Design of Recursively Learning Control System for Fruiting Mycelium of Mushroom

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The recursively learning control algorithm has been developed in controlling a simulated confined space that embodies the similar weather conditions of the habitat of the mushroom T. matsutake the mushroom never artificially cultured before.
The electronic circuit board that measures and records the field habitat meteorological data has also been designed here.
A simple program in the chip controls the temperature of the space in a digital manner. A proportional integral and differential control modified with self-adjusting prior errors reflects the previous error, the error before the previous and present errors simultaneously and finally the controller sets a new proportional constant.
Using the algorithm the controller installed in the weather simulation room could resemble successfully the records of a field meteorological data at the habitat of the mushroom.