How are seeds germinated hydroponically? – Part II

Mr. González

Do Now

- Answer the following in your note book:
 - What is a hypothesis?
 - How is a hypothesis written out?
 - Can a hypothesis be written as a data table?

Do Now

- Answer the following in your note book:
 - What is a hypothesis?
 - An educated guess.
 - How is a hypothesis written out?
 - If...then...because.
 - Can a hypothesis be written in a data table?
 - Yes. See lesson below.

HW

- Continue your germinating lab report.
- Add Hypothesis table and written hypothesis.
- Add materials and procedures to your report

Objectives

- I can formulate a hypothesis by writing it out and using a data table.
- I can calculate the real germination rate and % error.
- I can germinate seeds hydroponically.

- Develop a hypothesis for the germination success rate in your lab report.
 - Example table hypothesis:

Day	Hyp. Rate%	Adjusted Hyp
6		Leave
7		Me
8		Blank
9		For
10		now

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Hypothesis written out: If seeds are left to germinate between 6 and 10 days then...

Day	Hyp. Rate%	Adjusted Hyp
6	50	
7	55	
8	70	
9	75	
10	90	

Hypothesis written out: If seeds are left to germinate between 6 and 10 days then eventually there will be a 90% germination rate because...

Day	Hyp. Rate%	Adjusted Hyp
6	50	
7	55	
8	70	
9	75	
10	90	

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Hypothesis written out: If seeds are left to germinate between 6 and 10 days then eventually there will be a 90% germination rate because according to (.....) 10 days is the maximum time that healthy seeds need to germinate.

Activity

You will now add seeds to your sponges.

Materials

- Air conditioner (weather)
 sealer sponge 1 ¼ inches
 x 1 ¼ inches x 42 inches.
- Scissors
- Permanent Markers
- Grids
- Germinating trays
- Waterproofing plastic (optional)

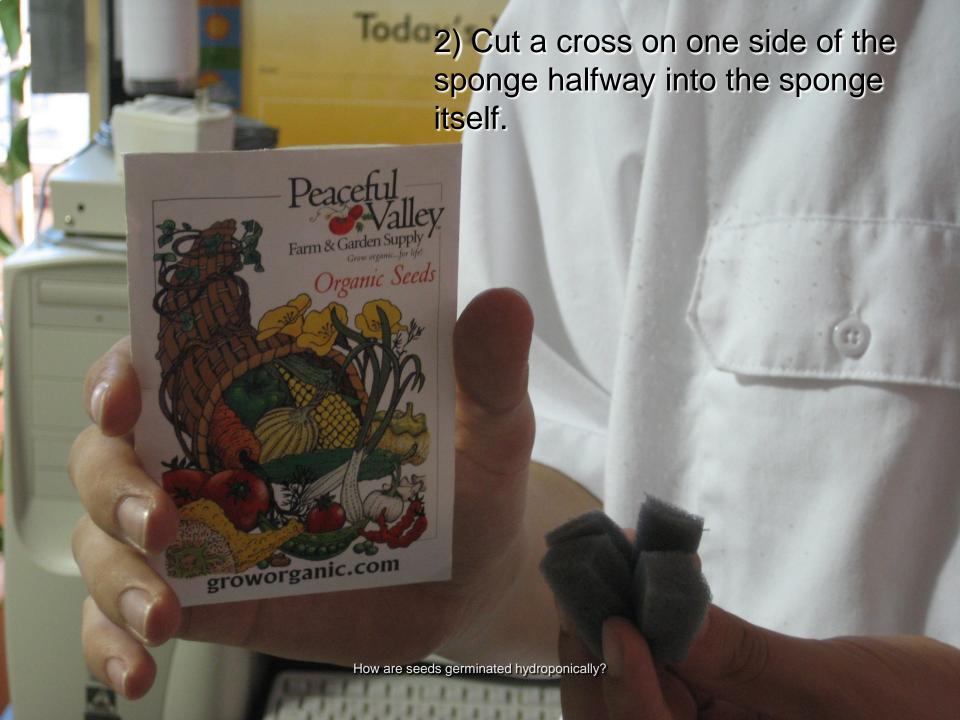
- Black plastic garbage bag to cover seeds.
- Tray cover
- Seeds
- Paper for seeds
- RO/DI water
- Watering can or water bottles
- Ruler

Procedures

- Add no more than 4 seeds to the sponge by placing each one on a separate notch in the cross.
- Make sure you keep a record of the kind of seed you used in you log sheet.
- Place sponges in grid by taking the sponge from the "cross" side place it 2/3 of the way into the grid.
- Adjust the height pulling from the bottom.
- Space out the sponges skipping a square along each row (length-wise).

Procedures

- Place the tray in the desired location. Fill up the tray about half way with water.
- Place grid in water and spray the sponges until they are soaked.
- Cover your sponges with the black plastic sheet.
- Place the tray cover over your seedlings to retain moisture.
- Add air stone to tray.
- Monitor growth every day. Spray sponges daily if necessary.
- Once your seedlings are about 3-5 inches long and have strong roots you may transfer them to the AEMs.





4) Label your sponges with a unique symbol. On your log sheet write germination date, # of sponges, # of seeds per sponge, # of seeds in total, type of plant, and the symbol you used.









Products of Hydroponically Germinated Seeds.







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