grafting method, 7-8 types of mango(<u>Mangífera índíca</u>) plantation, variegated guava(<u>Psídíum guajava</u>) and Indian noni (<u>Morínda cítrífolía</u>), jackfruit (<u>Artocarpus heterophyllus</u>), apple mango plantation(which is most rarely found in Tripura), banana(<u>Musa sp</u>)-(C-9) plantation. Mr. Gope explained that <u>each and every plant is being grown by using vermicompost by using the method of "vermicomposting"</u>, not even a single pinch of fertilizer were being used for these plantations over there.

After seeing and observing all the plantations we went to the key place of that nursery – The Vermicomposting Site.

The vermicomposting site consists of three pits and the composting was already done. Sir explained us the composting process and how the earthworms ( $\underbrace{Perionyx}_{excavatus}$ ) most suitable for the vermicomposting works.



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Mr. Gope explained that for vermicomposting the base of the pit is first prepared by filling it with sand and above the sand a mixture of garden waste, kitchen waste, organic waste, leaves, twigs is filled up. This is remained undisturbed for one month and allowed to decompose. During that one month water is regularly sprinkled in the pit to maintain the moisture of the prepared set up.

Then after one month the earthworms are released into the pit and they start consuming the organic waste. As result within a month or two the organic waste is transformed into vermicompost. Other factors like temperature, humidity, climatic conditions and weather also play an important role.

All the pits are shaded with a cemented ceiling to protect the earthworms from heavy rains.

There was a small channel attached to the pit. Mr. Gope told us that during the process when the pit is filled with excess amount of water that excess amount of water comes out through out that channel and this water is more beneficial and advantageous from vermicompost itself which is used in the plantations. And also the cemented walls made beside pit is a protection for the earthworms from the predators. Example – <u>Bandicoota</u> sp.



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The excursion ended at 1:15 pm and the bus left Maya Nursery for the college.

Overall this field trip was a great help for the students of 4<sup>th</sup> semester as well as a few students of 6<sup>th</sup> semester Zoology (Major). The total number of participants for the whole field trip was 30.









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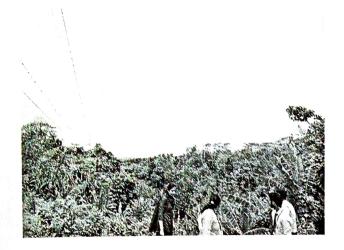
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Dr. Rumki Nath Sen. HOD, Dept. of Zoology Holy Cross College Trip to Vernicenposting Unit

1) Sayartika Bhattacharijee - 6th Sen 2) Subrapradip Das - 4th sem (2) Sudip kuman Paul - 4th sen 4) Shatabdi Deb - 4th sem (n) Anantika Swikar — 4th sem 6) Manas Debbarna - 4th sen 7) Swaj rabi das \_ 4th sem Rohit Reang - 4th sem ) Swalps Dary - 4th San Debangara Bhow mik-4th Sem Rinta najunder - 4 th sem Purpa Qas - 4th Sem Sebas unita Macarer - 4th sem supration Day - 4 th sem Suchis mita Sala - y M Sem. Nilabhra Dandhan Pantui Desberra Tamson Mose Tasmine Charlina Shwetob Choudhury - 4th sem.

Shwetob Choudhury - 4th Sem Baishali Bhattachargee - 4th sem Swasti Majuandar - 4th Sem Eshika Doy - 4th som Rajet Debnath - 4th Som Bhehendu Bhownik - 4th Sem Sourar Shil Sharma - 4th sem

















This is to certify that

COLF

has participated in

Collaborative activity/ Training Program on Vermicomposting and Vemiculture for Students, Non-teaching Staff and Teaching staff

organised by

Department of Zoology

Holy Cross College, Agartala

Accredited by NAAC with 'A+' Grade (Cycle 2)

on 18th May, 2023

Dr. Rumki Nath Sen

Runki Walk Son

HoD, Dept. of Zoology

Dr. Fr. Benny K John, CSC

**Principal** 

