

**Department of Microbiology**

**Report of the Event**

**Mushroom Cultivation Workshop 2016**

**22.07.2016**

**Organizer: Dr. M. Kulandhaivel**

**Participants: 41 students**

The mushroom cultivation workshop was conducted on 22.07.2016 by department of Microbiology, to inculcate the skill training of the students to become a Bio entrepreneur. Around 25 students participated in the workshop and benefitted.

"Fungi are the beginning and the end to this whole system."

Single-cell protein (SCP) refers to the microbial cells or total protein extracted from pure microbial cell culture (monoculture) which can be used as protein supplement for humans or animals. The word SCP is considered to be appropriate, since most of the microorganisms grow as single or filamentous individuals. This is in contrast to complete multicellular plants and animals.

There are 3 main parts to cultivating mushrooms:

- **Substrate:** the fungi's food/any medium they are grown on
- **Spawn:** material that mycelium is growing on that will be used to inoculate the substrate
- **Environmental Factors:** humidity (80-100%), food, temperature (55-75 degrees), sun (mushrooms need sun, but not direct sun). It is estimated that about 25% of the world's population currently suffers from hunger and malnutrition. Most of these people live in developing countries. Therefore, SCP deserves a serious consideration for its use as food or feed supplement. In addition to its utility as a nutritional supplement, SCP can also be used for the isolation of several compounds e.g. carbohydrates, fats, vitamins, minerals.



Performing Mushroom Bag Preparation



Performing Mushroom Bed Preparation