FUNGI IN SCHOOLS

for
CHILDREN
TEACHERS
PARENTS

and other interested parties

MAKING A SLIDE

You may be told, or perhaps read in a book, that you must 'Make a Slide' for examination under a microscope. Like most things it is easy when you know exactly what to do but almost impossible when you do not.

You will need: a glass microscope slide (76 × 26mm); a few square glass coverslips (ca. 16 × 16mm); water in a small open dish or dropping bottle; mounted needle and glass rod.

First practice putting these things together. Put the slide on the table and, using the dropping bottle, the glass rod or even the end of your little finger, place a *small* drop of water in the middle of the slide. The coverslip (made of very thin glass — so treat it gently) is put over the drop by resting one edge on the slide near to, or just touching, the edge of the drop and then slowly lowering the opposite edge so that the coverslip neatly covers the drop of water. At first it is easiest to do this by using the mounted needle to lower the coverslip onto the slide but soon you will manage without this and do both operations with one hand and no needle.

The skill lies in getting the size of the drop just right, too small and it will not spread out to cover the underside of the coverslip, too large and you have a flood on your hands with the coverslip slipping all over the place. Try both and you will soon see what I mean. With practice you can judge the size of the drop exactly. If a little water does ooze out then a small piece of kitchen paper placed at the side of the coverslip will soon soak it up.

When you have mastered the drop of water and the coverslip try putting a few spores in the drop. You can get spores from the spore print of a toadstool (dark ones are best), black mould scraped from damp wallpaper or, if you know the rust fungus on blackberry, *Rubus fruticosus*, the black spores from the underside of the leaf are very beautiful to look at. At long last the slide can be put under the microscope. If you have never used one before you may need some help at first so take it along to a BMS Foray or perhaps there is a mycologist living near you who can help. Using a microscope is not difficult especially when you can make good slides so it is worth some time spent in practicing this art. One word of warning — you should know about 'air bubbles' which can form under the coverslip and are sometimes mistaken for fungus spores — even in the best circles. Learn to recognise them early — with their rigid round rims — and save later embarrassment!

The diagram that illustrates this article is taken from an excellent book on microscopic techniques called *Pilzmikroskopie* by kind permission of the authors Bruno Erb and Walter Matheis. Unfortunately, for English readers at least, the text is in German but the illustrations, mostly in colour, make one long to study as many fungi as possible under the microscope.

Sheila M Francis

Next time: Make a Section

Stages in Making a Slide

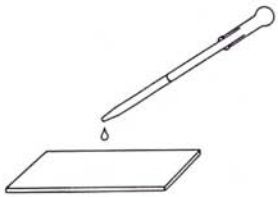

Fig. A. The drop

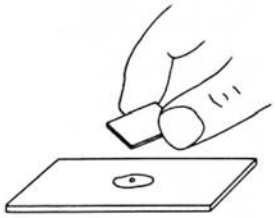

Fig. B. The coverslip

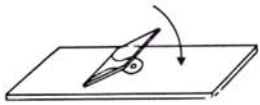

Fig. C. Covering the drop

Figures taken from Erb, Bruno & Matheis, Walter (1983). *Pilzmikroskopie*. Franckh'sche Verlagshandlung. W. Keller & Co. Stuttgart. ISBN 3-440-05127-7. With kind permission of authors and publisher.