

Growing Reishimushrooms (Ganoderma) on horticulture

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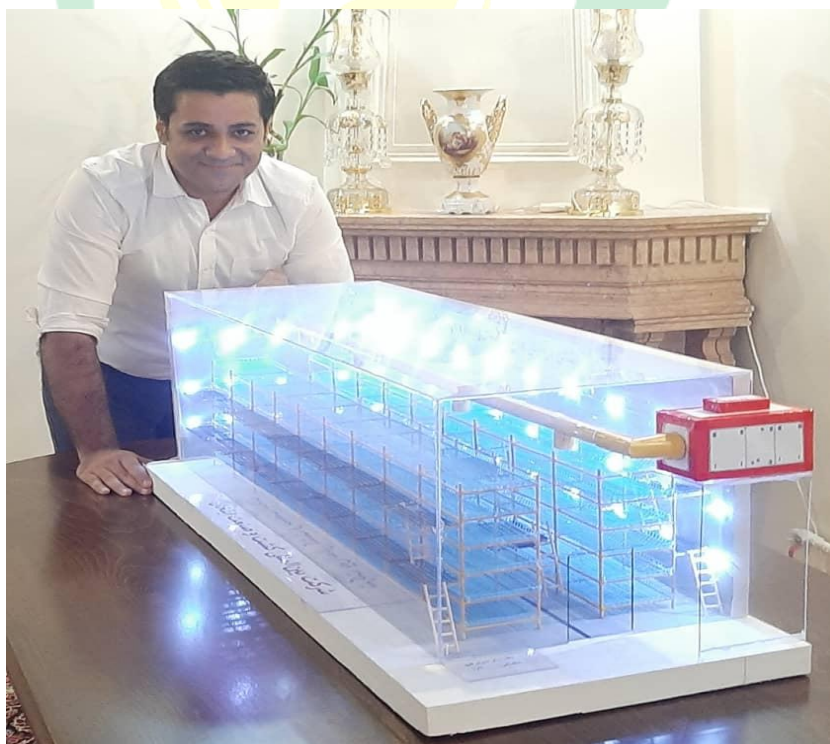
Introduction

A Kind of medicinal mushroom that grows wild in warfare causes that if it is mixed or the chemicals present in the body of this medicinal mushroom, it is less than the type of jump or if it is not more controlled and possibly be toxic.

It is normally cultivated and is a suitable option for the use of medicinal mushrooms.

How we can start to construct of Ganoderma farm?

To get started, you need a 60-meter hall that can hold about 10 tons of compost of Ganoderma.



Components of Compost of Ganoderma

P 85 % of sawdust or chopped wheat straw

P 13 % Of wheat bran or soybean meal

P 2 % gypsum

Ganoderma is grown on sawdust from broadleaf trees such as mango, spruce and coconut. To prepare the mushroom medium, the sawdust obtained from the milling machines is modified with 20% wheat bran and moistened to moisture with 65%.

For this combination, calcium sulphate and calcium carbonate are added to reach the PH of 6.5. Then, we should transport the culture medium to plastic and cultivate this substrate in bags. They pack it in a bag made of polypropylene and put linen in its mouth and with a ring made of plastic.



Growth period

The process takes around four months. The first month is the vegetative phase and the next three months is the reproductive phase. From each ton of compost, you can harvest 25 kilograms of dry product, which now costs about forty dollars per kilogram. According to the experiences of breeders in Iran, the yield of Ganoderma yellow variety is on average 25 kg of dry Ganoderma per ton of compost, while for red variety, this amount is about 15 kg.

The yellow variety is a modified Ganoderma of American research institutes that has been selected for commercial purposes so that it has both faster growth and higher yield than the red variety. In the cultivation of Ganoderma, the composition and amount of active ingredients as well as production efficiency are important. In the red variety, due to lower efficiency, the number of active ingredients may be slightly higher than the yellow variety, but the yield or efficiency of the yellow variety is 3 times the yield of the red variety.





To get the best product

The room temperature in the first month should be 30 degrees Celsius and the humidity 80% and in the second quarter, the temperature should be 28 degrees centigrade and the humidity should be 90% and carbon dioxide play a very important role, which should be controlled around 600 ppm through the outlet valve (window). And light should be controlled over 1500 lux.

Equipment for 60 square meters

Compost of Ganoderma

Air handling unit

Boiler

Chiller

Plastic duct

Shelves

Co2 meters

Lux meters

Thermometer

Co2 and temperature sensors

Carbon dioxide and light play an important role. During this period, we have to open the 50 by 50 cm windows that we installed at the beginning and end of the room.

The upper window at the end of the hall is designed to allow light to enter a thousand light lux for more than 8 hours, and the window that is located at the bottom is designed to reduce carbon dioxide to 600 ppm and oxygen, so inside the moon-hall should have two windows. One at the top in the dimensions of 50 cm by 50 cm for the entry of light and the lower window in the dimensions of 50 cm by 50 cm for the adjustment of carbon dioxide. Because carbon dioxide is heavy and is always on the floor, the window should be at the bottom and between the two rows of shelves. It is better to take the windows of light entry and adjustment of carbon dioxide with a net and filtration to prevent insects from entering the hall.



After harvesting, we should dry them at 45 ° C for 2 hours. Unlike button mushrooms, Ganoderma mushroom is not eaten wet (raw) and must be dried and then consumed. That is, it must be stored or sold dry.

One of the positive points of Ganoderma mushroom cultivation is its high durability, which, unlike button mushrooms, which should be sold immediately, can give growers the opportunity to sell their Ganoderma mushrooms easily.

Benefits of using Ganoderma

Most importantly, it boosts the immune system, regulates blood sugar and fat, prevents Stroke and improves your memory.

Resource

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