Blaine Thompson

Experimentation

1. Put on proper safety equipment
2. Gather materials
3. Label 4 mason jars a b c and d
4. Add a nasturtium plant and 200 ml of potting soil to every jar
5. In jar b add 10 aphids in jar a add nothing in jar c add 10 ladybugs and 10 aphids in jar d add 10 ladybugs
6. Put coffee filter on the top of each mason jar and screw on lid
7. Put all plants in direct sunlight and add 100 ml of water every 24 hours
8. Document results every 12 hours
9. Clean up and properly dispose of bugs

Problem statement how does a pest's natural predator affect the pest on a plant

hypothesis:

if the amount of the pests natural predator increases the impact of the pest on the plant will decrease because the natural predator will eat the pest so it doesn't starve to death also so the plant isn't affected by the pest

data table

jar	what's inside the jar	does plant have bite marks or holes	how many missing bugs	other observations
A	none		0	the plant seems to be dying
B	aphids		0	the plant is dying and there is a brownish mold on the plant
C	ladybugs and aphids		5	all of the aphids are dead

D	ladybugs		3	some of the ladybugs are dead because they starved

conclusion:

My hypothesis was “if the amount of the pests natural predator increases the the amount of the pest on the plant will decrease because the natural predator will eat the pest so it doesn’t starve to death also so the plant isn’t affected by the pest” this hypothesis was proven to be true by my experiment in the experiment when there was ladybugs introduced into one of the jars all of the aphids were killed and there was no mold on the plant while when there was only aphids introduced into the plant there was trace amounts of the mold on the nasturtium plant.

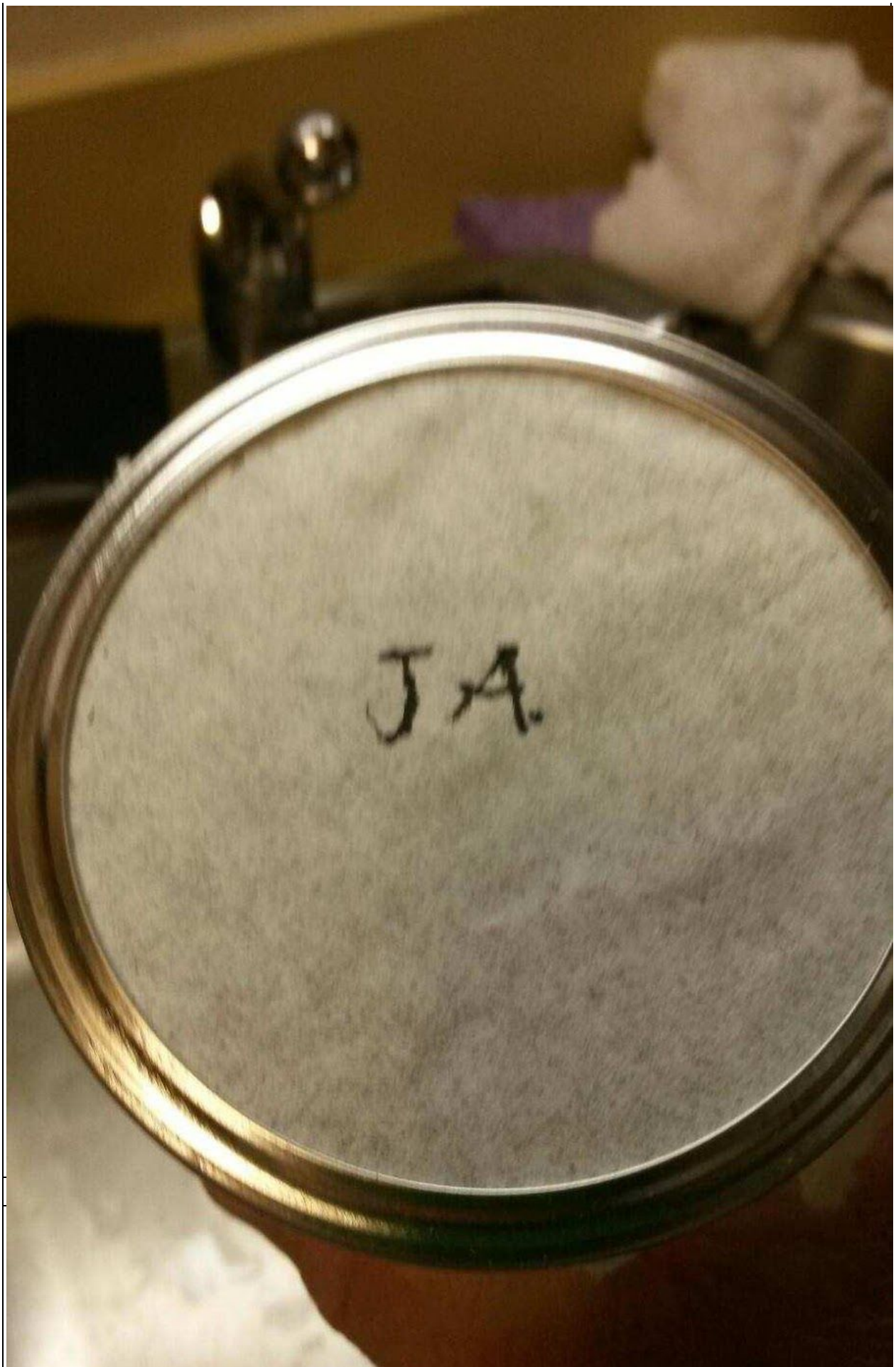
My experiment was invalid for a few reasons first we were unable to have three trials second some of the plants that I got were already discolored third of all due to shipping half of the aphids that I needed were already dead or were only larvae so I don't think the effect on the plant was as severe as it should have been.

If I were to do another experiment similar to this one I would test how normal pesticides affect the pest and the plant its on so I could compare the results and see which method is more effective.

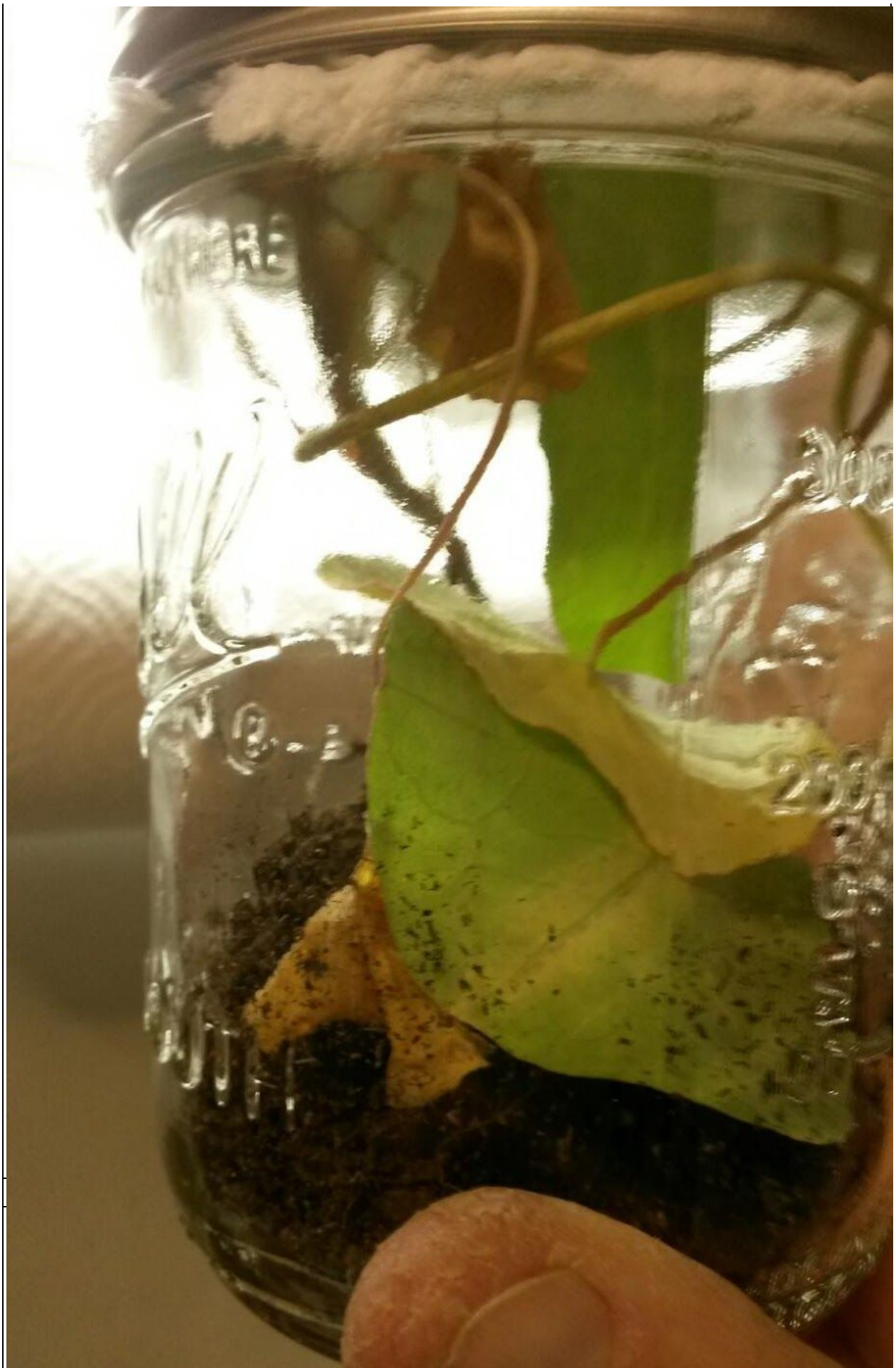

Ball
WIDE MOUTH


10 =

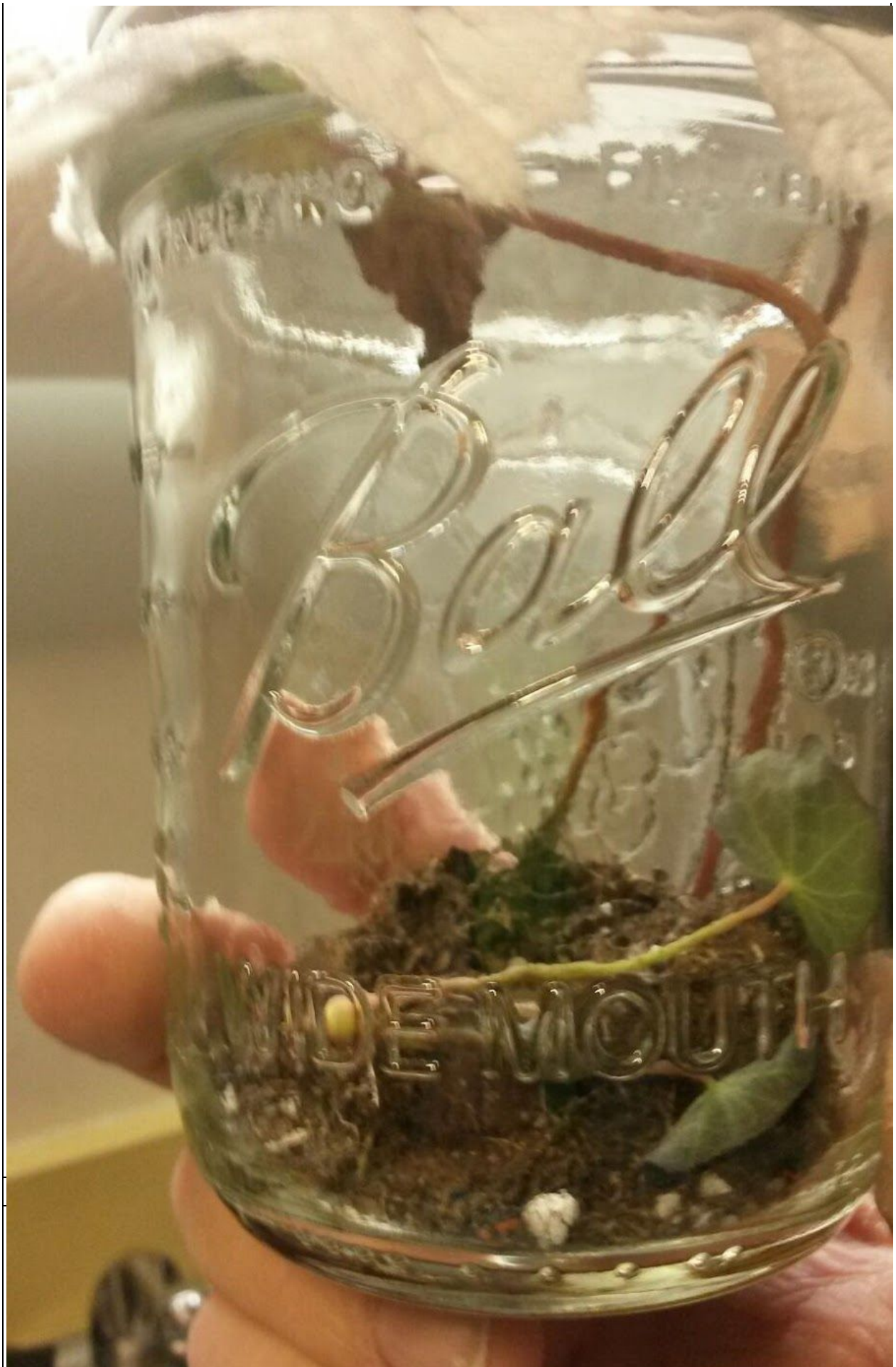

1 CUP

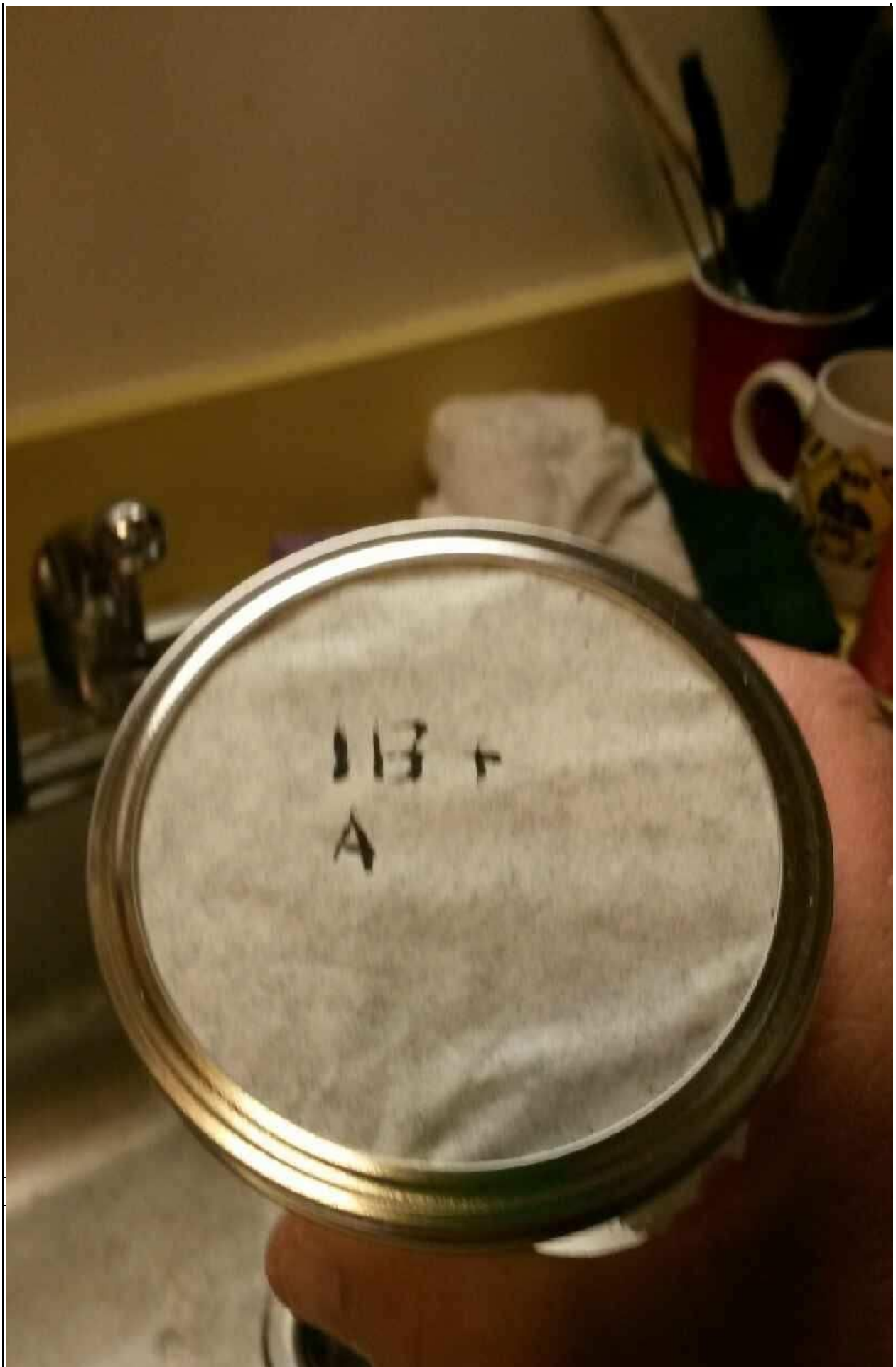

J A.

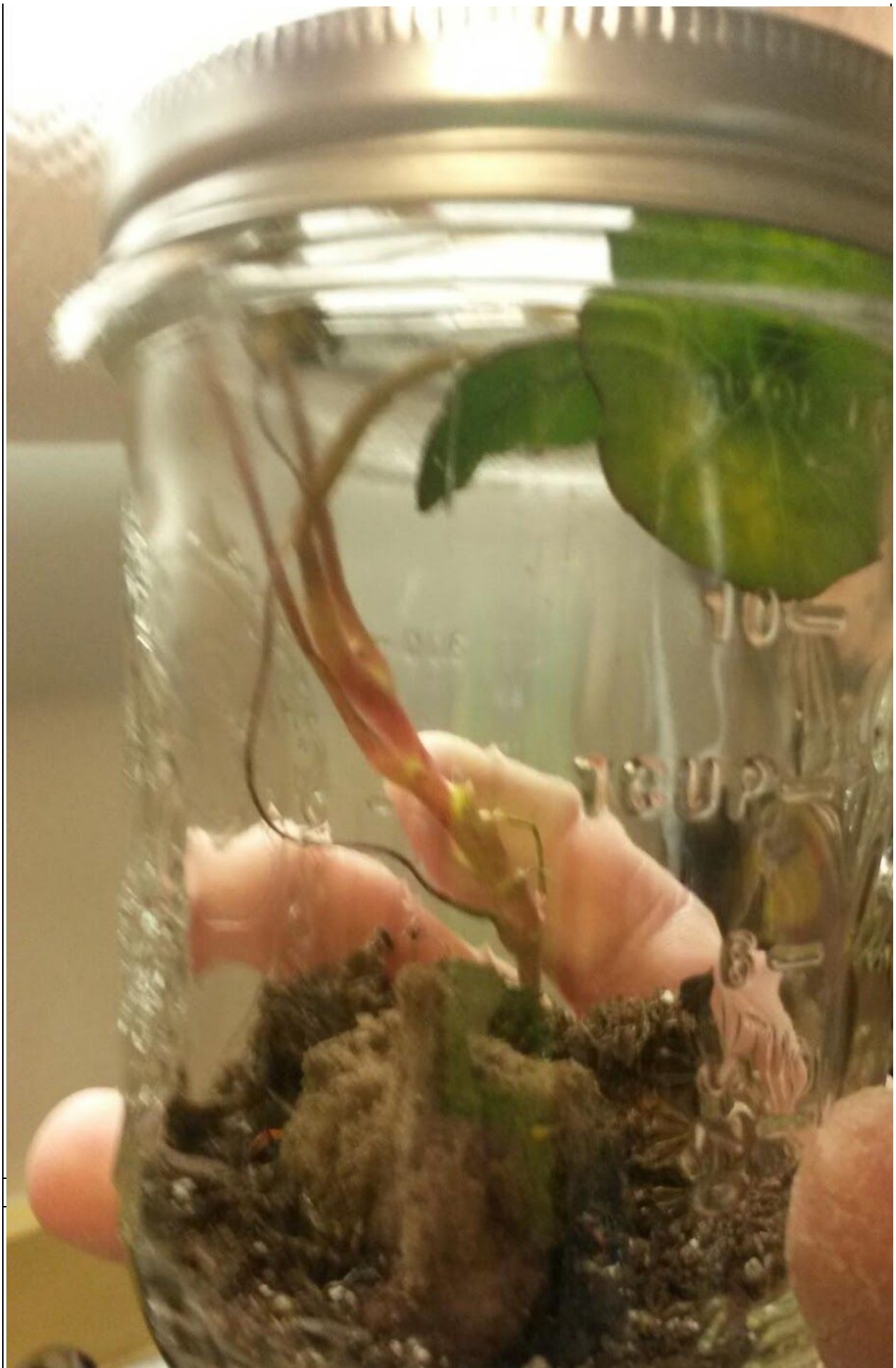

1 CUP



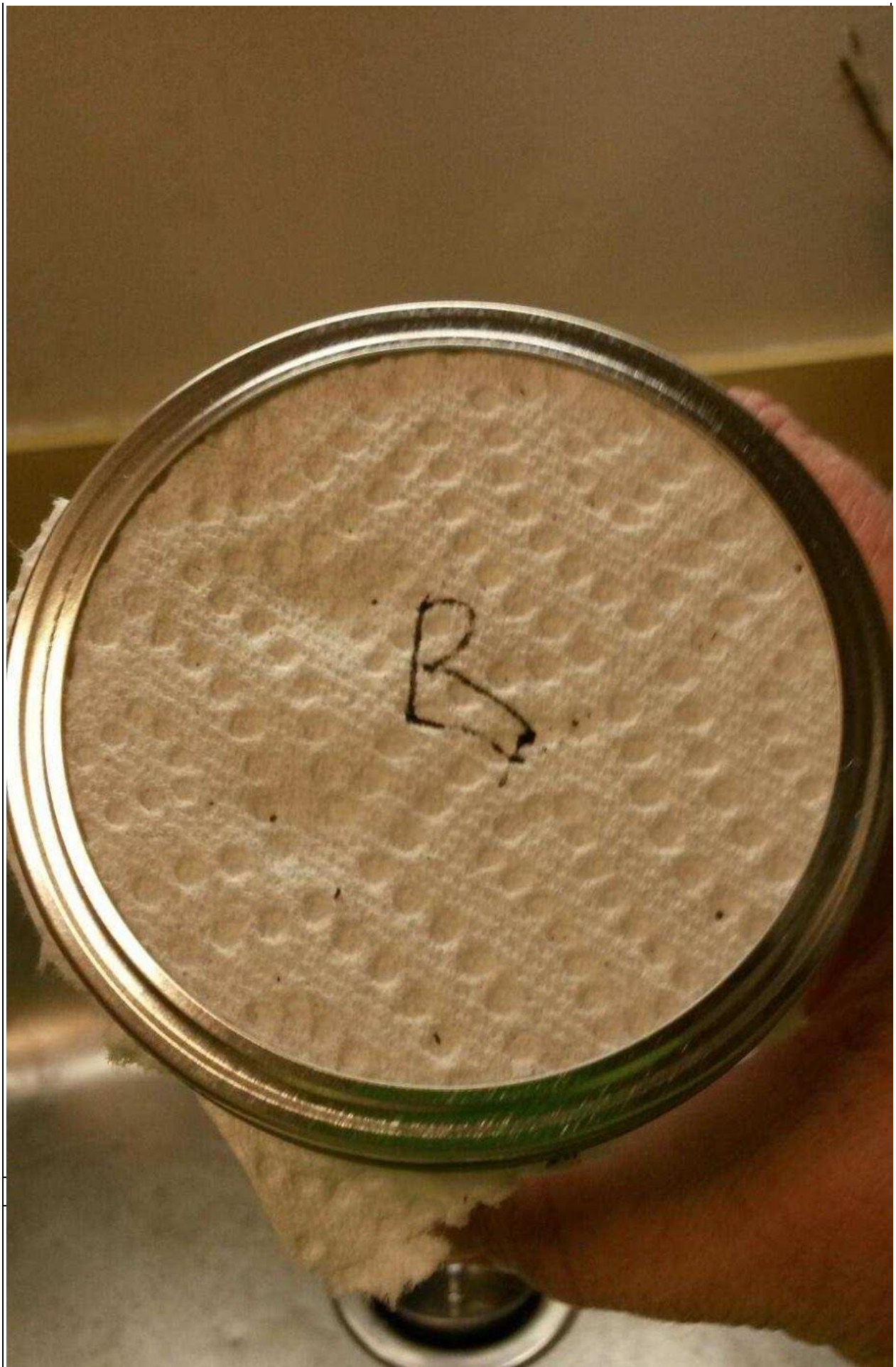

R


Coca-Cola


A

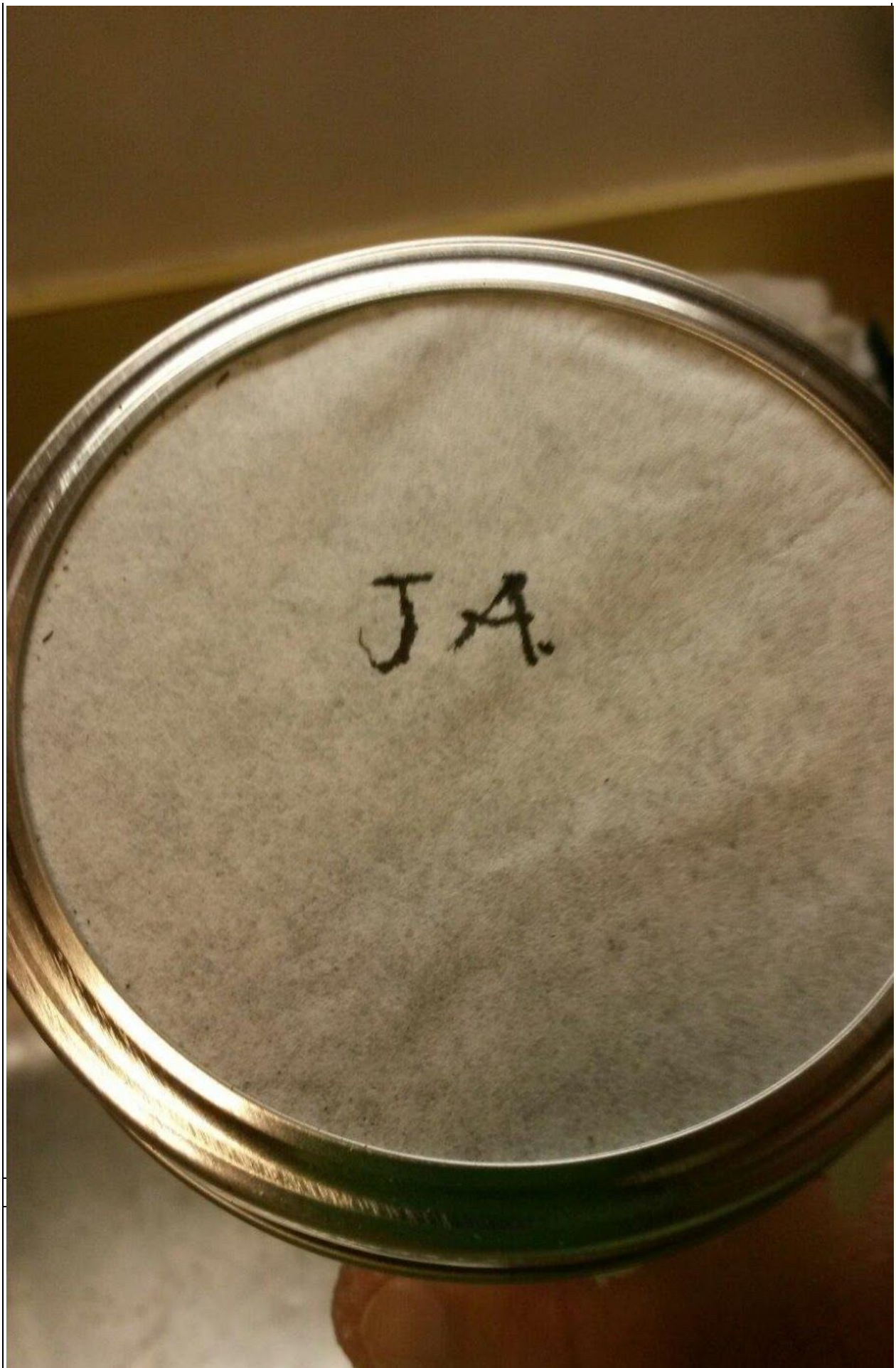



13 r
A


R


Ball


Ball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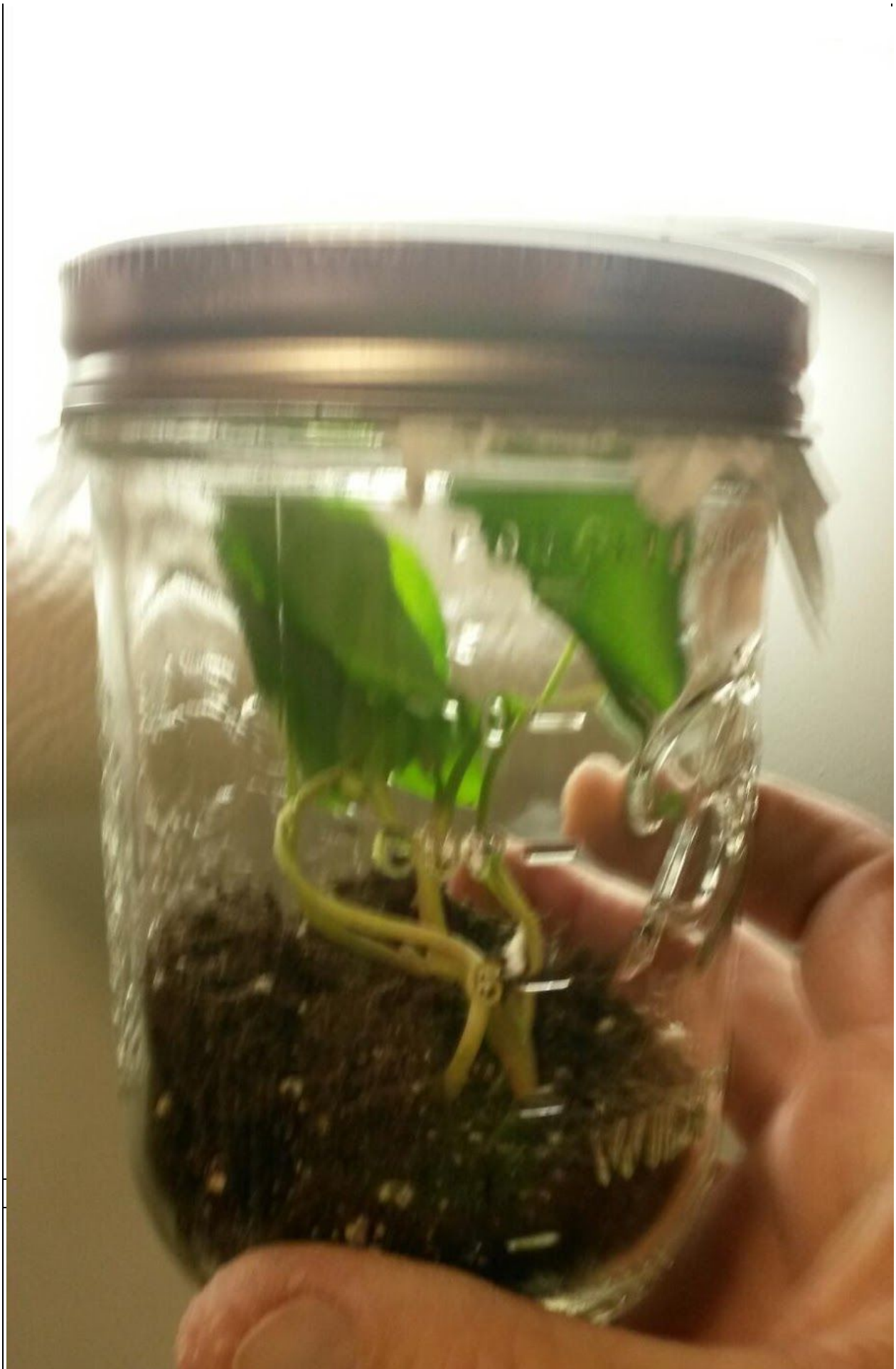
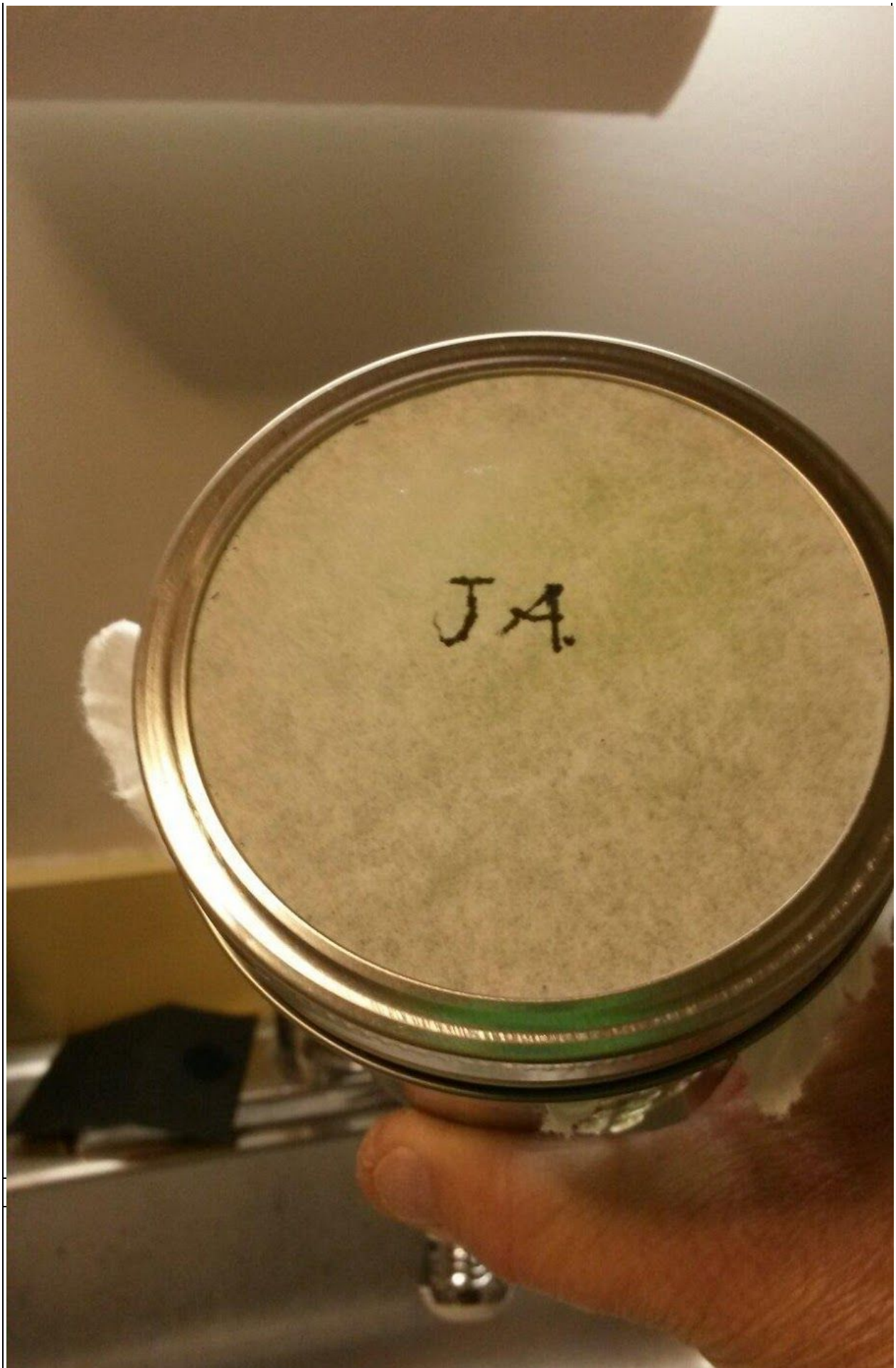
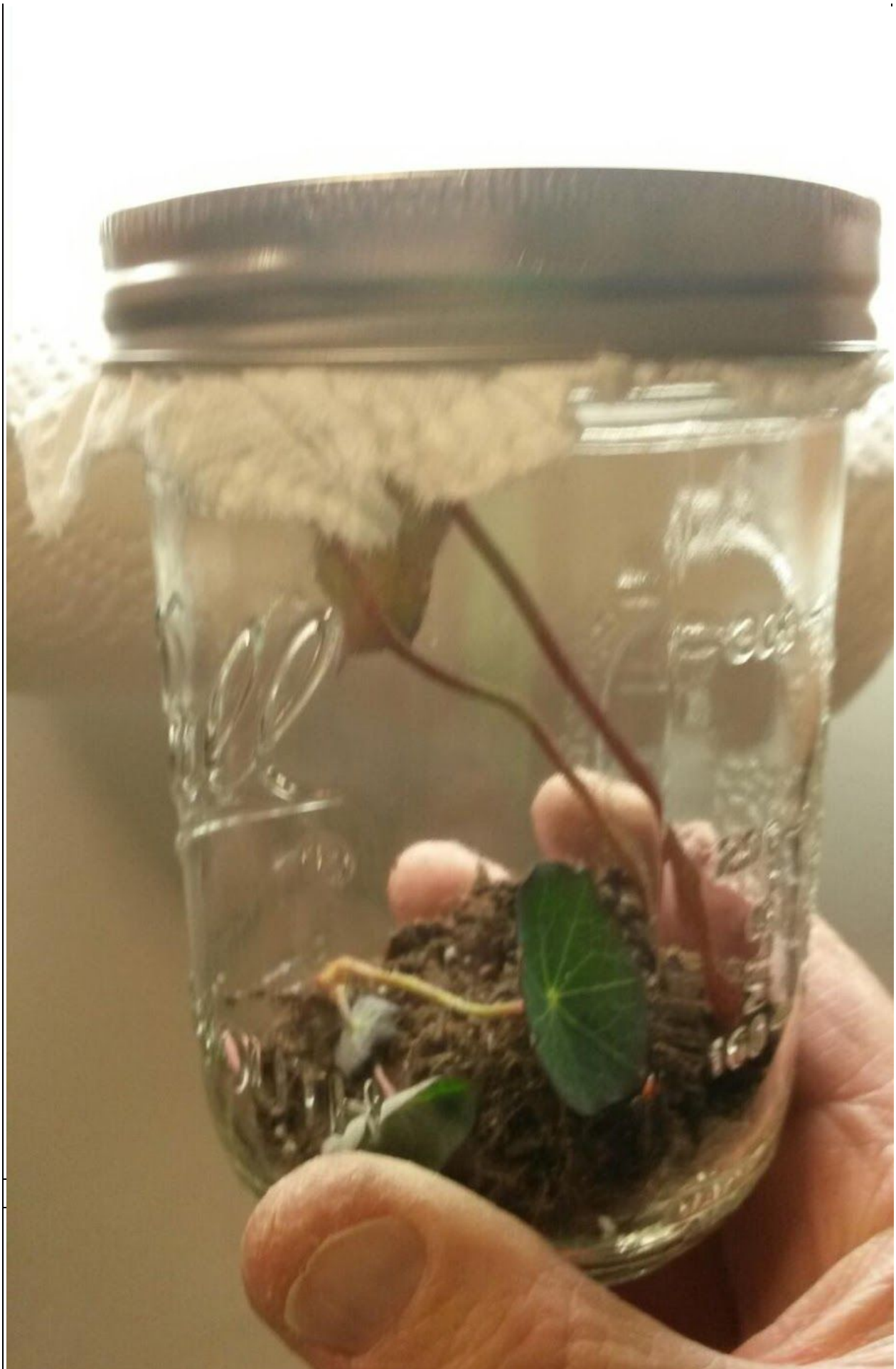
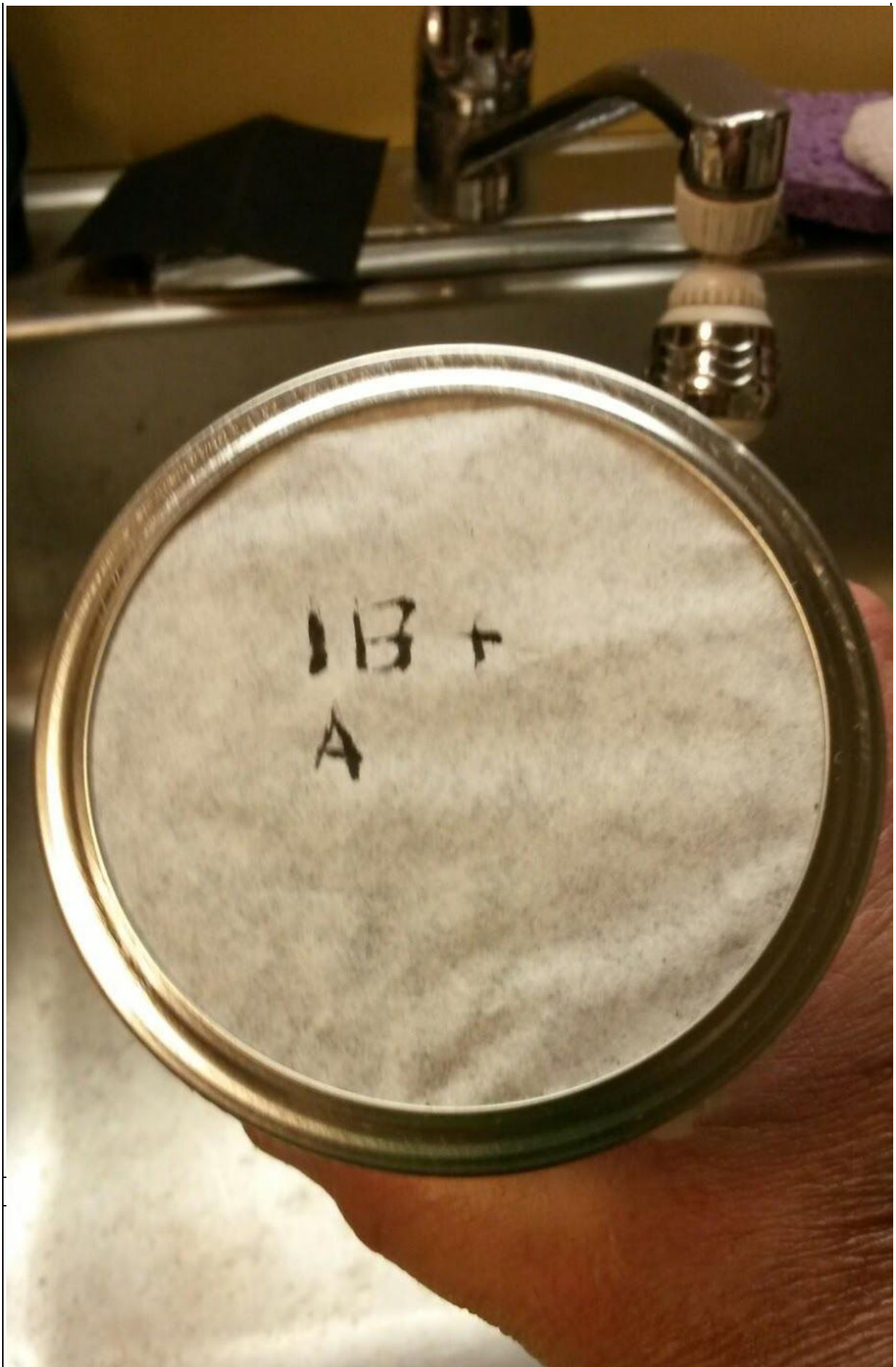



JA


B




113 r
A