Procedure for mounting mites by Graham Matthews (section on Loca added by Gordon Brown)

1. Wash in D.I. water.

2. Soak in warm 10% KOH for a couple of hours

3. Wash in D.I. water

3. Wash in 5% acetic acid (Sarsons Distilled Vinegar)

4. Wash in D.I. water

5. Replace water incrementally by adding isopropanol (IPA), removing after a few minutes, add more IPA and repeat 3-4 times, then leave in 100% isopropanol for an hour or so.

6. Transfer to slide in drop of 100% IPA

FROM THIS POINT ON THE PROCEDURE VARIES DEPENDING ON THE TYPE OF MOUNTANT USED.

For alcohol miscible mountants such as Brunel Alcoholic mountant, Brunel Aqueous Mountant, L&C (Lubkin & Carsten's formula), Shandon Immu-Mount, Glycerin Jelly, Surgipath Clearium, CMCP Macroinvertebrate, etc.

7. Arrange with fine needles

8. Add one drop of mountant and leave to become fairly tacky

9. Add another drop of mountant and quickly add cover slip (first drop of sticky mountant assists in preventing the specimen from drifting when slip is applied).

10. Carefully clip cover slip in place with modified paper clip. This flattens the specimen which should be quite soft and pliable

11. Place in drying cabinet at 40-50C. ....

For mountants not miscible with water or alcohol such as Canada Balsam, DPX, etc.

7. Clear the specimen using a suitable clearing agent such as xylene, Histoclear, Cedarwood Oil or similar

8. Arrange with fine needles

9. Add one drop of mountant and leave to become fairly tacky

10. Add another drop of mountant and quickly add cover slip (first drop of sticky mountant assists in preventing the specimen from drifting when slip is applied).

11. Carefully clip cover slip in place with modified paper clip. This flattens the specimen which should be quite soft and pliable

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For LOCA

7. Immediately after placing the specimen on the slide in a drop of 100% IPA, add one drop of Loca

8. Place in a dark warming cabinet or on a covered hot plate at around 40-50 degrees C and leave for an hour or two. If kept dark Loca will not set even when heated and experiments have shown that indirect sunlight will not readily set it. On balance it is safer to keep UV exposure to a minimum until the last stages. The heating stage will drive off the IPA and prevent air bubbles from forming in the insect therefore it is important to add the first drop of Loca immediately after transfer to the slide. Use of small drop of Loca will facilitate the evaporation of the IPA, which does take time.

9. Add additional Loca if necessary and coverslip

10. Apply light pressure to the cover slip with a small battery, slide clip, modified paper clip or similar. This flattens the specimen which should be quite soft and pliable

11. Set the Loca using a 365nm torch or other suitable UV source. Remove battery, weight or clip and re-expose to UV to set shaded area.

12. Wash slide with detergent to remove Loca oily residue, use hot water to soften set Loca and remove excess. Dry slide.

Larger specimens can be flattened between two half slides. For example, Graham processed a spider this way by floating onto a half slide in excess IPA, pipetting off excess IPA so the specimen was beached on the slide, then adding the second half slide, clipping the two half slides together and then adding the IPA back whilst the specimen was being flattened. The specimen was then floated in IPA onto the final slide. Excess IPA removed and then mountant and coverslip added.