A picture containing food, plate, drawing

Description automatically generatedLSU AgCenter Home Gardening Certificate Course

Home Lab Activity **# 5**

Activity Title: **Seed Germination (Viability) Test**

**Materials Needed:**

Paper towels or absorbent light-colored material

Packet of seeds or pack of dried beans

Clear sealable plastic bag or container

Marker

Mister bottle (optional)

Water

Garden Notebook & Pen

**Instructions:**

1. Label your plastic bag or container with the date and name of seed you are testing.
2. Fold your paper towel in half to make a crease. Then open it back up.
3. Count out at least 10 seeds or dried beans from your packet. Using multiples of 10 makes the calculation of % germination easier.
4. Arrange the seeds on one half of the paper towel so they aren’t touching each other and fold the other half of the towel over the arranged seeds.
5. Alternatively, with larger seeds like dried beans, you can lay the seed in a row along the paper towel and roll it up.
6. Now moisten the paper towel. Using a mister bottle is an easy way to do this. You can also pre-moisten the towel, squeeze out the excess and then spread it out before putting the seed on it.
7. Slide the “seed sandwich” into your labelled clear sealable plastic bag or airtight container.
8. Place the sealed bag in a dark location where the temperature will be in the 65-75 degree range. A kitchen cabinet or drawer works great. If you are testing seed that require light to germinate (e.g. lettuce), then put them in a semi-shady spot. Avoid putting the test in direct sunlight because the temperature inside the bag will become excessively high and could kill normally viable seed or make your calculated % germination artificially low.
9. About every two days (set a reminder on your phone), check your test and look for the formation of the radicle. The radicle is the embryonic root and the first part of the seed to emerge during germination. Count and record the “days from starting” and how many have germinated. For some, it is easier to record the number of germinated seed each day and then remove those from the test. When you check again, any seed that has germinated is added to the number and also removed.
10. The seed packet, seed catalog or other source should tell you how long it typically takes for your seed to germinate. Continue to check your seed for a few days past this point.
11. At the conclusion of the test, calculate your germination percentage. For example, if 9 out of 10 seed germinate, your germination rate is 90%; 8 out of 10 is 80%.

**Results:**

**Reminder to post a photo to discussion board link**