

pH Testing Lab

A pH meter is a useful tool in the greenhouse and each grower should be able to accurately operate the meter. This procedure is for testing your greenhouse water and soil media.

Materials Needed:

pH meter

Glass Beakers

pH solution 4 and 7

Distilled water

Strainer or fine mesh

Testing your pH meter

1. Pour a small amount of pH 4 solution into a beaker
2. Immerse the pH probe and take the reading. It should read 4.0. If it doesn't your meter may need to be calibrated.
3. Remove probe and rinse with distilled water
4. Test the accuracy of the meter again by immersing the probe in a small amount of 7.0 solution. Adjust meter if needed.
5. Remove probe and rinse with distilled water.

Testing your greenhouse water

1. Collect a small amount of water from your greenhouse into a glass beaker
2. Insert the probe of the pH meter and record the pH of the water.
3. Remove probe and rinse with distilled water

Testing your greenhouse soil media

1. Collect a fresh, dry growing media sample 1-2 days before testing is done.
2. Place 1 tablespoon of media into a glass beaker and add 30cc of distilled water.
3. Stir and let stand for 20-30 minutes.
4. Stir two more times within the next 20 minute period – 40-50 minutes total.
5. Obtain a clean beaker.
6. Place a strainer or fine mesh over the clean beaker
7. Drain the water out of the soil by pouring your soil beaker sample into a strainer allowing the water to pass thru into the clean beaker
8. Insert the probe into the water collected and record the pH of the water
9. Remove the probe and rinse with distilled water.

This is a free resource provided by Georgia Agricultural Education
Original creator: Melissa Riley, Central Region Horticulture Teacher



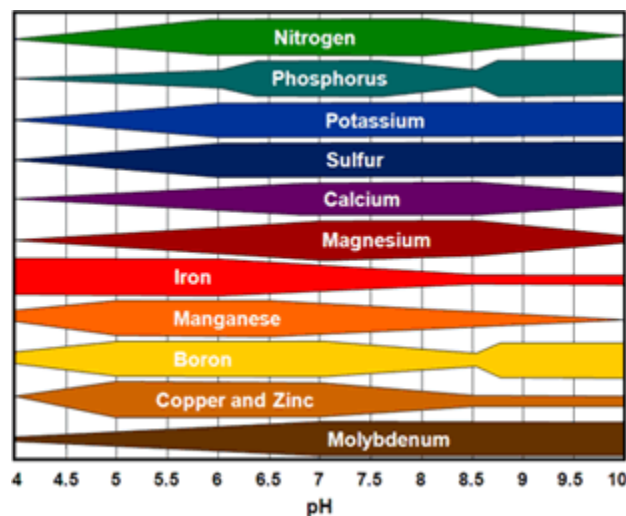
Student Response:

What was the pH of the greenhouse water?

What was the pH of the greenhouse growing media?

Lets apply what you learned

1. Why is knowing the pH of your water and growing media important?



2. Using the chart above determine what nutrients are easily available to your plants using only your greenhouse water?

Do the same for the pH of your greenhouse soilless media?

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