

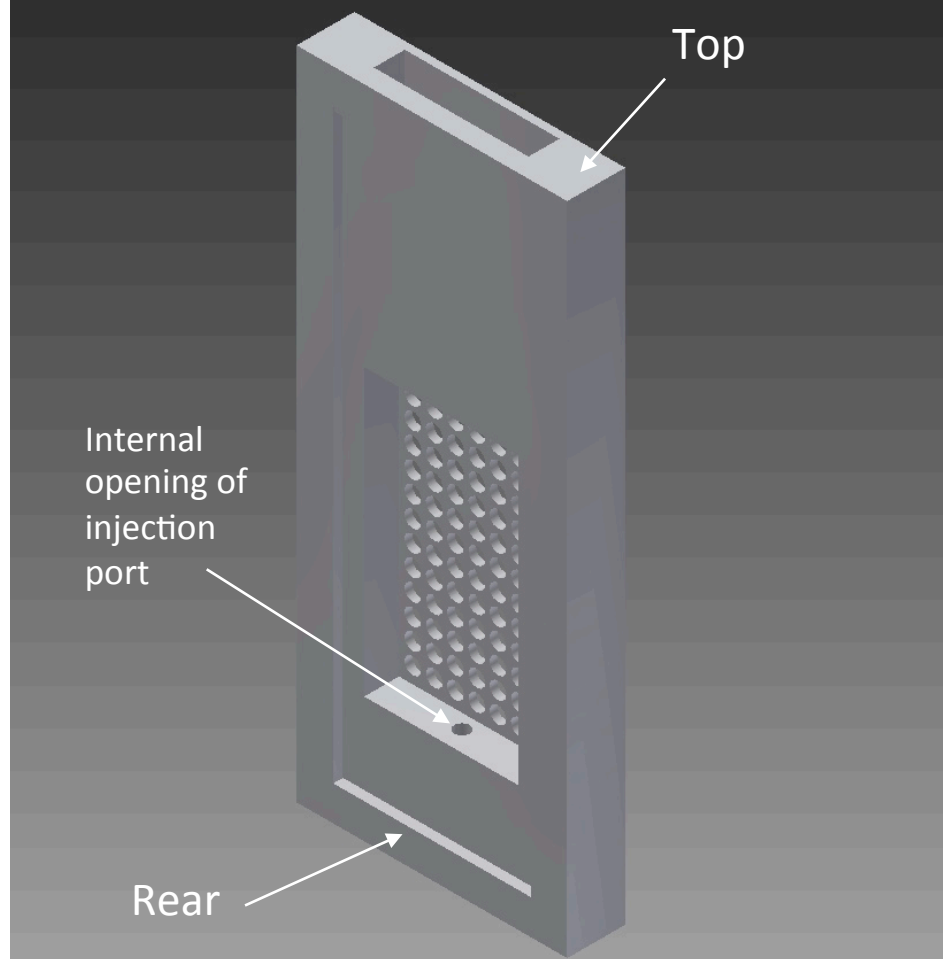
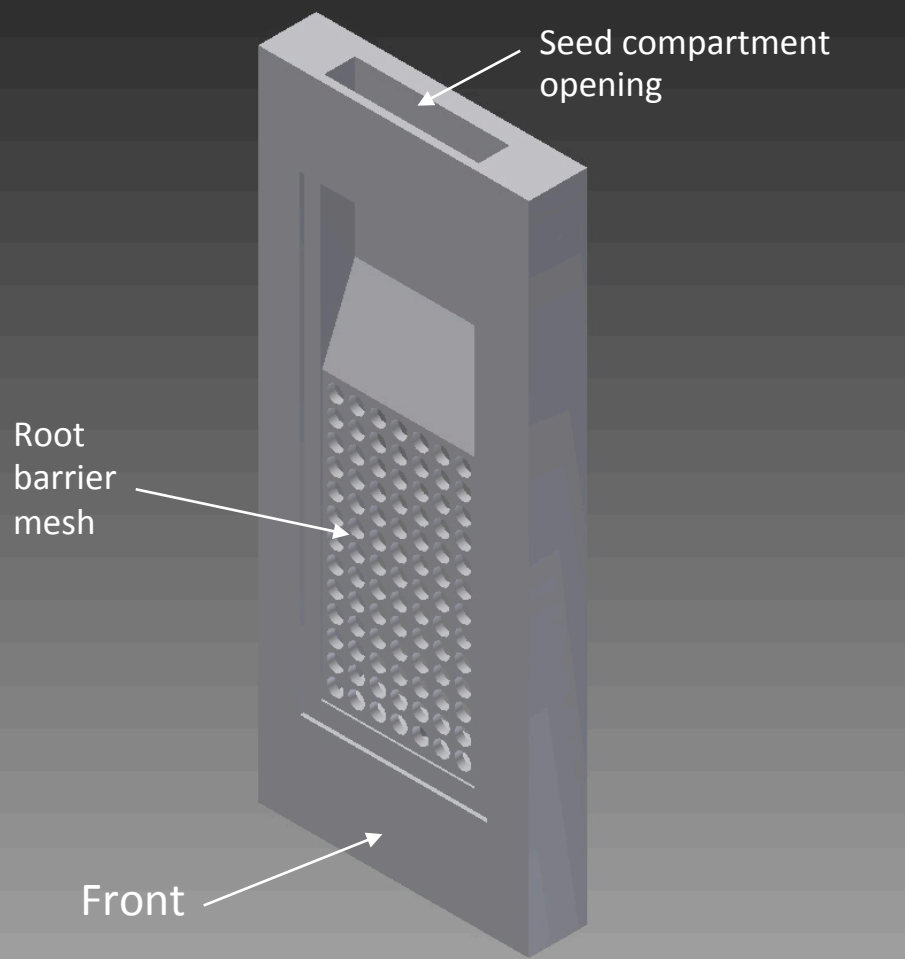
Root chamber assembly instructions

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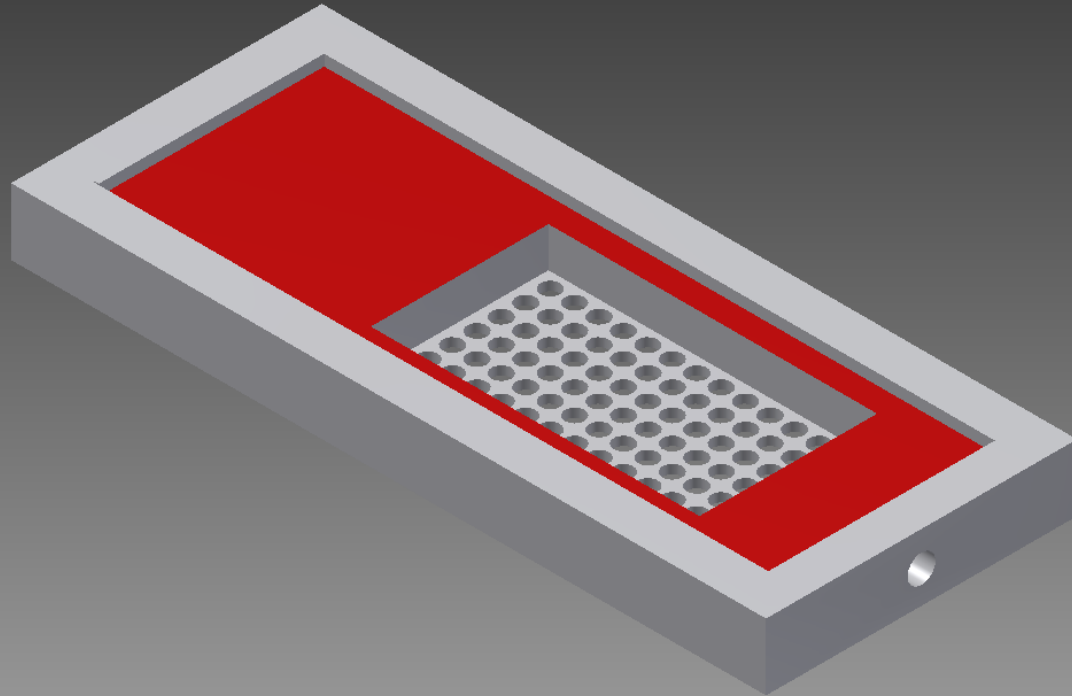
Unassembled device



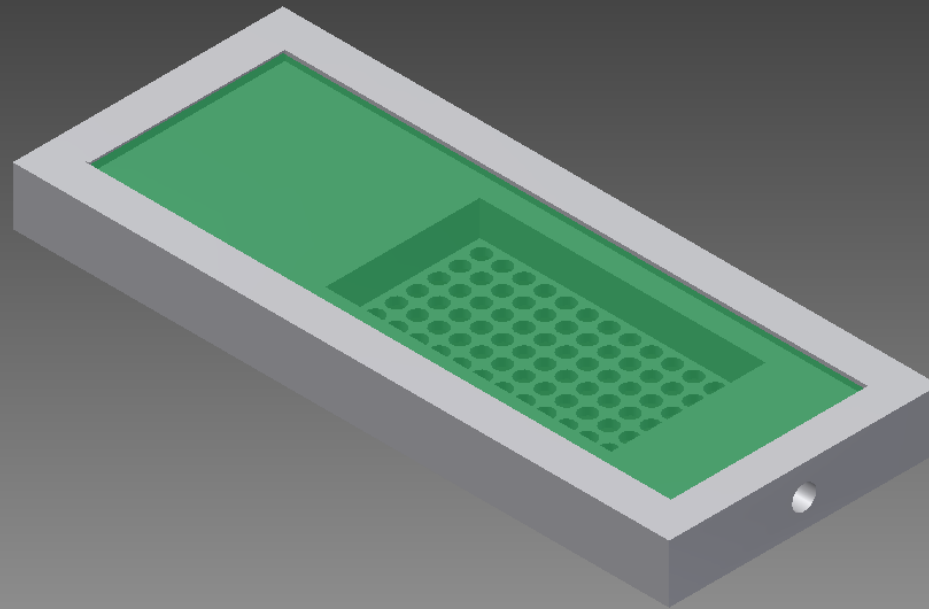
Assembly steps (~10-20minutes):

1. On the back side of the chamber, dispense a small amount of clear, watertight adhesive (e.g. E6000 craft adhesive epoxy) onto the full perimeter of the recessed face.
2. Carefully place a 25mm x 75mm x 1mm glass microscope slide down on the adhesive coated inset. Apply gentle pressure to the glass slide to help seat the slide into the chamber and ensure that the adhesive creates a complete seal around all 4 edges of the slide.
3. Place the chamber face down (glass slide facing up) and allow sufficient time for the adhesive to set.
4. On the front of the device, dispense a small amount of the same adhesive onto the 3 sides of the recessed face.
5. Carefully insert a 24mm x 60mm #1 glass coverslip and apply gentle pressure to ensure seating of the coverslip and even distribution and sealing of the epoxy along the left, right, and bottom sides of the slide.
6. Place the chamber face up (coverslip facing up) and allow sufficient time for the adhesive to fully set.

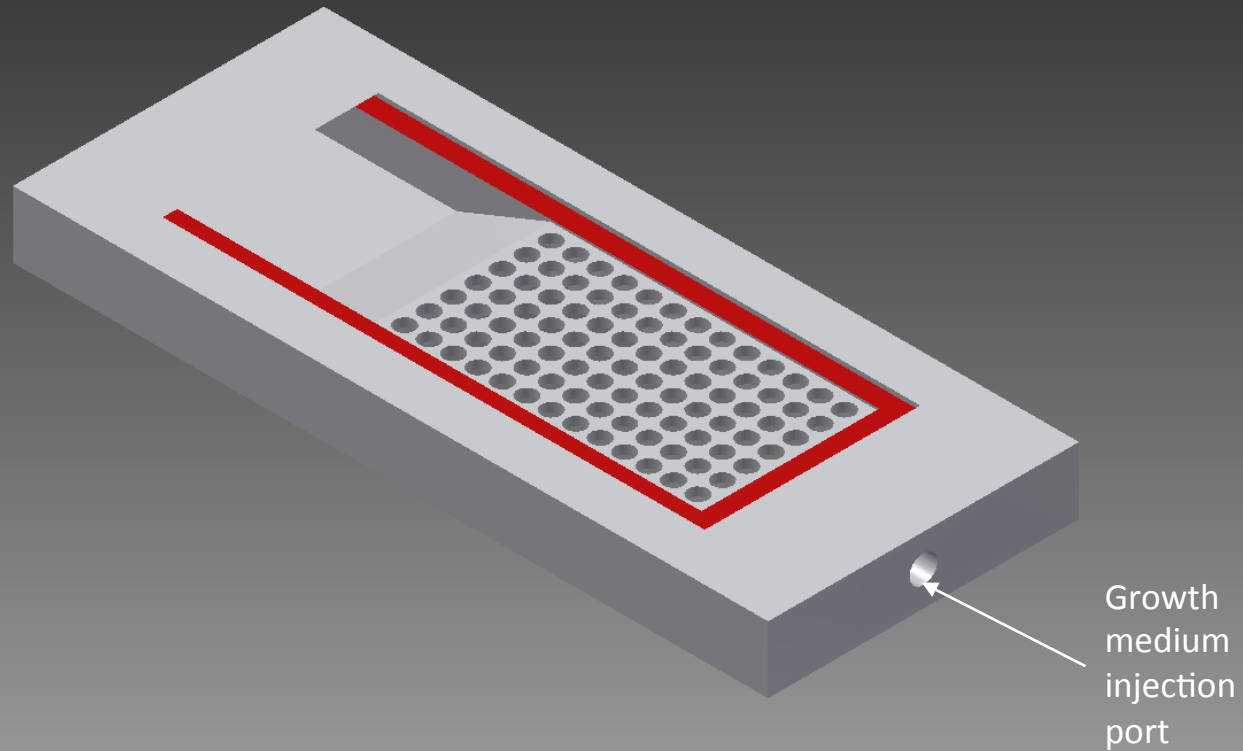
1. On the back side of the chamber, dispense a small amount of clear, watertight adhesive (e.g. E6000 craft adhesive epoxy) onto the full perimeter of the recessed face (shaded red).



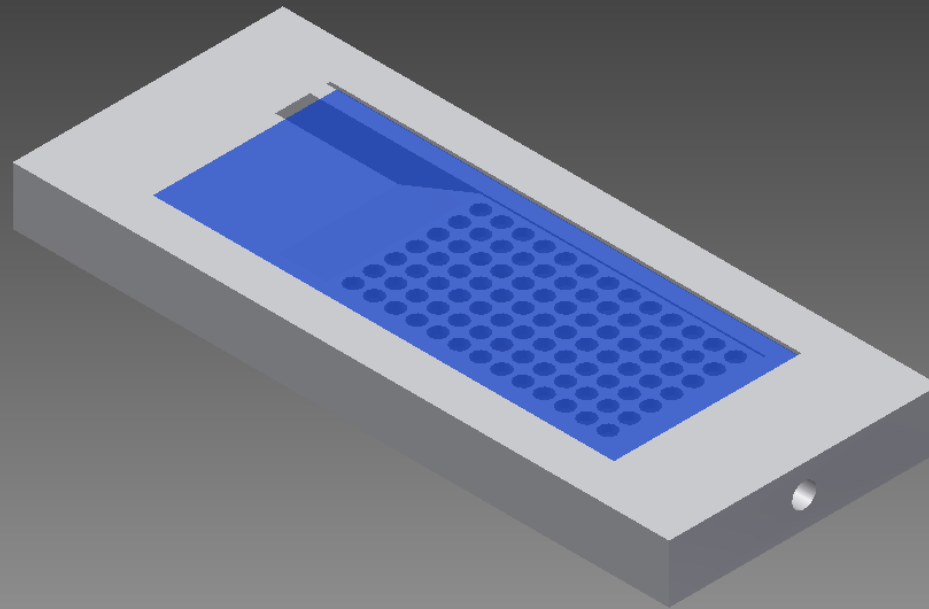
2. Carefully place a 25mm x 75mm x 1mm glass microscope slide (shaded green) down on the adhesive coated inset. Apply gentle pressure to the glass slide to help seat the slide into the chamber and ensure that the adhesive creates a complete seal around all 4 edges of the slide. Note the chamber has been rotated in this image.
3. Place the chamber face down (glass slide facing up) and allow sufficient time for the adhesive to set.



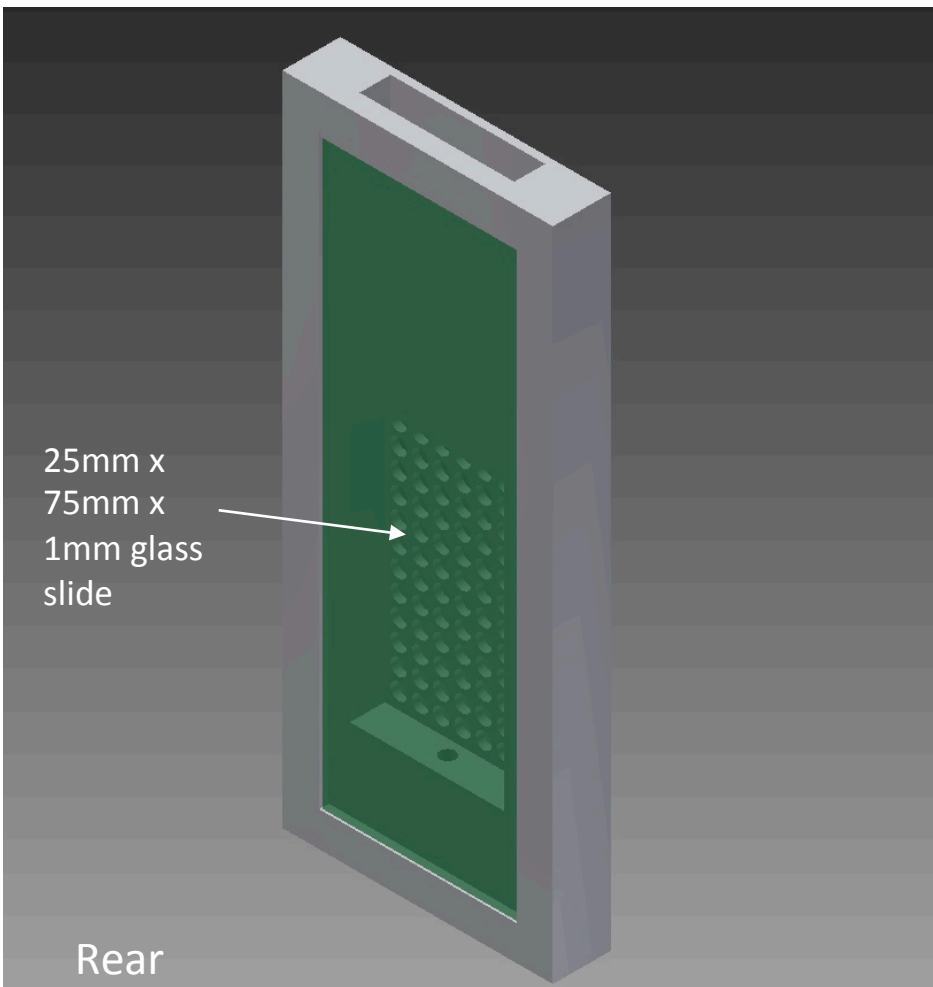
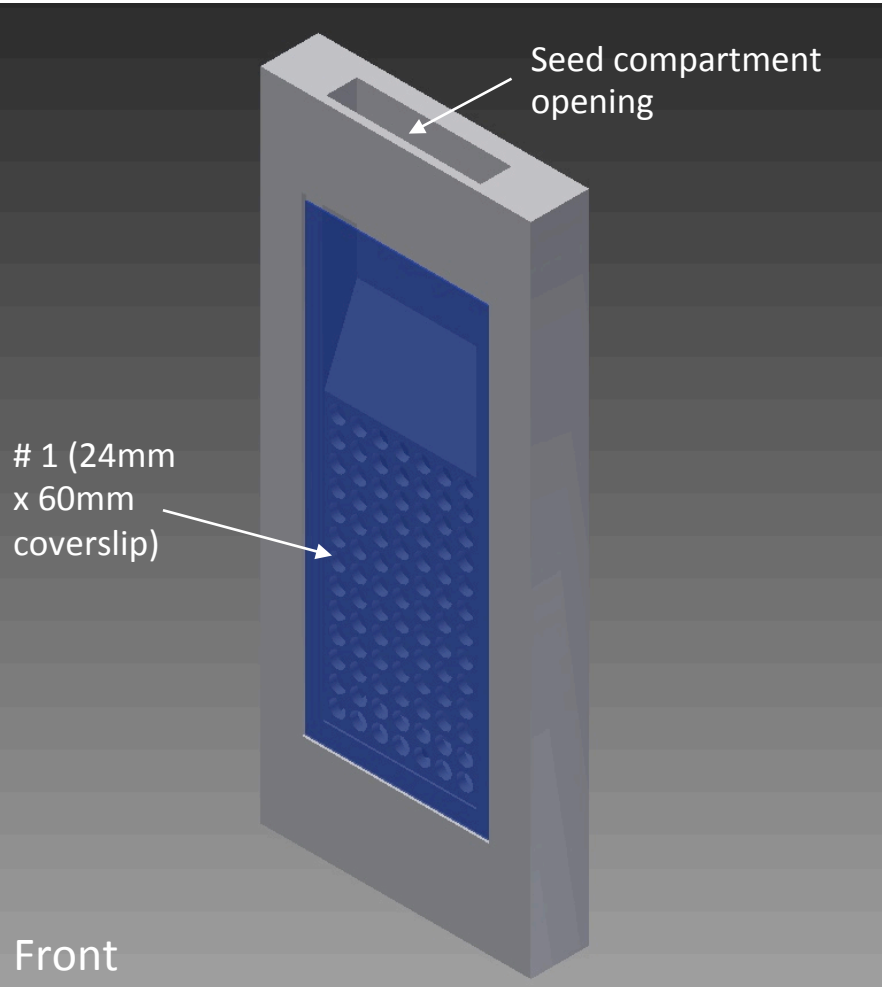
4. On the front of the device, dispense a small amount of the same adhesive onto the 3 sides of the recessed face (shaded red).



5. Carefully insert a 24mm x 60mm #1 glass coverslip (shaded blue) and apply gentle pressure to ensure seating of the coverslip and even distribution and sealing of the epoxy along the left, right, and bottom sides of the slide.
6. Place the chamber face up (coverslip facing up) and allow sufficient time for the adhesive to fully set.



Fully assembled device included sealed coverslip (shaded blue) and sealed microscope slide (shaded green).



Incorporation of plant seed and growth medium:

1. After the adhesive is fully cured, introduce a seed(s) into the seed compartment at the top of the device.
2. Inject the desired growth medium (e.g. aqueous buffer, agarose, etc.) through the bottom port by connecting a 1/8" outer diameter tube to the injection port. With the device held in an upright position, fill the device until the growth medium reaches the seed in the bottom of the seed compartment.
3. Injecting the growth medium slowly can help to reduce trapping air bubbles within the device.
4. Note, a non-liquid growth medium may also be used and introduced into the device prior to sealing the glass slide and coverslide necessary for viewing.