



# Automatic Control Systems for Cordyceps Militararis Mushroom Farm



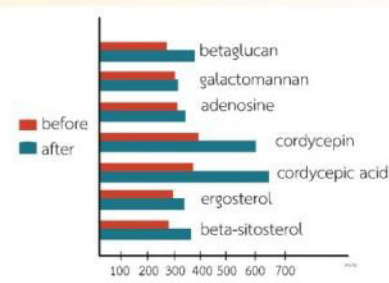
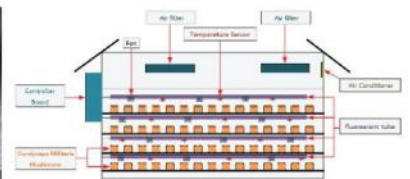
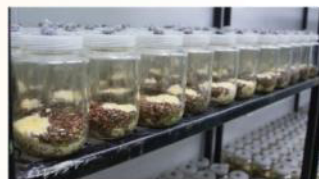
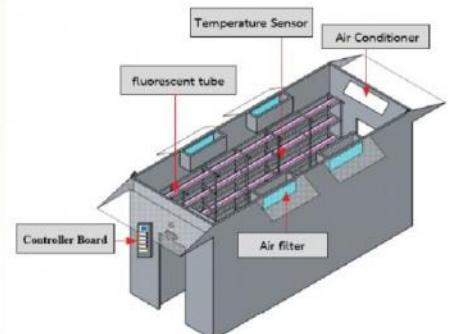
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## Product Feature

The cordyceps militararis mushroom is very popular and high values goods in the market for medicine in south-east Asia. According to the weather and environment, it is challenged to do the perfect farming of cordyceps militararis mushroom in Thailand. This innovation presents the automatic control systems for cordyceps militararis mushroom farm. It is designed to control the environment and important factors such as temperature, humidity, disinfection system and carbon vacuum system. All those factors are also recorded using online data logger. The experiment results show that the cordyceps militararis mushroom can perfectly provide cordycepin or cordycepic acid by this system, which the cordycepin or cordycepic acid is very important for biosynthetic pathway. It has an especially characteristic to pull out oxygen for using in human body completely. In the case of elders or patients, who stay in the weak condition, the cordycepin or cordycepic acid can help them to absorb oxygen better. Therefore the automatic control systems for cordyceps militararis mushroom farm support the farmer to produce the best cordyceps militararis mushroom.



## Application

The automatic control systems for cordyceps militararis mushroom farm can be applied and shown the distinguish as following:

- **High Quality:** This system can be used to improve the quality of cordyceps militararis mushroom. It makes a high values for the produces by increasing Cordycepin acid.
- **Good Process:** This systems can improve the process to produce the cordyceps militararis mushroom. It can reduce the number the fungal infection mushroom.
- **Social engagement:** The system can be transferred the technologies to community and make the community to be strong and happiness. This is one of the sufficient economies to develop the community to be smart farmers.

## Innovation

- The air conditioners are employed to provide the temperature between 17-19 °C. using temperature sensor to measure and also control the circulated air flow using fan.
- Also the air filters are used to operate with disinfection system and carbon vacuum system to protect the disinfection system and carbon vacuum system.
- The light automatic control systems is designed to control a suitable and adjustable light for cordyceps militararis mushroom farm. It will program to suit for each ages of cordyceps militararis mushroom.
- The system can reduce the waste of the fail growing cordyceps militararis mushroom which occurs from the fungal infection. Moreover, the IOT is also applied to record and remote from anywhere to control the system.
- The system will also alarm when it operated in abnormal condition. The lighting alarm will show at the farm, the video will send through the CCTV and also the SMS to mobile phone.

## IP status

- On process



Research Gap Fund

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