

What Is A Mushroom?

BARC

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Wild mushrooms grow on dead tree stump

Mushroom

Mushrooms belong to a group of organisms known as fungi. Fungi are a very large class of organisms and have a fundamental difference with the green plants. They lack chlorophyll and therefore they cannot make organic compounds necessary for photosynthesis. Some fungi obtain their food by breaking down dead plants or even animals (known as saprophytes) while others grow parasitically on living plants and animals. A mushroom is the fruiting body of the fungus and represents only a short stage in its life cycle. This reproductive part of the organism develops to form and distribute the spores. The structure of a mushroom consists of stem (stalk) and flesh (pileus) that contain gills and spores. The mushrooms are always referred to as edible fungi whilst the poisonous and unpalatable ones are called toadstools.

Spores

The production and dissemination of spores is the principal biological role of mushrooms. These spores will eventually germinate and give rise to minute, thread-like structures called hyphae. The hyphae continue to grow and develop into a mass known as mycelium which is extremely fine and can only be seen with the aid of a microscope. When the conditions of nutrition, humidity, temperature and light are right for spore formation, a fruit body or mushroom appears. The mushroom grows, the spores mature and are released giving rise to new mycelia and the cycle begins again.

Availability Throughout the Year

Today, mushrooms are cultivated in a controlled environment in which the temperature, humidity and ventilation are carefully monitored.

They can be artificially grown on substrates made up of raw materials such as sawdust, padi straws, cotton waste, papers, wheat straw, banana pseudostem, palm press fibre and coffee pulp with organic supplements such as rice bran, wheat bran, urea, corn flour or soyabean meal.

Different kinds of mushrooms have their own suitable requirements for substrates and organic additives. In some cases, no additives are used. Selection of substrates usually depends on the availability and abundance of the raw materials locally. Hence, mushrooms can be made available throughout the year and we do not need to wait for rainy seasons to taste this delicious and nutritious food.

Types of Common Mushrooms

In Brunei Darussalam, the most popular cultivated mushrooms are oyster mushrooms (*Pleurotus* spp.) and black jelly fungi (*Auricularia* spp.). The common imported ones are button mushrooms (*Agaricus* spp.), shiitake (*Lentinus* sp.), straw mushrooms (*Volvariella* sp.) and needle or golden mushrooms (*Flammulina* sp.). These are sold in fresh, dried and canned forms.