

Hydroponic Pea Sowing Seeds LSOP No. LSOP18 Version 1.1 Location UQ Node/Centre-wide Policy/Procedure **UQ- Equipment** UQ -waste <u>OGTR</u> Risk **Assessments** Approved by Elizabeth Dun **Date Approved** 16/08/2021 **Date Effective** 14/06/2021 **Next Review** 14/06/2026 **Date Contact for** plantsuccess@uq.edu.au **Assistance**

1.0 Scope

This procedure covers the sowing of pea seeds for hydroponics.

This LSOP does not cover media preparation or pea sowing for soil. Please refer to LSOP17.

2.0 Definitions

PPM - preservative plant mixture

3.0 Materials and Equipment

- 1. Eppendorf tubes (with lids removed)
- 2. Scissors
- 3. Pipettes & Pipette Tips
- 4. Hydroponic Pea Media Preparation (LSOP17)
- 5. HydroBotanics Grow A+B solution
- 6. Blu-Tac or Masking Tape
- 7. Blue Pipette Boxes
- 8. Black Boxes (to place pipette boxes in)

4.0 Prescribed Actions

- Cut lids off 180 Eppendorf tubes (can use pre-made tubes with lids already removed)
- 2. Pipette ~1.5mL of media into each tube. Allow media to set for ~30 minutes. (if using pre-cut tubes, then place tubes firmly upside down on either masking tape or blu-tac to prevent media leaking out)
- 3. Cut off the bottom of the Eppendorf tubes (can use pre-made tubes with bottoms already removed)
- 4. Place tubes in blue pipette boxes.
- 5. Break surface of the media using a pipette tip (to help roots grow through media)
- 6. Place 1 L107 seed into each tube
- 7. Pour ~100mL of HydroBotanics Grow A+B solution into each blue pipette box.
 - NB: HydroBotanics solution contains 5mL GrowA and 5mL GrowB in 1L water + I added 0.1% PPM to prevent bacterial and fungal growth.
- 8. Place blue boxes in a black box covered by another black box and place in the growth cabinet at 16hr day/8hr night at 22°C
- 9. Once the seeds have germinated place the blue box with the lid open (or remove the lid) in the growth cabinet.

NB: Use a small spatula to push some of the seeds out of the Eppendorf tube, as when the seeds were imbibed with water they expand and take up the diameter of the Eppendorf tube such that sometime either the shoot or root is stuck on the wrong side of the seed.