

Some poisonous mushrooms associated with trees in New Zealand ©

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Death cap (*Amanita phalloides*)

The death cap is arguably the most dangerous mushroom in New Zealand. Eating just one can kill. When young the mushrooms look like a white ball just at the soil surface. The top then splits and a white to off white mushroom grows out with the remains of the ball forming a cup at the base. The gills are initially covered by a veil but this eventually splits at the edge of the cap and leaves a ring towards the top of the stalk similar to the fly agaric to the right. Young caps are off white or greenish but at maturity can range in colour from off white, light tan or greenish and up to 12 cm across.



Fly agaric (*Amanita muscaria*)

The fly agaric, although widely illustrated in children's books, is poisonous and eating it can cause nausea, vomiting, diarrhoea and hallucinations. Young mushrooms (right) might be mistaken for an edible puffball. At maturity (above) fly agarics can be as large as a dinner plate and can lose some or all of their white spots. Placing pieces of the dried mushroom in a saucer of milk will attract flies which become intoxicated, fall off the mushroom and drown in the milk.



Poison pie (*Hebeloma crustuliniforme*)

This mushroom is quite common on introduced hardwoods and softwoods in New Zealand. The caps and gills are buff to light brown and 4 cm to 10 cm in diameter and smell of radish. Many species of *Hebeloma* and the allied genus *Inocybe* are poisonous and eating them can result in death. Some of the smaller species fall into the lbm category - little brown mushrooms - a name that covers many difficult to identify species. Novices should never eat lbms.



Brown roll rim (*Paxillus involutus*)

The brown roll rim, which can be 10 cm high and 12 cm across, is easily identified from the tightly inward rolled edge of the cap and cut surfaces that quickly turn rusty brown. One to 2 hours after eating there is abdominal pain, vomiting, diarrhoea, pain around the kidneys, kidney failure and possibly death. This can occur in people who have eaten these mushrooms without ill effect in the past. The way the gills run down the stalk and the blotchy surface of the cap vaguely resemble the edible saffron milk cap mushroom (*Lactarius deliciosus*) with which it has been confused.



Earthballs (*Scleroderma* sp.)

Most of the earthballs have a stalk at the base. They have a thick skin and a light brown centre when young but as they age the insides gradually turn dark brown or black and filled with dry dusty spores. Some species are very toxic producing unconsciousness, nausea, severe abdominal pain, vomiting, perspiration, tingling sensations, spasms, cramps, paralysis and anaphylactic shock.



***Cortinarius* spp.**

The caps of the 2000 species of *Cortinarius* range from 1-2 cm across to 15 cm or more. Many are brightly coloured, have fine threads running from the edge of the cap to the stem (the cortina) and/or a swollen base to the stalk. A few species are deadly poisonous, some are edible but the edibility of most is unknown. Poisoning, which can show from 1 or 2 days or up to 3 weeks after consumption, results in kidney failure.



IMPORTANT, READ ME It is easy to confuse some edible and poisonous mushrooms so be absolutely sure of a mushroom's identity before eating. If you are in any doubt, throw it out. Some people can have adverse reactions to even edible mushrooms so eat just a small amount of a new mushroom the first time you try it. Keep a few of the mushrooms in your fridge just in case you need to consult a doctor later. Always store mushrooms in paper bags, never in plastic bags and keep them cool after picking. Cook mushrooms before eating - only a few are safe to eat raw. Wash your hands after touching poisonous mushrooms. Do not put poisonous mushrooms in the same bag as those gathered for eating.

² NATIONAL POISONS CENTRE 24 hour poison advice 0800-764 766

¹ Truffles & Mushrooms (Consulting) Ltd, P.O. Box 268, Dunedin, New Zealand, truffle1@ihug.co.nz, www.trufflesandmushrooms.co.nz For more information see the book "Edible and poisonous mushrooms of the world" by Ian Hall and colleagues available from truffle1@ihug.co.nz, or one of the many other books on edible and poisonous mushrooms. The publisher and authors can take no responsibility for the misidentification of mushrooms by the users of this poster nor any illness that might result from their consumption. ALL RIGHTS RESERVED.