



### From the Editor

Consumers love local white and brown button mushrooms. At present, two companies have adopted technologies from the Netherlands and have been importing mycelium-filled compost bags from there, as well as using controlled-environment (CE) facilities to control the temperature, humidity, carbon dioxide concentration and illumination of cultivation rooms for industrialised production. One of the two companies has been awarded local organic certification for its products. This issue is a brief report on their production processes.



### I. Mushroom farm in Ngau Tam Mei

Originally a livestock farm, this mushroom farm at the foot of the hill has been converted to a covered factory-like workshop. CE cultivation rooms are constructed under the cover and equipped with water cooling system and air filters for adjustment of temperature and maintenance of hygiene. The mushrooms grow in an enclosed environment. The total area of cultivation racks, as told by the operator, is more than 3,000 ft<sup>2</sup>. It takes around 45 days to produce as much as 5 to 6 tonnes of mushrooms in every production cycle.



Water cooling and air filtering facilities



Rack facilities inside the CE cultivation room



Multi-layered cultivation and semi-automatic humidifier



Initial growth stage of fruiting bodies



Mature fruiting bodies ready for harvest



### II. Mushroom farm in Yuen Long

This mushroom farm looks like the aforementioned one, and one may view it as a factory or a warehouse from a distance, but larger in scale. There are 10 mushroom cultivation rooms in the farm. The environment of the rooms can be separately adjusted and controlled to meet the needs of different species or growth stages of mushrooms. Furthermore, very strict hygiene requirements have been imposed in the farm that everyone has to be disinfected and put on shoe covers before entering the production zone. As told by the operator, though only some of the cultivation rooms are currently in production, the average daily output has already reached 800 kg.



Air cooling and filtering facilities



Air shower room



Display panels outside the mushroom cultivation room showing different indices and the operation of facilities



Layered planting rack facilities



Growth stage of pin-heads



Mature fruiting bodies



Fresh products