



Repeating Crumley Try 2: Setup

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I am on Trial 2 of the Repeating Crumley Experiment. Trial 1 was a pretty decent success, but I ran into some issues regarding image acquisition, experiment stability, and water evaporation. I made some adjustments and began the experiment again. Here is how I setup the second trial:

- There are 20 seeds of the Dark Virginia variety from the [Tobacco Seed Company](#) in each sample.
- There are 8 water samples: di water, deuterium depleted water, 33% d2o in di water, 66% d2o in di water, 99.9% d2o, 33% d2o in ddw, 66% d2o in ddw, and a sample of di water without any seeds.
- The sample of di water with no seeds is acting as a control to monitor the possibility of fungal/mold growth. 20 seeds were added to water and allowed to incubate in solution for 30 minutes. At the end of the incubation period the seeds were removed and the sample was sealed.
- The seeds were added to each sample container ([analyslides](#)), and a water type was added immediately after seed addition.
- After closing the samples, clear nail polish was added around the rim to seal the chambers from the surrounding environment.
- Data is taken using a [Logitech HD Pro Webcam C910](#).

In the previous trial, the images were taken from below the samples. This resulted in several sample drops. In this trial, I have placed the samples flat on the lab top and am taking data from above the samples. In this manner, the samples have been significantly less agitated then before.

My biggest worry is that the nail polish has/will contaminate(d) the water samples, producing undesirable results. I have ordered a bunch of supplies to test what may create the best seal, while creating the least amount of interaction with the sample water. That experiment will be started as soon as possible and the result will be used to create a third trial run.