Plant - LR White Morphological fix & embed

Procedure for fixing and embedding plant tissue with LR White for morphological study

**Protective Equipment**; Gloves, lab coat, fume hood and safety glasses.

Remember to **label all vials** with; sample name, fixative type, your name & date

Primary Fixation:

2- 4% Paraformaldehyde/ 2% - 3% Glutaraldehyde Overnight, 4° C

 in 0.05 M Phosphate or PIPEs buffer

Rinse: With buffer 3x 5 – 10 min ea

Warning: Osmium tetroxide causes uncontrolled polymerization when used with LRW, contact staff for more information if needed

Dehydration:

 30% Ethanol 10 mins

 50% Ethanol 10 mins

 60% Ethanol 10 mins

 70% Ethanol 10 mins

 80% Ethanol 10 mins

 95% Ethanol 10 mins

 100% Ethanol 3x, 10 mins each

Infiltration: (LRW Teratogen)

 LR White : Ethanol

 1 : 3 each step overnight

 1 : 2

 1 : 1

 3 : 1 (optional step, depends on tissue density)

 100% LR White overnight, in hood or rotary table 3x

Embedding: LR White in gelatin capsules or other O2 excluding mold, place label in mold then sample

Curing: Overnight in oven at 60 - 65**°** C

 - or use vacuum oven (check for correct temp (60 -65**°** C or 140 – 149**°** F)