Department of Botany



Government Degree College Uttersoo

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<u>Department of Botany visited Agriculture Department, Muttan Anantnag for hands on training for students on cultivation of Mushrooms</u>



As a part of curriculum, the students who have opted Skill Enhancement Course "Mushroom Cultivation" visited the Department of Agriculture, Mattan on 11th December, 2024. The purpose of the visit was the hands on training for students on cultivation of Button Mushrooms (*Agaricus bisporus*).

After getting Permission from the Worthy Chair "Professor Mushtaq Ahmad Sohil" the students headed by Dr. Showkat Hussain Ganie (Head, Department of Botany) and Dr. Kowsar Jan left the college at 10:30 a.m. and reached the Agriculture Centre at 11:00 a.m.

Our team was cordially welcomed by entire staff of the Agriculture Unit. Dr. Showkat Hussain Ganie and Dr. Kowsar Jan introduced the students to the Department and also revealed purpose of the visit.

After the introduction **Mr. Malik Mohd Iqbal**, Mushroom Cultivation Development Officer accompanied our team to mushroom growing house. The hands on training started at 11:20 a.m. In the training the different steps for the cultivation of mushrooms were performed by the students under the supervision of Mr. Malik Mohd Iqbal.



In the first step students prepared the compost by mixing wheat and paddy straw and organic (poultry manure) and inorganic manures (Urea, Potassium and gypsum) in a fixed proportion. The paddy straw is the source of Carbon and Nitrogen

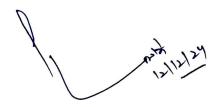
This was followed spawning in which seeds of mushrooms adsorbed on wheat grains were introduced into the heap of compost via layer spawning methodology (50-60 grams of spawn in 10 kg of compost).

Finally casing was done. Casing step is required for fruiting. In this step garden soil, coco peat, sand, semi burnt paddy husk was added to compost containing spawn.

The necessary conditions required for the efficient multiplication of mushrooms were also highlighted by Mr. Malik Mohd Iqbal. These include:

- 1. Mother spores are to be adhered on wheat grains for obtaining nutrition and kept at 4°C till spawning.
- The dark room used for cultivation of mushrooms must be sterilized by disinfectants like formalin and other insecticides to protect it from flies that lay eggs and destroys the crop.
- After spawning, the ventilation of dark rooms should be near to zero. CO₂ concentration should be 1% and humidity should be maintained at 75-90% for first 15 days. The temperature should be 20-25°C.
- 4. Casing material should also be sterilized. The conditions required during casing are same like that of spawning except CO₂ concentration. At this juncture, the circulation of fresh air for two hours on daily basis is required for pin head formation.
- 5. During the formation of pin heads, temperature should be maintained at 16°C.

The training culminated with Vote of thanks delivered by Dr. Showkat Hussain Ganie in which he first thanked the worthy Principal for permitting the Department of Botany to visit the Agriculture Centre. Thereafter, he accorded a heartfelt gratitude to Mushroom Cultivation Development Officer, Mr. Malik Mohd Iqbal and his entire team for giving hands on training to our students on cultivation of mushrooms. The programme was indeed a source of aspiration for the students to become self-employable by creating their own mushroom cultivation units. The Head, Department also thanked the Agriculture Department for arranging high tea for the students and the accompanying staff.

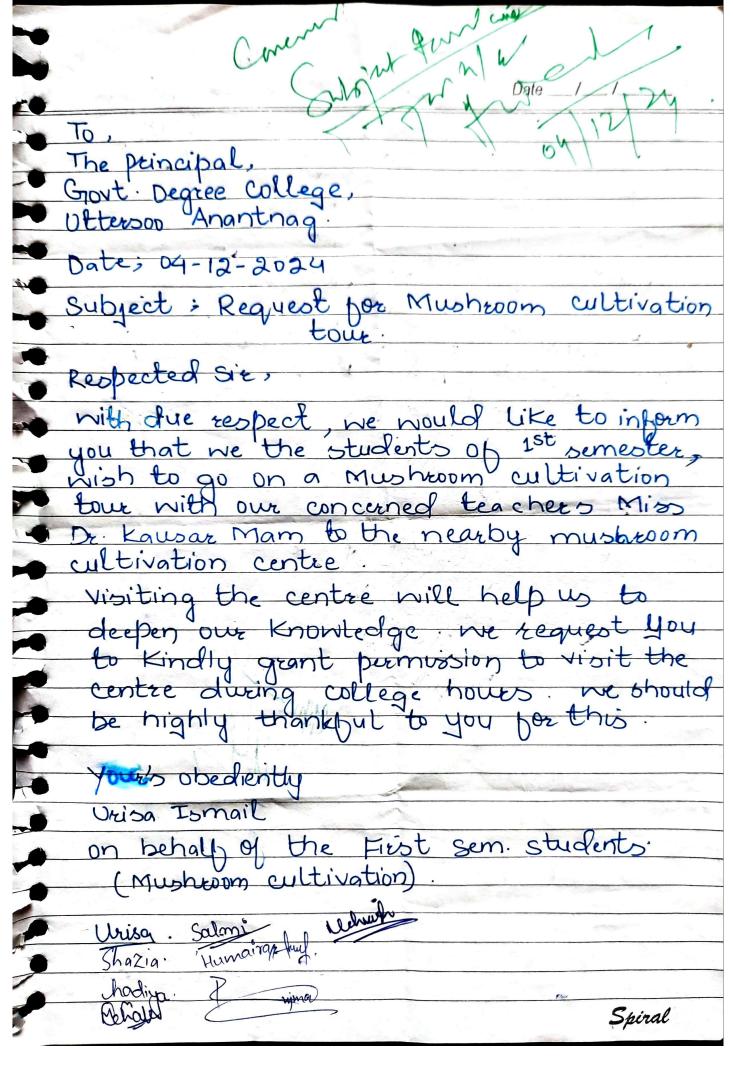




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Dr. Showkat H. Ganie Head, Depth of Botany



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