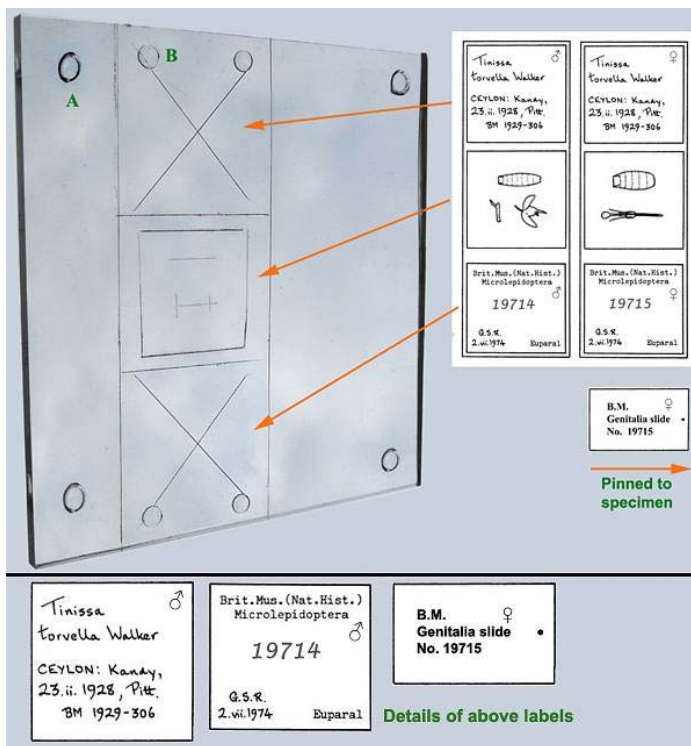


The laying out of slides and their data labels



The above slide example is based on Robinson, 1976.

To aid comparison between different slides and to help position the cover slip and arrangement of the genitalia, a simple template can be made from Perspex (such as the lid from a CD/DVD jewel case) and inscribed with a sharp blade. (In the above example, a 18x18mm square cover slip has been used.) This is placed on the microscope stage and the slide positioned on top so that the marks are visible beneath.

Two further marks inside the work area will help centre the skin (the uppermost line), and either the female parts or the male genital armature (valva) and aedeagus (the lower line shaped like an extended '±'). Small nylon studs (A&B) will help to prevent movement either to the template or the slide when you are working on it.

The slide should be placed on top of the template and mounting medium added. Under a microscope the genitalia can be positioned and arranged by reference to the marks on the template beneath.

If the genitalia are large, once the cover slip has been fitted you may be able to reposition the various parts by simply inserting between the cover and slide a long nylon bristle (cut from a paintbrush and mounted on a cocktail stick);

if the genitalia are small, allow the mounting medium to cure slightly until the parts remain stationary. Leave the slide overnight in a dust free environment and add the cover slip the following day.

A very temporary slide label can be made from the adhesive portion of a Post-it Notes. Permanent labels, which can be printed through a laser printer, can be obtained through specialist stockists (such as www.coleparmer.com).

For handwriting labels, use an Edding 1800 Profipen (Technical Drawing Pen 0.1mm tip, black). These have a very fine tip.

Reference:

Robinson, G.S., 1976. The preparation of slides of Lepidoptera genitalia with special reference to the microlepidoptera. *Entomologist's Gazette*, **27**: 127 - 132.

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