

Chestnut Pollen
Pollen Germination Assay
v. 2007

1. Make a 0.5% sucrose solution with distilled water (room temp worked the best)
2. Add 1.5mL of sucrose solution to a small vial
3. Add in 4mg of pollen anthers, shake well to get the pollen into the solution and out of the anthers.
4. We use deep well glass microscope slides and a cover slip
 Rub vaseline on the edge of the deep well (this is so it creates a seal)
 Place one drop of the solution onto the cover slip and place on the deep well slide
5. I like to incubate overnight at 31 degrees C
6. View under a microscope; I count 100 pollen grains and use a clicker to keep track of pollen that has germinated.

In the past we made moisture chambers. To do this take a Petri dish, and the ring from a wide mouth mason jar. Place a small square of paper towel to cover the bottom of the dish then fit on the mason jar ring. Add 5ml of water to the dish. Place 5 drops of the anther/sucrose solution onto a regular microscope slide, set it on the edge of the mason jar ring, and put the top back on. Incubate it over night at 31 degrees C. Place a cover slip on when ready to view under the microscope.