

Controlled-Environment Greenhouse



Agriculture, Fisheries
and Conservation Department

Growing Organic Lingzhi

Newsletter-August 2005

From the Editor

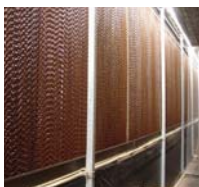
Apart from fruits, vegetables and flowers, local organic farmers also cultivate *Lingzhi* in controlled-environment greenhouses. This edition covers our visit to a local organic *Lingzhi* farm to find out how it uses CE greenhouses to produce *Lingzhi*.

Greenhouse Environment

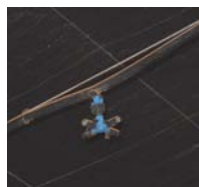
Lingzhi likes a dark and humid environment with good ventilation. CE greenhouses, equipped with devices such as shading nets, water walls, exhaust fans and mist sprayers to optimize the light intensity, temperature, relative humidity and ventilation, are adopted as mycelia growing rooms and incubation rooms for *Lingzhi*.



CE incubation room



Water wall



Mist sprayer



Exhaust fan

Cultivation Management

- Fill culture bags with sawdust and organic nutrients to serve as the substrate for *Lingzhi* growing.
- Put *Lingzhi* spawn in sterilized culture bags, and then leave them in the mycelia growing room for about 25 days with the optimum temperature set between 24 ~ 26°C and relative humidity below 60%. The room should be kept completely dark.
- Transfer the mycelia-filled culture bags to the racks in the incubation room. Open the bags to let the fungi grow. The optimum environment is 27 ~ 30°C with a relative humidity between 75 ~ 80%. Weak light should be allowed in the room.



Mycelia-filled
culture bags



Opened
culture bags



Initial stage



Intermediate stage



Mature stage

Harvesting

Harvest when the pileus has turned brown with spores and shows a white rim. After harvest, the pilei and spores can be processed into a variety of *Lingzhi* products. It takes about three months to harvest after opening the fungus culture bag.



For more information and visits to
greenhouses, please contact:
Crops Development Section,
AFCD (Tel: 2668 0295)
AFCD Home Page
[http:// www.afcd.gov.hk](http://www.afcd.gov.hk)