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PHYSICS

Repeating Crumley 5: The Setup

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I like to say this a lot, but this will most likely be the last trial of this experiment. We have convincing data that Crumley didn't do the experiment correctly back in 1950 and this trial will just provide us with hopefully slightly better data. It may lead to another set of experiments that are similar in setup where we track growth rates in differing DDW amounts.

And with that said, let's get on with the setup:

- I used virginia gold #1 tobacco seeds, but did not setup with arabidopsis this time. As per usual, I can only track 8 samples at a time and I'm doing all 8 with the tobacco. ~~Maybe~~ I'll do arabidopsis in the successor experiments.
- As per usual there is >/= 30 seeds per sample with 6ml of each water type in each sample.
- The water types are: Control (no seeds, DI water), DI water, 33% D2O, 66% D2O, 99% D2O, DDW (which we are considering calling deuterium free water, DFW), 1% D2O in DDW, and 33% D2O in DDW.
- The reason for the 1% D2O in DDW is just so there is some amount of D2O in DDW without it drastically affecting the seed growth but so that there is some amount of D in the H2O that is more than DI water. I did 5.94mL of DDW and 0.06mL of D2O so you know.
- I didn't preplan this experiment at all, and I feel it is painfully obvious.

Seeds were poured into analyslides and counted. There are at least 30 seeds (but no more than 40) in each sample and I did this because seeds typically get crushed when I seal the samples. I added the water types to the prelabeled slides (6mL of each). And put the analyslide lids on the samples.

Instead of sealing the samples with vacuum grease like usual, I placed them in the fridge. I will remove them on Monday as a way to synchronize the growth and at that point I will seal the chambers. I felt the longer I had them out at RT, the more chance the seeds would have to begin growth and sealing the chambers takes me a couple hours.

So prepare yourselves for the first pictures of the new crop to come on Monday. Until then…