Fungi of the Wombat Forest and Macedon Ranges

The Fungi Kingdom comprises some of the most extraordinary and important organisms on earth. With their bizarre morphologies, complex life histories and ephemeral fruit-bodies, fungi have intrigued people across the planet and throughout history. The Wombat Forest and Macedon Ranges provide a diversity of habitats for fungal foraying including riparian forest, wet forest, damp forest, grassy woodland, montane grassy woodland, shrubby foothill forest, heathy dry forest, herb-rich foothill forest, valley grassy forest, sedgy riparian woodland as well as stands of various exotic tree species.

The fungi illustrated in this guide were surveyed over the last decade and represent just a selection of the species you may encounter. Hundreds, possibly thousands more fungal species are likely to occur in the region.

Identifying Fungi

Be aware that it is not usually possible to accurately identify fungi from images alone as many species vary greatly in colour and form. Many fungi can be identified using field characteristics – i.e. features of the fruit-body that are visible to the naked eye. The major field characteristics are illustrated in the accompanying diagram. Other species require microscopic examination of structures or DNA sequencing for accurate identification.

The most accurate way to identify fungi to species level is with taxonomic keys, which provide written descriptions of the diagnostic features. A selection of field guides and websites is listed below to assist you further with identifications.

Fruit-body Forms

The most familiar fungal fruit-bodies are likely to be the 'Agarics' - those fungi that typically have an umbrella-like form and gills beneath the cap, commonly referred to as mushrooms. However, fungi appear in a great variety of other fruit-body forms such as puffballs, clubs, discs, polypores and coral fungi. The species in this guide are arranged alphabetically within such generic groups.

Edible & Poisonous Fungi

Foraging for edible fungi has become a popular pastime, but be aware that knowledge about edibility of Australian fungi is scant and deadly poisonous species exist in Australia. Many cases of poisonings, including fatalities, are reported each year. In the event of a poisoning or suspected poisoning contact the Poisons Information Centre on 13 11 26.

Contacts

Wombat Forestcare		www.wombatforestcare.org.au
Fungimap	9252 5374	www.fungimap.org.au
Field Naturalists Club of Victoria	9877 9860	www.fncv.org.au
Victorian Poisons Info Centre	13 11 26	www.austin.org.au/poisons
Macedon Ranges Shire Council	5422 0333	www.mrsc.vic.gov.au
Hepburn Shire Council	5348 2306	www.hepburn.vic.gov.au

Websites of Interest

Australian National Botanic Gardens	www.anbg.gov.au/fungi
CSIRO Fungibank	www.fungibank.csiro.au
Atlas of Living Australia	www.ala.org.au
Interactive Catalogue of Aust. Fungi	www.rbg.vic.gov.au/dbpages/cat/index.php/fungicatalogue
The Australasian Mycological Society	www.australasianmycology.com

Selected Field Guides that include Victorian Fungi (Available from Fungimap)

Grey, P. & Grey, E. (2005). Fungi Down Under. Fungimap, Melbourne.
McCann, I.R. (2003). Australian fungi illustrated. Macdown Productions, Vermont.
Fuhrer, B. A. (2005). A Field Guide to Australian Fungi. Bloomings Books, Melbourne.
Young A. M. (2005). A Field Guide to the Fungi of Australia. New South Wales University Press, Sydney.

Acknowledgements

Research, photography, text & illustration: Alison Pouliot. Special thanks to the following people for their invaluable advice in validating identifications and assisting in species selection: Pat & Ed Grey, Tom May, Paul George, Virgil & Jurrie Hubregtse, Katie Syme, John Walter, Sapphire McMullan-Fisher & Genevieve Gates. Photographic and field assistance: Valérie Chételat. Layout: Wombat Forestcare Design Team. Thanks to the Leigh Catchment Group for the use of their brochure template.

Cover image: The genus *Mycena* contains some of the tiniest and most delicate fungi. They are characterised by white spores and often have a translucent, striate cap.

Fungi of the Wombat Forest and Macedon Ranges

Fungi

of the Wombat Forest and Macedon Ranges

Wombat Forestcare

Community caring for Nature

Agarics

Agaricus xanthodermus
Yellow Stainer *
GILL S

Amanita punctata
GILL M

Clitocybe clitocyboides
Funnel Cap
GILL S

Coprinus comatus
Lawyer's Wig *
GILL S

Cortinarius austrovenetus
Green Skinhead *
GILL M

Cruentomycena viscidocruenta
Ruby Mycena *
GILL S

Amanita ananiceps group
GILL M

Amanita xanthocephala
Vermilion Grisette *
GILL M

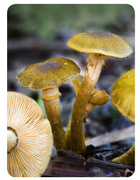
Coprinellus disseminatus
Fairy Bonnets
GILL S

Cortinarius archeri
Emperor Cortinar *
GILL M

Cortinarius kula
GILL M

Entoloma moongum
Dark Pinkgill
GILL S

Amanita muscaria
Fly Agaric *
GILL M

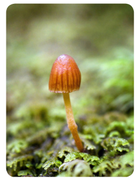


Armillaria luteobubalina
Australian Honey Fungus *
GILL P, S

Coprinopsis atramentaria
Inky Cap
GILL S

Cortinarius austroalbidus
Australian White Webcap *
GILL M

Cortinarius rotundisporus
Elegant Blue Webcap *
GILL M



Galerina hypnorum group
Moss Galerina
GILL S

Amanita ochrophylla
GILL M

Austropaxillus infundibuliformis
Funnel Pax
GILL S, M

Coprinopsis nivea
Snowy Ink Cap
GILL S

Cortinarius austrocinnabarinus
GILL M

Cortinarius sinapicolor
Slimy Yellow Cortinar *
GILL M

Gymnopilus junonius
Spectacular Rustgill *
GILL S

Agarics

Hebeloma victoriense
GILL M

Hypholoma australe
GILL S

Lepista nuda
Wood Blewitt *
GILL S

Hohenbuehelia sp.
GILL S

Hypholoma fasciculare
Sulphur Tuft
GILL S

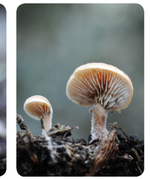
Leucoagaricus ooliekirrus
GILL S

Hygrocybe astatogala
Waxgill
GILL S

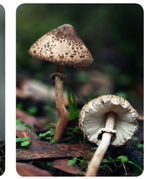
Lactarius eucalypti
Eucalypt Milk Cap
GILL M

Leucoagaricus rubrotinctus
GILL S

Hygrocybe miniata group
Waxgill
GILL S



Lentinellus tasmanicus
GILL S

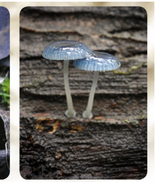


Macrolepiota clelandii
Parasol Mushroom
GILL S

Agarics

Marasmiellus affixus
Little Stinker
GILL S

Mycena albidofusca
White-Crowned Mycena
GILL S



Mycena interrupta
Pixie's Parasol *
GILL S

Marasmius alveolaris
GILL S

Mycena clarkeana
Tufted Mycena
GILL S

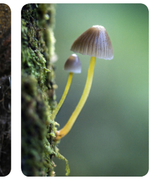
Mycena nargan
Nargan's Bonnet *
GILL S

Marasmius elegans
Velvet Parachute *
GILL S

Mycena cystidiosa
Tall Mycena
GILL S

Mycena subgalericulata group
GILL S

Mycena albidocapillaris group
GILL S



Mycena epipterygia group
Yellow-Stemmed Mycena
GILL S

Omphalotus nidiformis
Ghost Fungus *
GILL S, P

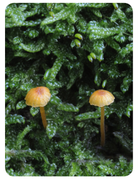
Agarics

***Pholiota* sp.**
GILL S

Rhodocollybia butyracea
Buttery Collybia
GILL S

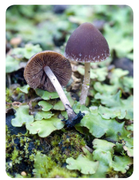
Russula persanguinea
GILL M

Pluteus cervinus
Deer Mushroom
GILL S



Rickenella fibula
Little Pin
GILL S

Tricholoma* aff. *terreum
GILL M



Psathyrella* aff. *pennata
GILL S

***Russula clelandii* group**
GILL M

Volvopluteus gloiocephalus
Common Rosegill *
GILL S

Psilocybe subaeruginosa
Blue-Staining Psilocybe
GILL S

Russula neerimea
GILL M

***Xerula australis* group**
Rooting Shank *
GILL S

Boletes/Leathers/Jellies

Austroboletus lacunosus
PORE M

Podoscypha petalodes
Rosette Fungus
LEATHER S

Tremella frondosa
Witch's Butter
JELLY S

Boletellus obscurecoccineus
Rhubarb Bolete *
PORE M

***Stereum hirsutum* group**
Hairy Curtain Crust *
LEATHER S

***Tremella mesenterica* group**
Yellow Brain *
JELLY S

Boletellus emodensis
Shaggy Cap
PORE S

Pseudohydnum gelatinosum
Toothed Jelly *
JELLY S

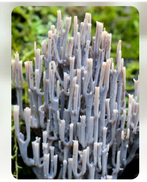
Heterotextus peziziformis
Golden Jelly Bells
JELLY S

Fistulinella mollis
Marshmallow Bolete
PORE S

Tremella fuciformis
White Brain *
JELLY S

***Calocera sinensis* group**
Pretty Horn
JELLY S

Corals/Polypores/Tooth Fungi



Artomyces austropiperatus
Peppery Coral Fungus
CORAL S

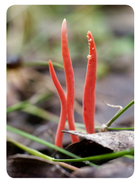
Fistulina hepatica
Beefsteak Fungus *
PORE S, P

Trametes versicolor
Rainbow Fungus
BRACKET S

Clavaria amoena
Yellow Club Coral Fungus
CORAL S

Grifola colensoi
PORE S

Hydnum repandum
Hedgehog Fungus
TOOTH M



Clavaria miniata
Flame Fungus
CORAL S

Panellus pusillus
Little Ping-Pong Bat *
PORE S

Phellodon niger
TOOTH M

Ramaria ochraceosalmonicolor
CORAL M

Pycnoporus coccineus
Scarlet Bracket Fungus
BRACKET S

***Sarcodon* sp.**
Sarcodon
TOOTH M

Puffballs/Earthstars/Clubs/Pins/Chantarelles

***Scleroderma* sp.**
Earthball
PUFFBALL M

Geastrum triplex
Collared Earthstar
EARTHSTAR S

Leotia lubrica
Jelly Baby *
PIN S

Lycoperdon perlatum
Puffball
PUFFBALL S

Cordyceps gunnii
Dark Vegetable Caterpillar *
CLUB P

Xylaria hypoxylon
Candle Snuff Fungus
CLUB S

***Morganella* sp.**
Puffball
PUFFBALL S

Cordyceps menesteridis
Red Headed Cordyceps
CLUB P

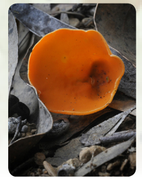
Craterellus cornucopioides
Horn of Plenty *
CHANTARELLE M

Calostoma fuscum
Common Prettymouth
PUFFBALL M

Xylaria polymorpha
Dead Man's Fingers
CLUB S

Podoserpula pusio
Pagoda Fungus *
CHANTARELLE S

Cups/Discs/Truffles/Lichens/Slime Moulds



Aleuria aurantia
Orange Peel Fungus
CUP S

Bisporella citrina
DISC S

Lichenomphalia chromacea
Yellow Navel *
LICHEN Y

Ascocoryne sarcoides
Purple Jelly Disc *
DISC S

***Chlorociboria aeruginascens* group**
Blue Green Stain Fungus
DISC S

Ceratiomyxa fruticulosa
Icicle Fairy Fans *
MYXO S

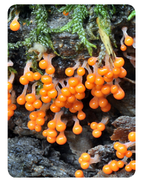
Scutellinia scutellata
Eyelash Pixie Cup
DISC S

Discinella terrestris
Yellow Earth Buttons
DISC S

Fuligo septica
Dog Vomit Slime Mould *
MYXO S

Banksiamyces toomansis
DISC S

***Zelleromyces* sp.**
TRUFFLE M



***Trichia* sp.**
MYXO S

Fungal Trophic Modes

Fungal Trophic Modes

Fungi can be divided into three groups based on how they obtain their nutrition:

1. Most fungi are saprotrophic (saprobic) and decompose dead organic matter. They can break down lignin, cellulose and chitin and grow on rotting logs, leaf litter and other organic material.

2. Some fungi are parasitic and obtain nutrition from a living host organism, with no benefit to the host. They grow on living plants and other fungi, while some specialised groups parasitise invertebrates and other animals.

3. Mycorrhizal fungi form symbiotic relationships with living organisms of benefit to both. The hyphae of these fungi form mutually beneficial relationships with the rootlets of plants.

Another symbiosis is that of lichens which is a relationship between a mycobiont (fungus) and a photobiont (an alga or cyanobacterium). Lichens are classified as fungi.

These trophic modes assist in identification as particular species are associated with certain habitats or plant species. Nutrition modes are indicated by the following symbols:

M (mycorrhizal), S (saprotrophic), P (parasitic) or Y (symbiotic).

Slime Moulds

Slime moulds (Myxomycota) are not fungi but occupy the Kingdom Protista. Slime moulds are included in this guide as historically they have been adopted by mycologists. With their bright colours and bizarre forms they are frequently sighted in the Wombat Forest and Macedon Ranges.

Fungal Substrates

Fungi grow on a huge diversity of substrates including various types of soil, living or dead wood, leaf litter, native animal scats, moss beds, invertebrates as well as other fungi. The type of substrate where each species is usually found is indicated with a colour code:

soil · moss · dung · wood/litter · invertebrate

Fungimap Target Species

Fungimap serves as a hub of information and interaction among fungal experts and enthusiasts. This includes the mapping of over 100 easily recognisable target species. The images in this guide that are target species are indicated by an asterisk (*). You may like to contribute your records of target species to the Fungimap project. Further information and record sheets are available on the Fungimap website.

Main parts of the fruit-body of a fungus.