

fermented fungal bed. As illustrated in FIG. 1 and FIG. 2, the storage container 11 in this embodiment includes a tank main body 11a into which the substrate is to be put, and an upper lid 11b to be put on the tank main body 11a. The tank main body 11a in this embodiment is a container having both end sides in the longitudinal direction closed by side walls and having a U-shaped cross-section with an upper side thereof opened, and is configured such that an opening portion on the upper side can be opened and closed by the upper lid 11b. The storage container 11 in this embodiment is made of stainless steel having a high thermal conductivity.

[0028] The tank main body 11a is provided with a fungal bed outlet 11c (FIG. 2) for delivering the finished fungal bed to the outside. The fungal bed outlet 11c can be opened and closed by an opening-and-closing door. The upper lid 11b is provided with a material inlet 11d for putting the substrate (material) into the tank main body 11a, a water supply port 11e for introducing water (including hot water; the same applies hereinafter) supplied from water adding means (not shown) into the tank main body 11a, an air supply port 11f for introducing cool air supplied from the air blowing means 14 into the tank main body 11a, an air discharge port 11g for discharging cool air that has passed through the tank main body 11a ~~toward~~ to outside of the tank main body 11a, and inoculum inlets 11h for putting inocula thereinto.

[0029] The heating means 12 is means for heating the tank main body 11a and the substrate and the like in the tank main body 11a. In this embodiment, a planar heater is used as the heating means 12. The planar heater is provided along an outer surface of the tank main body 11a. The planar heater can be provided on the ~~front~~ entire surface of the tank main body 11a, but can also be provided only partially. As the heating means 12, means other than a planar heater can be used. Although not shown, a heat-insulating sheet can be installed on an outer periphery of the fungal bed production device 10 during a low-temperature period, for example, during a severe wintertime.

[0030] The stirring means 13 is means for stirring the substrate and the like in the storage container 11. As an example, the stirring means 13 illustrated in FIG. 1 and FIG. 2 includes a rotary shaft 13a arranged along a longitudinal direction of the storage container 11, a plurality of stirring blades 13b held by the rotary shaft 13a, a drive motor 13M for driving the rotary shaft 13a, and a transmission mechanism 13c for transmitting power of the drive motor 13M to the rotary shaft 13a. When the drive motor 13M is powered on, the rotary shaft 13a and the stirring blades 13b are rotated, and the substrate and the like in the tank main body 11a are stirred by a rotational force of the rotary shaft 13a and the stirring blades 13b.

[0031] The air blowing means 14 (FIG. 2) is means for supplying cooling air used for cooling the substrate and the

the upper lid 11b. An installation location of the temperature sensor 15 may be other than this. In place of the temperature sensor 15, a water vapor sensor for detecting a flow rate of water vapor inside the storage container 11 may be provided.

[0034] Information detected by the temperature sensor 15 can be used to determine whether or not the heating (heat conduction) is appropriately performed by the heating means 12. For example, when a temperature detected by the temperature sensor 15 is lower than a target temperature (for example, 100°C), it is determined that the heat conduction is not appropriately performed by the heating means 12. In this case, the heating means 12 may be controlled so as to increase output.

[0035] Meanwhile, when the temperature detected by the temperature sensor 15 is ~~lower~~ higher than the target temperature (for example, 100°C), it is determined that the heat conduction is appropriately performed by the heating means 12 and water turned to vapor has spread evenly in the substrate unevenly distributed in a bottom portion of the tank main body 11a.

[0036] The controller 16 is means for controlling different kinds of devices that form the fungal bed production device 10. The controller 16 in this embodiment is provided in a front portion of the fungal bed production device 10 on a clean area 21 side. With the controller 16, it is possible to set operating conditions (such as time and temperature).

[0037] Although illustration is omitted, the fungal bed