

MASERATION

Kill and fix in alcohol.

Remove wings and return them into alcohol. Caustic soda will destroy the membrane.

Place insect in cold 20% caustic (soda or potash).

Heat until the **alcohol inside the insect** boils. (I use a pyrex beaker over a methylated spirit burner). this will happen at about 75 deg. C. well before the caustic itself boils. You can usually see the bubbles forming inside the insect, and sometimes the insect moves quickly about as the vapour escapes from it.

Leave it boiling for 5 secs. do not boil the caustic at any timenas this will soften the insect.

Remove from heat for 5mins. During this time the caustic will seep into the insect to replace the alcohol that boiled off during the heating.

Repeat heating/cooling at least twice more. During the second heating the liquid expelled from the insect will be brown due to dissolved body contents. This will get even darker on the third heating. If this doesn't happen try once more heating and cooling, but still never boiling the caustic.

Remove from caustic and place in water for about 12 hours to get rid of most of the caustic. This water may also turn a little brown as more contents come out.

Remove insect from water and place in 20% acetic for several hours, this will neutralise any caustic that is left and remove the small amount of calcium salts that are in the chitin.

After this the insect will be very soft and easily dissected. This should be done as far as possible under water- certainly without letting the parts dry out, as any air bubbles will be very difficult or impossible to remove.

Place the dissected limbs etc. onto small squares of microslides, arrang exactly as you want them to appear when finished, cover with another square and clip together. This was the last chance to move any of the limbs as from now on they will harden, and probably break if movement is attempted.

Place the clipped slides into 100% alcohol for 3 hours.

Remove and place in fresh alcohol for 3 hours.

Remove and place in xylene for 3 hours.

Remove and place in fresh xylene for 3 hours.

Remove clipped slides to petri dish with a little xylene in it, unclip the slides and very carefully remove limb into xylene. From there move onto final slide, position carefully, apply balsam and cover slip. Job done.