Fungi

Mushrooms and Toadstools are common names given to some of the fungi. These names have no scientific meaning and their interinterpretation depends upon the experience of the speaker and the listener. The term "mushroom" is usually restricted to those gilled fungi which are collected and eaten as a delicacy. The term "toadstool" is then used to refer to all other fungi which like the mushroom has gills on the underside of the cap.

> Centre

The fungi we are likely to see may be placed in one of six **g** groups.

The first group which has gills on the underside of the cap and also a central stem are often called mushrooms and toadstools

The second group appears a little like the mushrooms and toadstools but instead of having gills have pores or small tubes on the underside of the cap. Many of these are given the name boletus.

A third group does not have a stem and are shaped like a cup. These are usually given the name cup funguis.

A fourth group we can easily recognize are those which are round, pear-shaped or star-shaped and are given such names as Puffballs or Earth-stars.

A fifth group has cylindrical club shapes which may be branched or unbranched and may be variously known as Club Fungi or Coral Fungi

The sixth group has pores or tubes as in a Boletus but there the similarity ends for the fruiting body is usually tough and corky, or even woody, rarely growing in the ground and forming more or less a bracket shape, hence the name Bracket Fungi.

Fungi form an important section of plants. Some species play an important part in our lives. They are useful in produc ing food, while others cause serious damage to crops and cloth es etc. and are of considerable economic importance. Because *f* fungi lack chlorophyll they cannot make their own food and have to rely upon "ready-made" food. This they obtain from other plants or animals. If they obtain their food from decaying matter such as logs, twigs or dead leaves they are termed saprophytes. Some fungi obtain their food from living plants and

13

animals. These fungi are known as parasites.

Fungi are able to grow in damp and dark places because they do not require sunlight in order to make their own food. We may find a wide variety of fungi in the moist gullies where little sunlight penetrates.

There are several mushrooms in Ringwood. The common or field mushroom (<u>Agaricus campestris</u>)may be found in the grassed areas away from trees as it seldom, if ever, grows amongst them. The field mushrooms appear after the autumn rains and while the ground is still warm. The buttons push through the ground and **see** soon expand. The veil covering the gills is broken as the cap **exp** expands. At first this reveals deep pink gills which become derke darker as they mature. The cap is white. On the stem may be seen the remnants of the veil as a ring. The spore price, which may be made by placing the cap with the stem removed , gills downward on a piece of white paper and leaving in a draught free position for a day, is purplish brown or chocolate brown.

The coarser Horse Mushroom (Agaricus arvensis) may also be found. It derives its name from agris meaning cultivated XXEXAXDF land and arvensis pertaining to the field. It is a larger plant the than the Field Mushroom and has a large bulbous stipe stem. and the young gills are white or greyish. It MEXXEME is edible but may couse indigestion in some people.

If we look closely at the mushroom we find that it stands on a stalk, or more correctly a stipe because this attachment does not function like a stalk. On the underside of the pileus or cap we find gills. The mushroom is only the fruiting part of the fungus. If we examine the ground around the mushroom by digging we shall probably find thin white threads, This is known as mycelium or the fungus plant.

A common species which may occur in clusters at the base of stumps or trunks of living trees is Honey Fungus '(Armillaria <u>mellea)</u>. This world-wide fungus varies in colour but the caps are usually yellowish-brown to deep brown in colour, downy or scaly, especially towards the centre and when young joined to the stem by a thick skinned yellowish-white ring of skin. The stem

page 2

varies in length but has the character of being whitish above the ring and yellow-brown to honey coloured below. This gives it the common name "Honey Fungus". Growing through the soil or behind the bark on the trees may be found shining black strands which has given it the common name Bootlace Fungus.

3855

page 3

Inky caps are a group which can be easily recognised. They are among the first species a beginner or student becomes aw aware of other than the mushroom. When Inky Gaps are picked they quickly liquify into a black ink like fluid. At times the Nobed Inky Cap (<u>Coprinus micaceus</u>) may be found growing in pr profusion where a telegraph pole hase been removed. It also may be found against dead and rotting trees, or over buried wood. It is a small fungus with a fluted conisal cap and is from about 1 to 3 inches in diameter.

Several other Inky -caps may also ber seen. The one as called Shaggy- Cap (<u>Coprinus comatus</u>) is easily recognised for from the shaggy appearance of the long cylindrical heads. These are from 2 to 6 inches high. The shaggy appearance is caused by scales orpieces of the cap which darken and peel off.

There are some species of fungi which are more common than they were several years ago. These are often the species which grow amid the pine needles and the conifer trees which have been introduced to the area. Saffron Milk Cap (Lactarius deliciosus) is a large fungus 2 to 4 inches across with a sel salmon to reddish-orange cap which is marked by concentric circles of varying hues. The stem may also be an orange colour and it becomes hollow with age. The word "lac" is latin for "milk" and refers to the fluid or "milk" which exudes when to the cap is broken. In this species the "milk" may be a carren carrot colour. It is sometimes eaten by people who appreciate its flavour.

Another fungus which has increased rapidly over the past few years is the Fly Agaric (Amanita muscaria) It occurs under exotic trees such as pines, birches and other conifers. It may be recognized by its bright red cap which may be up to 7 inches across. The cap is flecked with white spots. There is a

page 4

3855

a ring of "skin" about the middle of the stem which is up to 8 inches long. There is a fat bulb, or volva at the base of the stem. The reason for the flecking on the cap is that the whole fungus was once enveloped in a cream or white veil. This is noticeable in the "button" stage. As the cap expands the veil is torn and pieces adhere to the cap. Specimens need to be handled with care if the volva is to be seen. Dig up carefully. This species is poisonous and should not be eaten. The common name, Fly Agaric, has two meanings. The Agaric refers to the latin Agris meaning cultivated land; Mushrooms and all gilled fungi are placed in the Family Agaricaceae the Agarics. The term Fly is derived from the purpose it was reputed to have been put. It was collected and dried. When x dry the fungus was broken into smallpieces and placed where these could be eaten by theflies. When the flies ate some of the fungus they would die. The poison in the fungus is known as muscarine. It is a good rule never to eat any fungus that has a volva. In fact it is a good rule never to eat a fungus that you don't know to be safe. Ask someone who knos knows which fungi are safe to eat. Be very careful of any 🏧 mushroom in the "button" stage.

Fairy Ring Mushroom (<u>Marasmius oreades</u>) is usually easy to recognise because of its habit of growing more or less in a circle, or part of a circle. It is a small fungus with irregular caps which are pinky-brown and from 1 to 2 inches across. The creamy white gills are widely spaced. If left undisturbed this fungus will produce its ffairy ring" ? each year for many years with the circle gradually expanding

Several species of the "pore" fungi may be found. The largest of these will possible be <u>Boletus edulis</u>. The pore fungi differ from the gill fungi in having pores instead of gills on the undersurface of the cap. The cap is quite sticky while young and the stem is also large and swollen. Some specimens of this in Ringwood have been measured to about 6 26 inches across the cap. In other areas it grows larger h than this.

Bracket fungi grows on living or dead trees, but instead of forming an umbrella-like cap develops a shelf-like structure which has pores instead of gills on the undersurface. One of the common species of this group is Rainbow Fungus (<u>Trametes versicolor</u>) This is a thin semi-circular, leathery species which has multi-coloured concentric zones on the upper surface. It may form tiers and is particularly common on stumps and fallen logs. It does not have a stem and from the pores on the undersurface white or dirty yellow spores will come.

Another species easily recognised is <u>Trametes cinnabarina</u>. This bright reddish-orange bracket fungus also has deep red, or pe reddish-brown pores on the undersurface. The flesh is thicker than in the preceding species and likely to be corky.

Often a large spongy white fungus, which looks like a loaf of bread may be found lying on the ground under trees. This is White Punk (<u>Polyporous portentosus</u>)which has dropped or been blown out of the tree. This fungus often forms in the bole of eucalypts and may not bez seen until it drops to the ground. Punk was used by the aborigines when they were shifting camp.Because a piece of punk will smoulder for a long time the aborigines were able to transport their fire from one camp to another.

Another species is known as Curry Punk (<u>Polyporus</u> <u>australiensis</u>) It is so named because of the curry odour which the this fungus possesses and which will persist even though the fungus may be quite old. It is an orange-yellow on both upper and lower surfaces.

Of the cup fungi the one we are likely to see is Crange-Peel Fungi (<u>Peziza aurantia</u>) This looks like pieces of curled up orange peel dropped on the ground, particularly bare ground. It is scarlet-orange on the inside and whitish on the outside. It wi measures from about half an inch to several inches across.

The Puffballs belong to a very increasing group. These begin their life as round, fleshy balls. As they develop they burst to release their spores. One way of doing this $i\frac{s}{d}$ for a tiny hole to appear in the top of the puffball. When the wind blows across this hole, or when it is touched by your finger, a brown cloud

page 5

spurts out the top. These are the spores being scattered. Puffballs were once hung in kitchens, or in blacksmithhs # where slices could be used in an emergemcy to stop bleeding Some people today use this knowledge when an accident occurs in the bush or when they wish to soothe minor sores or blisters. Puffballs are edible and reputed to be quite tasty if cooked when they are firm and white inside. Take care that a young Amanita is not mistaken for a puffball.

3855

page 6

The common Puffball (<u>Eycoperdon pyriforme</u>) is somewhat pear-shaped. When it is young it has small spines over its surface. These spines soon fall off leaving a net-work of scars It is one of the commonest species in the grassy areas under the trees or even on suburban lawns.

It is unlikely that many people will discover one of the smallest of the puffball group. It is the Bird's Nest Fungi (<u>Crucibulum vulgare</u>) which grows on dead twigs, or even a leaf. It reaches about a quarter of an inch across. When the spores are ripe there is a wonderful mechanism to distribute them. Dom Damp weather gives the best chance for the survival and develop ment of fungi spores. In this species the ripe spores **a**re triggered by a raindrop, or if you wish to see the action use a straw to drip a drop of water into the "nest". The spores are **e** expelled when the moisture is put on it.

I leave 1" The wettes of Rungwood