

FUNGI IN SCHOOLS

for
CHILDREN
TEACHERS
PARENTS

and other
interested parties



MAKE A SECTION

In January we practised 'Making a Slide' and finally put a few spores in a drop of water and looked at these under the microscope.

Very often it is necessary to 'Make a Section' in order to study the structure of a fruitbody. Before attempting such advanced procedures always remember to have a good look at the specimen first with the naked eye, then with a $\times 10$ hand lens or a dissecting binocular microscope if you have one. Very often a **Squash preparation** will give you the information you need and is much quicker than a section. To make one remove a very small piece of the fruitbody with a mounted needle or fine forceps and put this carefully in the centre of the drop of water, lower the coverslip and very gently press the top of the coverslip with a rubber or the end of a pencil. This will spread the tissues and allows the coverslip to lie flat on the slide. If you don't get it flat the coverslip will rock about making examination under a high power objective impossible.

There will be many occasions however when you really do need a section to study special structures and the arrangement of hyphae in the fruitbody. You will now need a steady hand, a sharp (new) razor blade and keen eyesight (or a low power binocular microscope). If your ambition is to look inside an agaric the most helpful advice I know is given in a book called 'Identification of the Larger Fungi' by Roy Watling (Hulton Educational Publications Ltd, 1973).

If the fruitbody you want to section is very soft, small or frail i.e. the discomycete shown on the cover of *The Mycologist* Vol. 2, it can be helpful to place it between two small pieces of pith from an elder tree (*Sambucus nigra*). You can make these yourself if you have a tree in the garden.

The sections can be picked off with a mounted needle and put directly in a drop of water on a slide or kept in water in a small dish or watchglass for later examination. If air in the tissues is a problem, a drop of washing up liquid added to the water will help.

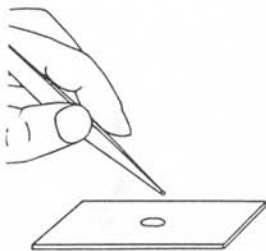


Fig. 1. Specimen in drop of water

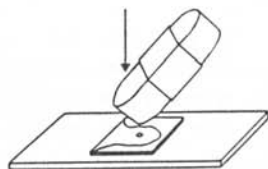


Fig. 2. Press gently with rubber, if necessary

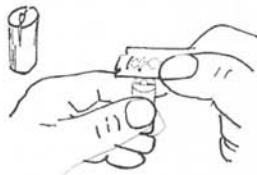


Fig. 3. Cutting section with material in elder pith

Figures from Erb B & Matheis W (1983). *Pilzmikroskopie*. Kosmos, Franckh'sche Verlagshandlung. Stuttgart: W Keller & Co. ISBN 3-440-05125-7. With kind permission of authors and publisher.