

ABSTRACT

My project is about invasive plants and soil temperature correlation. The reason why I am doing this project is because my grandmother likes to garden in the backyard and I noticed lots of weeds in the garden. This weed is called Henbit. The Latin name for Henbit is *Lamium amplexicaule*. I wanted to know if the soil temperature with the plant will be warmer than normal soil temperature. To do so, first use a nail to dig into the ground and measured 5cm. Then put the soil temperature thermometer in the hole. Wait a few minutes then record the data. Next use the nail to dig the hole deeper to 10cm. Record the data. I did this procedure for ten days. This data supported my hypothesis because the soil temperature with the plant was warmer than the normal temperature.

HYPOTHESIS

I think the soil temperature with the invasive plants will have a greater temperature than the soil temperature without the invasive plants.

MATERIALS

1. Soil Temperature Thermometer
2. Nail
3. A Piece of Paper
4. Globe Protocol

PROCEDURES

1. First I used the nail and dig into the ground measured 5cm.
2. Then I put the soil temperature thermometer in the hole.
3. Next I waited until it stops. Record the data.
4. Then I took the soil thermometer out and take the nail and dig deeper to 10 cm.
5. I put the soil thermometer back in and record the data.
6. I did this procedure for ten days.

RESULTS

These data were taken around 3:30pm.

Day 1: The soil temperatures with invasive plants were -1 degrees Celsius, -5 degrees Celsius, and -3 degrees Celsius. The average was -3 degrees Celsius. The soil temperatures without invasive plants were -1 degrees Celsius, -2 degrees Celsius, and -1 degrees Celsius. The average was -0.6 degrees Celsius.

Day 2: The soil temperatures with invasive plants were -1 degrees Celsius, -6 degrees Celsius, and -2 degrees Celsius. The average was -3 degrees Celsius. The soil temperatures without invasive plants were -1 degrees Celsius, -1 degrees Celsius, and -2 degrees Celsius. The average was -1.3 degrees Celsius.

Day 3: The soil temperatures with invasive plants were -2 degrees Celsius, -7 degrees Celsius, and -6 degrees Celsius. The average was -5 degrees Celsius. The soil temperatures without invasive plants were -2 degrees Celsius, 1 degree Celsius, and 1 degree Celsius. The average was 0 degrees Celsius.

Day 4: The soil temperatures with invasive plants were 2 degrees Celsius, -1 degrees Celsius, and 1.5 degree Celsius. The average was 0.83 degrees Celsius. The soil temperatures without invasive plants were -1 degrees Celsius, and 1 degrees Celsius, and -2 degrees Celsius. The average was -0.6 degrees Celsius.

Day 5: The soil temperatures with invasive plants were 2 degrees Celsius, -2 degrees Celsius, and 0 degree Celsius. The average was 0.3 degrees Celsius. The soil temperatures without invasive plants were 2 degrees Celsius, 3 degrees Celsius, and 2 degrees Celsius. The average was 2.3 degrees Celsius.

Day 6: The soil temperatures with invasive plants were 3 degrees Celsius, 0 degrees Celsius, and 1.5 degrees Celsius. The average was 1.5 degrees Celsius. The soil

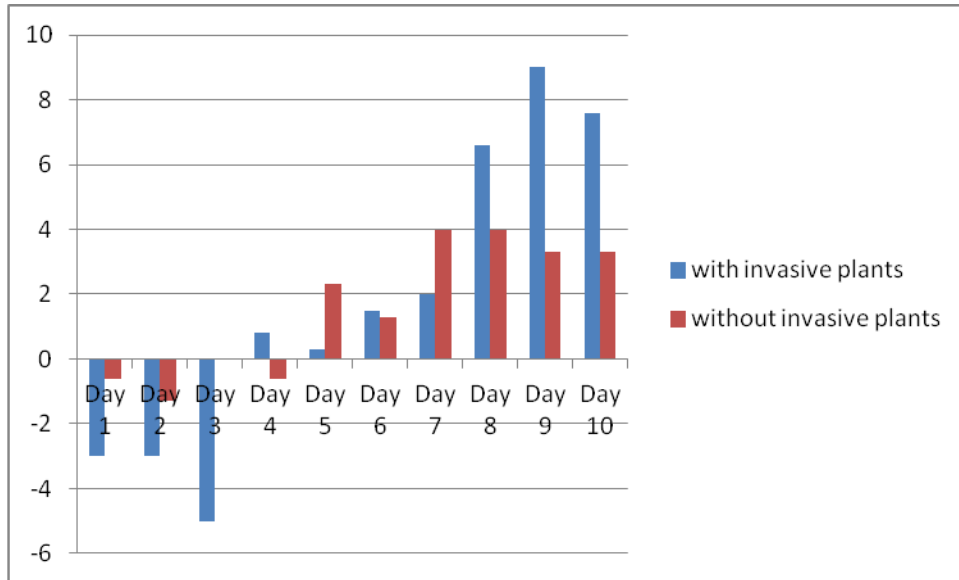
temperatures without invasive plants were 1 degrees Celsius, 2 degrees Celsius, and 1 degrees Celsius. The average was 1.3 degrees Celsius.

Day 7: The soil temperatures with invasive plants were 6 degrees Celsius, 0 degrees Celsius and 0 degrees Celsius. The average was 2 degrees Celsius. The soil temperatures without invasive plants were 4 degrees Celsius, 5 degrees Celsius, and 3 degrees Celsius. The average was 4 degrees Celsius.

Day 8: The soil temperatures with invasive plants were 9 degrees Celsius, 6 degrees Celsius, and 5 degrees Celsius. The average was 6.6 degrees Celsius. The soil temperatures without invasive plants were 5 degrees Celsius, 4 degrees Celsius, and 3 degrees Celsius. The average was 4 degrees Celsius.

Day 9: The soil temperatures with invasive plants were 10 degrees Celsius, 9 degrees Celsius, and 8 degrees Celsius. The average was 9 degrees Celsius. The soil temperatures without invasive plants were 4 degrees Celsius, 3 degrees Celsius, and 3 degrees Celsius. The average was 3.3 degrees Celsius.

Day 10: The soil temperatures with invasive plants were 8 degrees Celsius, 8 degrees Celsius, and 7 degrees Celsius. The average was 7.6 degrees Celsius. The soil temperatures without invasive plants were 2 degrees Celsius, 3 degrees Celsius, and 3 degrees Celsius. The average was 3.3 degrees Celsius.



CONCLUSION

According to the data collected from the ten days, my hypothesis was supported. The soil temperature with invasive plants was warmer than the soil temperature without invasive plants. But this data only proves that only a specific certain plant has a soil temperature warmer than normal soil. This data can help the world by using it to persuade other gardeners to get rid of their invasive plants.

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