

# **Edible or Poisonous Mushrooms?**

## **How to determine which is which!**

**March 1<sup>st</sup> 2012**

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# HOW TO COLLECT FUNGI FOR IDENTIFICATION

- **NOTE HABITAT AND SUBSTRATE**
- **vegetation type (indigenous or exotic); growing on live or dead vegetation or on soil.**
- **Natural environment or garden/park setting – if in a park/garden, how close are the nearest trees?**
- **Wet/dry environment**

# HOW TO COLLECT FUNGI FOR IDENTIFICATION

- Collect only the specimens you need – do not waste fruiting bodies
- Cut specimens from wood
- Dig specimens out of the ground – do not cut off at ground level
- Lay face down in a collection basket or box
- Identify accurately every cap before cooking
- DO NOT EAT RAW MUSHROOMS COLLECTED FROM THE WILD. Why???

# Characteristics to note

- After establishing the habitat, look at the fungus
- Does it have gills or pores?
- What shape are the gills or pores?
- Do the gills touch the stem or the cap?
- What colour are the gills?
- What colour of the spores?
- Does the fungus have a volva?
- Does the fungus have a ring?
- Is the ring moveable?
- Are the cap and stem thick or thin? Short or tall?  
Alone or in clusters? On wood or the soil or litter?

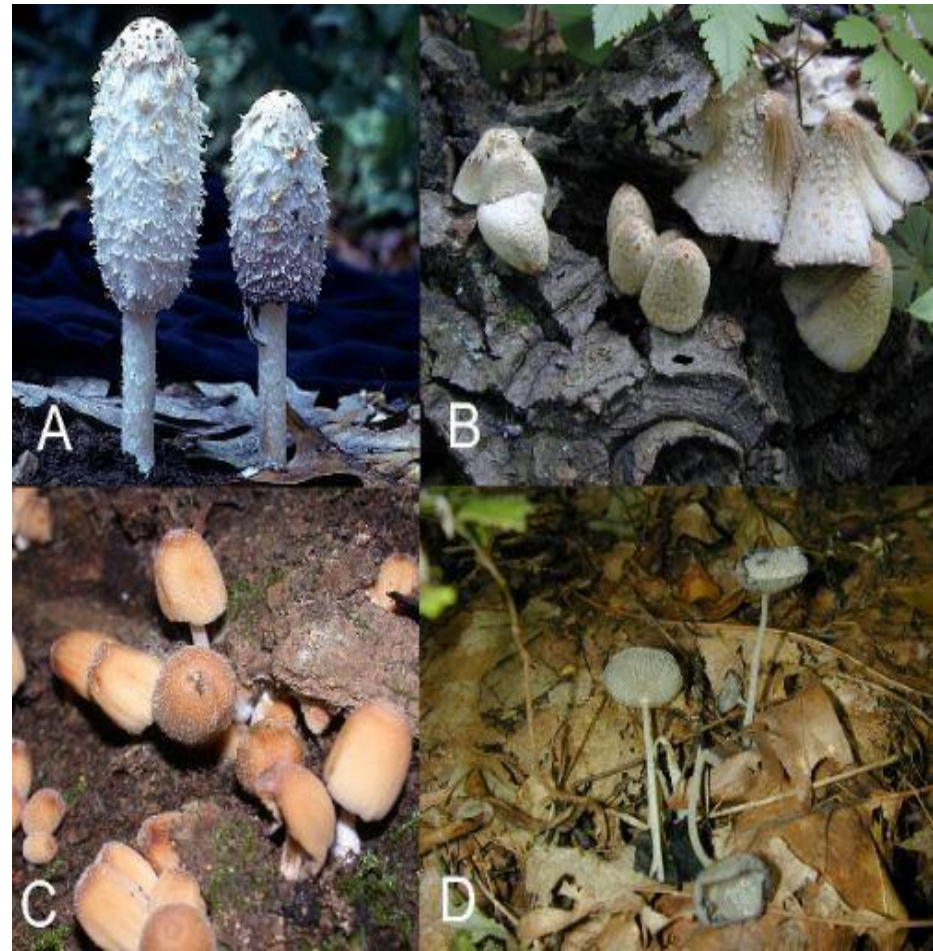
# IDENTIFICATION – *Coprinus* spp

- Good web site:
- <http://www.rogermushrooms.com/>
- Easy recognised –cannot be confused for poisonous species.
- Mostly found in Autumn
- *Coprinus comatus* – judge's wig
- *Photo T. Volk.*



# IDENTIFICATION – *Coprinus* spp

- Other *Coprinus* species
- A) *C. comatus* – ‘judge’s wig’
- B) *C. atramentaria* – ‘tippler’s bane’
- C) *C. micaceus*
- D) *C. plicatilis*





# IDENTIFICATION – *Lactarius deliciosus*

- Found in pine plantations
- Around pines, spruce, exotics in gardens
- Trees generally +15 years old
- Found with Boletes, *Suillus granulatus* and *luteus*



# IDENTIFICATION

## *Suillus granulatus* and *S. luteus*

- Found in pine plantations with *Lactarius deliciosus*
- Called 'honey buns' or 'slippery Jacks'
- Best eaten when young
- *S. granulatus* – no ring, sandy-like stem
- *S. luteus* – has ring –smooth stem
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# IDENTIFICATION – *Agaricus* spp edible mushrooms

- 26 species in Australian forests and fields
- Most edible eg
- *A. campestris* – field mushroom
- *A. avensis* – horse mushroom
- *A. subrutilescens* – red bleeder



# IDENTIFICATION – *Lepiota* spp edible mushrooms

- *Lepiota rhacoides*
- *Lepiota procera*





# IDENTIFICATION – *Agaricus* spp 'poisonous' mushrooms

- yellow staining' group
- *Agaricus xanthoderma*
- *Contains phenolic compounds that smell like hospital detergents*
- *Stain yellow at base of stem and edge of cap*



# IDENTIFICATION – Death cap

- *Amanita phalloides* – death cap – grows with Oaks predominately but moving into native Eucalyptus forests
- Mistaken for *Agaricus* spp
- ONLY DIFFERENCE SPORES AND GILLS ARE WHITE



## *Amanita phalloides* – death cap

- Tastes like a field mushroom
- Peels like a field mushroom
- Grows with field mushrooms if oaks are around
- Delayed symptoms – up to 48 hours
- Lysis of red blood cells
- Apparent recovery after 72-96 hours
- Hepatic breakdown
- Death 4-5 days



# Other poisonous mushrooms

- Small brown mushrooms”
- Do not pick SBMs
- Many of unknown toxicity
- *Galerina* spp – as toxic as the death cap



## Other mushrooms – *Amanita muscaria*



## ***EATING MUSHROOMS***

- **Do not eat wild mushrooms raw!**
- **First meal of season, eat very little –wait 8-10 hours – if no reaction, then go ahead**
- **Allergies can accumulate**
- **Some fungi that a toxic when raw are edible when cooked**
- **Illness be may from contaminating microbes, not fungus**
- **Seek help – take what you have eaten, scraps and cooked**



## Other mushrooms

*Armillaria luteobubulina*



## Other mushrooms

*Gymnopilus spp/ Coriolus spp*





# Fungal biomass – why we need forests



# CONTACT ME?

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## ***THE END!!!!***

- **THANK-YOU FOR YOUR ATTENTION.**
- **COLLECT CAREFULLY & WITH  
CONSIDERATION FOR THE  
ENVIRONMENT**
- **EAT ONLY AFTER CAREFUL  
IDENTIFICATION!**