

# Fungi

It is estimated that there are around 100,000 species of fungus worldwide. Due to the fact that most species are either hard to find or need to be identified using a microscope, it is impossible to say how many fungi actually exist. Here are just a few! **Note: Some fungi are DEADLY POISONOUS. Mushrooms should never be collected without help from a knowledgeable fungus expert.**

## Fly Agaric – *Amanita muscaria*

This toadstool is perhaps the most well known fungus in the world, and is classically the species used in illustrations with fairies perched on top! Its striking red and white-spotted cap makes it one of the most attractive fungus species. The name comes from its use in the past for fly traps, where the cap is broken up and placed in milk or sugar solution to attract and poison flies in the home. This fungus grows in birch woods and is deadly poisonous.



Courtesy of Tony Wille CC-A-3.0 Unported

## Giant Puffball – *Calvatia gigantea*

This is one of the largest species of fungus, and can grow larger than a man's head. They are solid, white and ball-shaped and were once common in pastures around Ireland and Britain. The improvement of such habitats has led to a slight decrease in numbers. The spores, which can number as many as 1,000,000,000,000 per mushroom, are highly inflammable and were once used to smoke out bees and produce stage lighting effects!



Courtesy of Dignel Richerd

## Honey Fungus – *Armillaria mellea*

This is a parasitic fungus that grows in clusters, with toadstools reaching up to 12 cm across and 15 cm tall. However these yellow-brown fruiting bodies are just the tip of the ice-berg, quite literally. The bootlace-like strands of the hyphae of this species creep under the bark of living trees, stealing their food and energy, before killing them. An extraordinary feature of this fungus is that the infected wood of its hosts glows with a chemical reaction causing **bioluminescence**. This effect is so extreme that soldiers in the First World War attached pieces of the wood to their helmets to avoid collisions in the trenches!



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## Cultivated Mushroom – *Agaricus bisporus*

This mushroom is uncommon in the wild but is widely cultivated and available in every supermarket in Ireland. It is closely related to the larger Field mushroom that can be found widely in unimproved pastures to this day. The Cultivated mushroom reaches 10 cm across and 5.5 cm tall and is white with pink gills, turning dark brown with age. Mushroom farms use spore-filled bags of manure in large, humid polytunnels to encourage large numbers of mushrooms.



Courtesy of Andrew Bossi CC-BY-SA.2.5

## Black Summer Truffle – *Tuber aestivum*

This is a 'spore-shooting' fungus and a rather unattractive one at that. These small mushrooms are found underground in beech woodlands on chalky soils. They only reach 7 cm across and are black and warty in appearance. They were once common but are now quite rare and are an expensive culinary treat (more than Euro 100 per kg). Traditionally pigs and dogs were used to search for these strongly scented fungi, a practice still occasionally used today where they are found in parts of southern Britain. They are still widespread in France and Italy.

Text by Jenna Poole



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