

USE OF THE VAILLANCOURT LAB DEW CHAMBER IN THE SEED HOUSE

1. First, send an e-mail request to Doug (doug.brown@uky.edu), and include the following information:
 - a. What days you will want to use the chamber (unless otherwise specified, Doug will assume you will use it from noon on the first day until noon on the next day).
 - b. What plant species, and how many plants you will be putting in the chamber.
 - c. What pathogen the plants will be inoculated with. **THIS CHAMBER IS NOT CLEARED FOR BL-2 PATHOGENS.**

Be sure to have permission from Doug to use the chamber before you inoculate your plants. Make your request for only one night at a time, and no more than one week in advance, to help with planning. If you have requested the chamber and discover that you will not need it after all, notify Doug right away so that the chamber can be used by others.
2. The chamber is always on, and the settings are NEVER to be changed or disturbed by anyone other than Doug. Default settings are 15 hour daylength and 72° Fahrenheit. If you need different settings for some reason, ask Doug to make those adjustments.
3. Water your plants in the morning. Label the plants with your name, date, and treatment information.
4. At around 12:00 noon, inoculate the plants using the table immediately outside the chamber, washing it down before and after your work with 10% bleach. Immediately put the inoculated plants into the chamber. The chamber will then cycle through the rest of the day and begin to build up humidity until dew actually forms on the leaves during the night cycle. Do not open the chamber during this cycling process.
5. Remove the plants about 12:00 noon the next day. This allows time for the plant to acclimate itself to lower humidity conditions before it is removed to the greenhouse or lab. Moving out of high humidity into low humidity too rapidly will cause the cells to rupture and die.
6. DO NOT leave your plants in the dew chamber for longer than 24 hours. It is not a growth chamber, and it should not be used as one. Your plants will not be happy. Doug will have the right to remove and destroy any unauthorized plants found in the chamber.