

Mounting Fungal Material in Lactophenol – Cotton Blue

- Lactophenol fixes, clears and acts as a mountant but, for permanent preparations, ringing is essential.
- It is important to get the amount of liquid under the cover glass just right*; surplus around the edges of the cover slip is very difficult to remove and even traces of it prevent adhesion of the ringing cement. 16 mm cover slips seem to be suitable for this work.

Procedure.

1. Clean slides and covers.
2. Place a drop of lactophenol on the centre of a slide.
3. Put a very small speck of material (spores, mycelium, etc.) onto the drop. Nb. Dry spores tend not to sink into the mountant so . . .
4. Dip a dropping rod (with a small glass “blob”) into absolute alcohol or ethyl acetate. Touch the blob on a tissue and then apply traces of the remaining chemical to the top of the liquid on the slide.
5. Warm the lactophenol blob gently over a spirit burner flame.
6. Apply a cover slip in the usual way [Nb. A minute drop of lactophenol on the underside of the cover slip may help to prevent the formation of air bubbles in the centre of the field of view.
7. Leave for, say, 2 – 3 hours.
8. Ring. Both goldsize and clear nail varnish seem to work well as a first layer. The ringing medium needs to be pretty “runny” and the application needs to be very gently done – too heavy a touch can displace the cover slip! I used a 3/0 brush.
9. Add 2 – 3 more coats of the goldsize or nail varnish, leaving time for thorough drying between applications. Each coat needs to be one application; the solvent acts quickly on previous coats and it is all-too-easy to loosen the coverslip!
10. Complete the ringing with Humbrol enamel paints (or your choice for finishing) and label.
11. For examination, start with x10 and / or x20 objectives. Higher powers are needed to see details of these small structures.

*If the drop to be covered looks too big, remove some material from around the edge by dipping in a very thin capillary tube [This can be made by heating and drawing out small diameter glass tubing.]. The liquid will slowly creep up inside so that small quantities can be removed in a controlled way.

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