

FAQs on Paddy straw mushroom (*Volvariella volvacea*) cultivation

Sl. No.	Question	Answer
1.	What is paddy straw mushroom?	Paddy straw or straw mushroom is scientifically known as <i>Volvariella</i> and the commonly cultivated species is <i>V. volvacea</i> . Other important cultivated species are <i>V. diplasia</i> and <i>V. esculenta</i> .
2.	What is the nutritional value of this mushroom in comparison to other popularly cultivated mushrooms?	Nutritionally this mushroom contains highest level of protein (3.90% on fresh wt basis), good amount of potassium, iron, calcium, vitamins of B complex.
3.	What are the climatic conditions required for its cultivation?	Paddy straw mushroom is a warm temperature loving mushroom, hence can be cultivated in the temperature range of 28 to 38°C and relative humidity (RH) of 57-60%. Ideal temperature for spawn run is 30-35°C, while 28-32°C for fruiting. RH of 80-85% is ideal for both spawn run and fructification.
4.	What are common substrates used for cultivation of paddy straw mushroom?	Paddy straw is the most common substrate for this mushroom hence it is known as paddy straw mushroom. However, it can also be cultivated on cotton waste, cotton ginning mill waste, cotton spinning mill waste, sugarcane bagasse, banana pseudostem etc.
5.	What are different methods of paddy straw mushroom cultivation?	Paddy straw mushroom can be cultivated both outdoor as well as indoor in side thatched huts or pucca houses. The common method for its cultivation is by using chemically treated/steam treated /steam pasteurized paddy straw bundles of 45 cm × 15 cm (L × B). Mushroom beds can be prepared by opening 3 bundles in one direction, followed by opening of other 3 bundles in just opposite direction and like wise. The ideal bed size is 1.5 ft ³ . The other method is the indoor method where in the substrate (paddy straw or cotton waste) is composted 4 days outdoor followed by 4 pasteurization/conditioning inside the cropping room itself.
6.	What are the specific advantages of paddy straw mushroom?	First of all it is a high temperature living mushroom; mean can be cultivated major parts of the country. Secondly, it is considered as most tasty mushroom among the edible mushrooms. Thirdly it has the shortest cropping cycle and one crop cycle is completed with 20-25 days. Lastly its cultivation technology is very simple and can be cultivated both outdoor as well as indoor.
7.	What are the regions in the country where it is popularly cultivated?	Orissa is the leading state, where it is cultivated mainly out door under the shadow of coconut, chesew, mango, banana and teak trees. Besides Orissa, this mushroom is also popular in states of West Bengal, Chhattisgarh, Jharkhand, Bihar, Andhra Pradesh, Tamil Nadu etc.

8.	What are different diseases and insect pests of paddy straw mushroom?	This mushroom being very fast in growing usually does not invite many diseases if handled properly. However, <i>Coprinus</i> sp. and <i>Trichoderma</i> sp. are the common competitor moulds, which appear because of inefficient substrate pasteurization treatment or excessive use of nitrogen sources or watering. Among the insect-pests phorids and mites are the common insect pests of this mushroom. Nematodes infestation also causes crop losses in certain cases.
9.	What are the marketing prospective of paddy straw mushroom?	Marketing is not the problem in the region where it is popular and is being sold mainly as fresh. However, world trade is being done in canned form. Marketing in new area certainly needs great efforts.
10.	Is spawn of paddy straw mushroom is easily available?	The spawn of this mushroom can be booked by placed advance order and availability of high yielding strains is not is problem.
11.	What is the economics of this mushroom?	One bed of paddy straw mushroom prepared from paddy straw costs around Rs. 20-22 and it can yield 1-1.250 kg fresh mushroom, which costs around Rs 50-60; net saving of Rs. 30-38/bed.
12.	What is the optimum size of farm needed for sustaining a average Indian family?	Here farm size mean quantity of straw to be used because mushroom can be cultivated in tier system or out door under the shadow of trees. So 9 ton of paddy straw in one month can generate an income of Rs. 20, 000/month.