Do copper rods impact the length of a carrot?

Materials

- 1 foot copper wire x3
- Carrot seeds
- White 9x9 sq 10 inch container x3
- Black 9x9 sq 10 inch container x3
- Potting soil
- water

Purpose

- The topic is plants
- I chose this topic because I wanted to see if the carrots have more nutrition.

Question

- Do copper rods impact the length of a carrot?

Background Research

- In my research I read the container can be big or small.
- The webpage also said that it should be placed in direct sunlight.
- For the carrots to properly grow it needs to be deep enough for the roots.
- The container needs to keep the soil in it and provide good drainage.
- It should not be made of toxic materials.
- The soil should not be made of diseases or weeds.
- It should be loose enough for the roots to go deep.
- It is best if you don’t use tap water.
- The container needs to be at least 1 quart.
- The carrot need to be grown at least 2-3 inches apart.
- To grow some of the carrots with electroculture a foot of copper wire is needed.

Independent Variables

- Copper spiral

Dependent Variables

- Same carrot seed
- Location-sun
- Container size
- Amount of water
- Soil

Hypothesis

If a carrot is planted with copper rods then it will grow taller because according to my research electroculture gardening has several benefits such as: improved soil, greater yields, and faster ripening.

Procedures

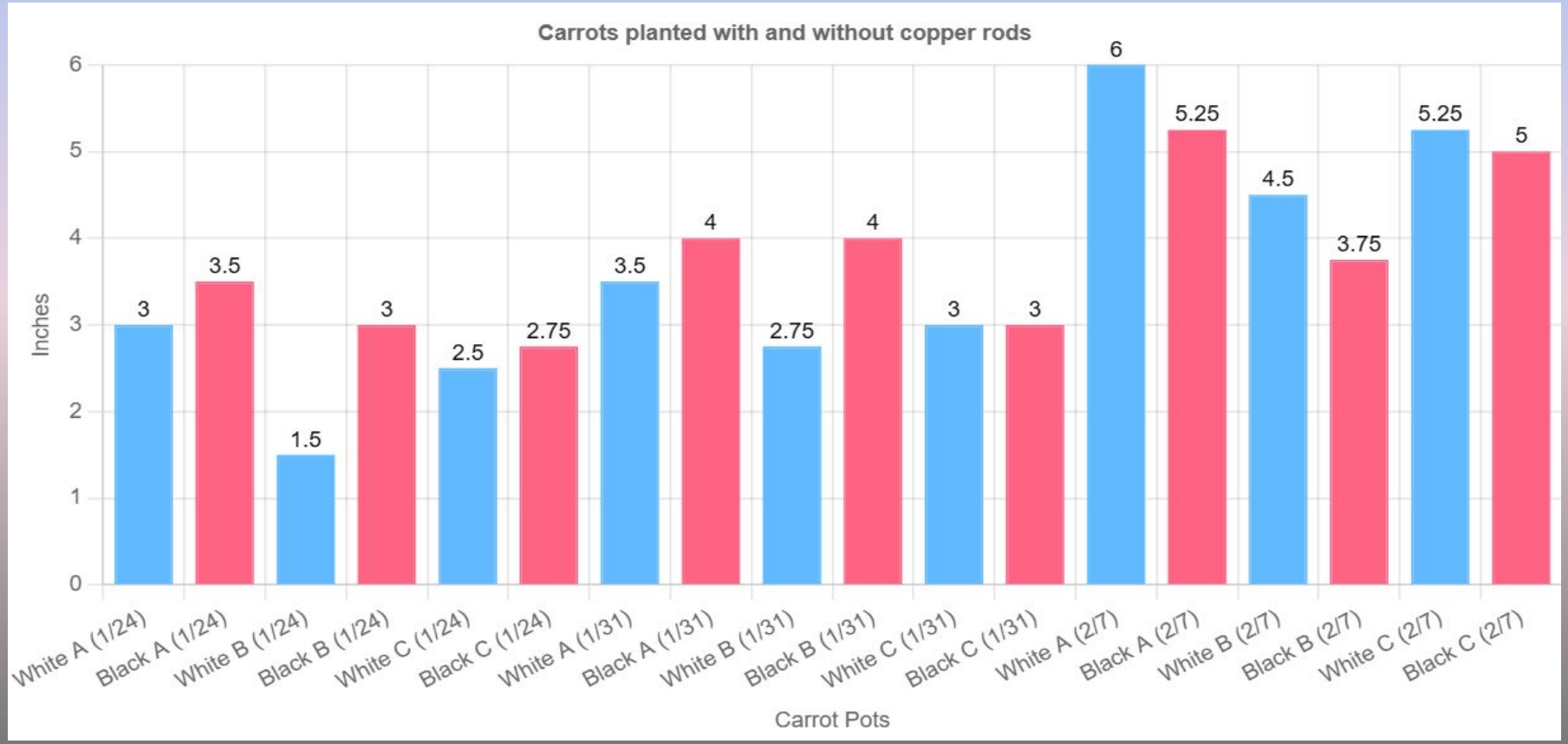
1. Gather all the materials.
2. Cut open the soil.
3. Get a cup and scoop soil into it and fill a pot up to ¾.
4. Sprinkle carrot seeds into the pot.
5. Next top the seeds with soil.
6. Move the pots where they will grow.
7. Water the seeds.
8. Clean up the mess.
9. Twist each 1 foot copper rods into a coil.
10. Put the rod into the white pots.
11. Then check the carrot seeds in two weeks.
12. When the carrots are one inch tall move some carrots out, so that all of them are three inches apart.

Pictures with copper rods

Pictures without copper rods

Blue = Copper rod
Pink = no copper rod

Data Analysis



Conclusion

The answer to my question is yes copper rods do affect carrots positively.

My project is important because if carrots can have more nutrition they will grow more.

It supports it by my research.

It relates to the real world because when we have more carrots, we are healthier.

I could improve my experiment by paying more attention to my plants.

I want to learn does it affect other vegetables.

Works cited

Extension.Arizona.edu-search carrots

thespruce.com/what-is-electroculture-gardening-8697899