



# Gardennote

## Recognising edible field mushrooms

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When cooler weather and the first rains arrive, many people start thinking about collecting mushrooms. To avoid poisoning, it is important to be able to correctly identify them in the field. Most people collect the field mushroom (*Agaricus campestris*), or the similar horse mushroom (*Agaricus arvensis*), or similar edible mushrooms with small scales covering the cap such as *Agaricus subrufescens* which pop up in metropolitan open spaces and in backyards. However, people should be aware that there are a small number of different species which can be confused with field mushrooms; these are either inedible or poisonous. This Gardennote describes some tips to help distinguish edible mushrooms from their inedible look-alikes.



Figure 1 **Field mushroom** (*Agaricus campestris*). Photo © by Georg Mueller



Figure 2 **Horse mushroom** (*Agaricus arvensis*). Photo © by Georg Mueller



Figure 3 **Agaricus subrufescens**. Photo © by Neale Bougher

### Field mushrooms

When unsure about correct identification, people sometimes use simple 'tests' which have been found to be unreliable, for example, 'peeling the cap' or 'dipping a silver spoon in the cooking pot to check for blackening'. Fungi with a neat, clean appearance are not necessarily edible, and ugly or messy fungi are not necessarily poisonous.

To help correctly identify field mushrooms, look for these three main features :

A large fleshy cap (4 to 16 cm across), the top of which can vary in colour between white and brown, but does not have gold or yellow tones.

Gills, which in the young field mushroom are pink, and in the horse mushroom, cream, but which change with age from pink to dark brown.

A veil of skin over the gills when the mushroom is young and in the 'button' stage, which splits as the cap expands and remains attached to the stem as a small ring of skin (Figure 7).

It is important to realise that in any flush of mushrooms there may be a range of ages present from the 'button' stage with very pale gills to old 'flats' with dark-brown, almost black gills. If only 'buttons' are present it is safer to keep them until the next day, to be sure the pink-brown gill colour develops, typical of an edible field mushroom.

### Important disclaimer

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## Look-alikes

### Yellow stainer mushroom

Be cautious about the yellow-staining mushroom. It looks similar to the edible field mushroom except that its exposed flesh will immediately turn yellow, especially in the stem. It may also have a strong, rank smell and on cooking gives off a yellow juice. Although some people can eat this species, it will make many others ill.



Figure 4 **Yellow stainer mushroom** (*Agaricus xanthodermus*)

### Death cap mushroom

The death cap mushroom is extremely poisonous and is responsible for 90 per cent of all deaths caused by mushroom poisoning. It is currently not known in Western Australia but has been accidentally introduced into eastern Australia from overseas and may appear elsewhere in future.

The death cap can be easily recognised. The cap is light olive-green to greenish in colour. The gills can range from white to pinkish in mature mushrooms. In young specimens, a white, membranous partial veil tissue extends from the edge of the cap to the upper stalk (Figure 5), covering the gills. The stalk is white, up to 15 cm tall, with a large rounded bulb at the base. The bulb includes a white, cup-like membranous sheath at the base of the stalk (volva). The base of the stalk and the tell-tale volva are often buried in the soil. If you find a mushroom in its button stage and are unsure if it is edible, dig out the base of the stalk. If it is surrounded by a cup-shaped sac it is likely to be poisonous.



Figure 5 **Immature death cap mushroom** (*Amanita phalloides*). Photo © by Georg Mueller



Figure 6 **Mature death cap mushroom** (*Amanita phalloides*). Photo © by Georg Mueller

Caution: If you have any doubts at all about the identity of a 'mushroom', don't eat it.

In all instances avoid eating older, perhaps maggoty or mouldy mushrooms. Many cases of supposed mushroom poisonings actually are due to bacteria or mould growing on older mushrooms – not due to the mushroom itself.

Do not collect mushrooms from sites where they may accumulate high levels of dangerous elements, e.g. by the side of a busy road or near toxic waste dumps.

Immediately seek medical advice if you suspect poisoning after eating mushrooms.

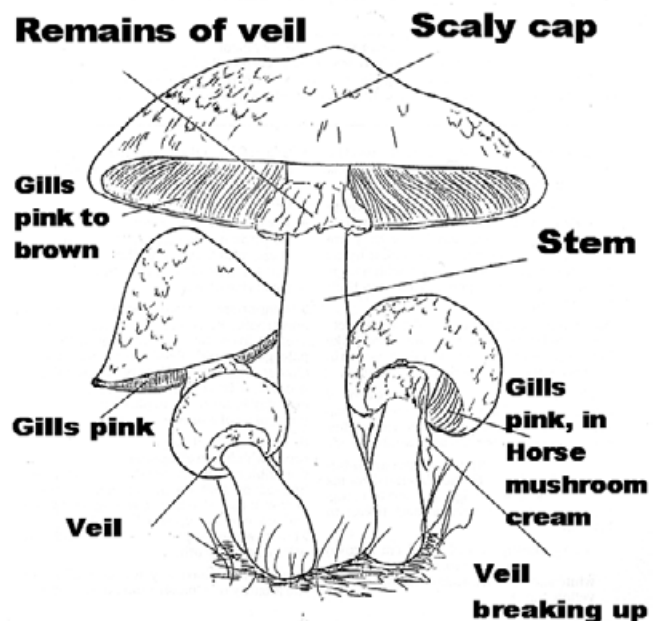


Figure 7 **Parts of edible field mushrooms**

The Department of Agriculture and Food does not offer identification services on mushrooms and toadstools.