

IMPORTANCE OF MUSHROOM CULTIVATION



1) Highly Nutritious food

Mushroom is considered to be as a complete and safest food and suitable for all age groups, child to aged people. It is one of the good sources of Protein, which contains less of carbohydrate and fat. The most population in India suffers due to protein- malnutrition, as sufficient requirement of proteinaceous supplement is not available in daily diet. The protein consumption in India is far below the International level and the various developmental programmes were aimed to increase the Pulse grain production, which are the main sources of protein. In recent years, the importance of mushroom as a good source of protein is much felt and lot of emphasis is being given for popularization of cultivation as a commercial venture to augment the protein supply.

Nutritive value of mushrooms (Fresh weight basis)

Protein - 2.90 %

Fat - 0.37 %

Carbohydrate - 5.36 %

Fibre - 1.10 %

Ash - 1.10 %

Calories - 33.90 / Kg

The mushrooms contain as high as 30 per cent protein by dry weight, contain less of fat and carbohydrate. So this is a very good food for the people who suffer from hypertension and diabetics. Because of its high fibre content, it is a very good diet for people who suffer from constipation and peptic ulcers. In addition, all mushrooms contain almost all-essential amino acids like leucine, isoleucine, valine, tryptophan, lysine, theonine, phenylalanine and methionine. These are also considered as a good source for several vitamins like thiamine, riboflavin and niacin, and essential minerals like calcium, phosphorus, iron, sodium and potassium. In addition, active principles are also extracted from poisonous mushrooms to cure several diseases in medical science.

2) Recycling of farm residues

Mushroom cultivation is much useful in recycling of organic waste like paddy straw and other farm residues for better utilization as substrates for growing mushrooms. The spent waste of the substrates is used as very good manure enriched with the nutrients. In addition, the mushroom spawn can be successfully used for decomposing coir pith as enriched manure. The straw substrate after harvesting mushroom can be better utilized as nutritive cattle feed.

3) Additional income

Mushroom culture is one of the important components of Integrated Farming System and farmer/ farm women can get additional income from the mushroom culture by utilizing the lean seasons/ leisure hours to increase his economic status.

4) Solves unemployment Problems

The mushroom culture serves as a low investment venture for the Unemployed graduates. Mushroom cultivation can be started with a very minimum capital investment and it does not need any sophisticated equipment/ techniques. So it is a very profitable venture for the persons interested in self-employment.

5) New food products development

The mushroom cultivation encourages the development of new food products and gives chances of employment for the people involved in the new industries/ commercial units. The some of the new food products developed using the mushroom are canned mushrooms, Mushroom soup powder, papads, noodles and pickles etc.

6) Increases foreign revenues

The potential for export of new food products of mushroom is really felt by the mushroom growers and a large quantity of button mushroom is exported to foreign countries like U.S.A. and other European countries to get foreign exchanges. In addition, great demands for the mushroom pickles and mushroom papads are noticed in other countries.

7) Used as medicines

Because of very low fat content, it is very good food for hypertension patients. It also serves as a very safe food for diabetic people because of its low carbohydrate content. In addition it cures peptic ulcers and constipation because of the more fibre content in the mushrooms. The continuous uptake of *L. edodes* , *F. velutipes* and *A.bisporus* critically reduces the blood cholesterol level.

Several alkaloids and extracts obtained from the mushrooms act as medicines for curing several ailments. Anti tumour principles are reported to present in *Agaricus bisporus*, *Lentinus edodes*, *Pleurotus ostreatus* and *Flamulina velutipes*. The alkaloids from *Agaricus campestris* also act as a anti bacterial compounds, some of the extracts like 'Lentinan' and 'rentinan' from *L. edodes* cures cancer and it also reported that the continuous use of this mushroom is very effective in reducing the HIV population to recover from AIDS syndrome. It is also used as a liver protectant.

Thank you..