



## GUIDELINES FOR FUNGUS COLLECTING

**Fungal collecting is fun and educational but there are a number of things to be aware of.**

### GENERAL GUIDELINES

#### Permits

- In Australia, you **must** have a permit to collect fungi (or any other organism) legally from any land other than private property. Permits may be obtained from the appropriate State or Territory government department and are issued subject to clearly stated conditions.
- On private property you should obtain written permission from the landowner to collect.

#### Collecting

- Notify the relevant managers or landowners before visiting a site and explain the purpose of your visit.
- Check the disease status of your proposed foray site and have **disease management** procedures in place. For example, carry appropriate anti-*Phytophthora* equipment (methylated spirits and brushes to disinfect boots and car wheels).
- Follow the rules of the bush by shutting gates, keeping to paths where possible and minimising your impact on the local environment.
- When investigating the area or making collections, return vegetation, dead wood, leaf litter, soil etc to their original positions as much as possible.
- Avoid collecting where you are visible to other people: they may think that they can collect, too. If you are seen by others, explain what you are doing and that you have a permit to collect.
- **Do not collect anything unless you know you will have sufficient time to document the specimens appropriately.** (As a guide, ten collections is usually the maximum that can be fully described and documented in a day.)

### MAKING COLLECTIONS

A collection without full documentation is almost useless.

- Record date, nearest town, general habitat, substrate and habit; also latitude/longitude, frequency of fruit bodies, soil type, dominant plant species, whether dry/moist/wet.
- Make sure that collections are adequate. (Generally at least 5 specimens of medium-sized mushrooms, but 10 or more of smaller fruit bodies such as tiny mycenae.) Do not over-collect: we do not know the full effects of collecting fruit bodies.
- Do not collect unopened mushrooms or immature fruit bodies: lack of spore release may result in future reduction of populations; also it may be impossible to identify the fungus if the spores are immature. However, it can be useful to include an immature fruit-body in a collection along with mature fruit-bodies, to show features such as the partial veil.
- Avoid collecting damaged or decayed specimens: critical diagnostic characters may have been destroyed or damaged (besides the unpleasantness factor). There is also the possibility of spreading disease organisms.
- Collect the whole specimen by carefully digging around the base with a knife or removing from bark or dead wood. Include features such as the volva (basal sac), which helps to identify *Amanita* species, or a pseudorhiza (rooting base). Remove as much substrate as possible, although if there is a lot of obvious mycelium, a small portion should be collected

because mycelial colour helps to identify some cortinarians. For wood-rotting fungi, the type of wood rot (white or brown) is important, and some of the substrate should be included where possible to show this.

- Record details of host (such as for leaf- or wood-inhabiting fungi) and substrate, and also associated vegetation.
- Wrap specimens in waxed paper or place in separate plastic containers of the appropriate size, or use the compartments of fishing tackle boxes. Keep each collection separate and label with its own collection number. If necessary, pack waxed paper or moss around the specimens to avoid damage in transport.

#### **AFTER THE SURVEY**

- Return to home base and describe, dry and packet your collections.
- Pay particular attention to noting features which disappear on drying, e.g. colour, texture, degree of stickiness, colour changes on cutting, whether it exudes fluid, odour. See, for example, *Fungi of Southern Australia* (Bougher & Syme 1997) for further details of characters to record.
- Colour photographs (taken in the field or after collecting) are especially useful in documenting the characters of fleshy fungi such as mushrooms. Turn over one fruit-body to show lamellae attachment and other features.
- Provide the manager/landowner with a list of species collected or recorded and voucher specimens as required.
- Lodge specimens at your local State Botanical Herbarium.

#### **SAFETY POINTS**

**Some fungi are poisonous or may cause allergies. We do not know the toxicity of the majority of Australian fungi.**

- Wash your hands after handling fungi.
- Avoid breathing in spores.
- Keep specimens away from small children and pets.

**MOST IMPORTANT: UNLESS YOU ARE ABSOLUTELY CERTAIN OF THE IDENTITY OF A FUNGUS AND KNOW IT TO BE EDIBLE –**

**DO NOT EAT IT!**

