

## summary

This research aims to study the effect of rusty water on the bougainvillea and how to solve this problem?. The importance of this research is to know the effect of irrigating the bougainvillea with rusty water, its treatment and what factors lead to rust in water? We did an experiment on the bougainvillea and watered it with rusty water for a full four months, we wrote all the changes that happen by biological and non-biological factors. It was concluded that as we multiply the amount of rusty water in irrigating the bougainvillea, the more likely it will die. After the experiment ended, we found out that rusty water may cause wilt or spots on leaves. These spots usually develop when there is an excessive amount of moisture on the leaves of bougainvillea for a long period of time. The acidity and alkalinity of soil and water affected the bougainvillea growth. experts recommend checking the iron water pipes, cleaning them every six months, and irrigating the plants with pure water suitable for cultivation so that it does not affect them.

key words: plant, stains, water, rust, leaves

## -Research questions

What is the cause of the spots that showed on the bougainvillea?

What are the effects that might happen to the bougainvillea if it was irrigated with rusty water?

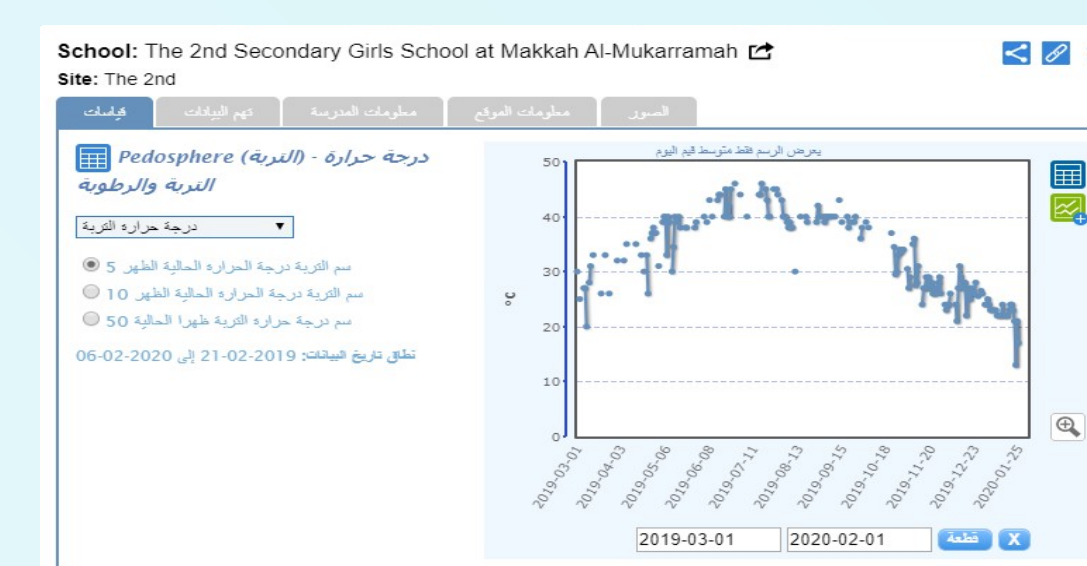
Is there a relationship between water pollution and plant wilt?

What is the difference between irrigating a plant with rusty water or pure water?

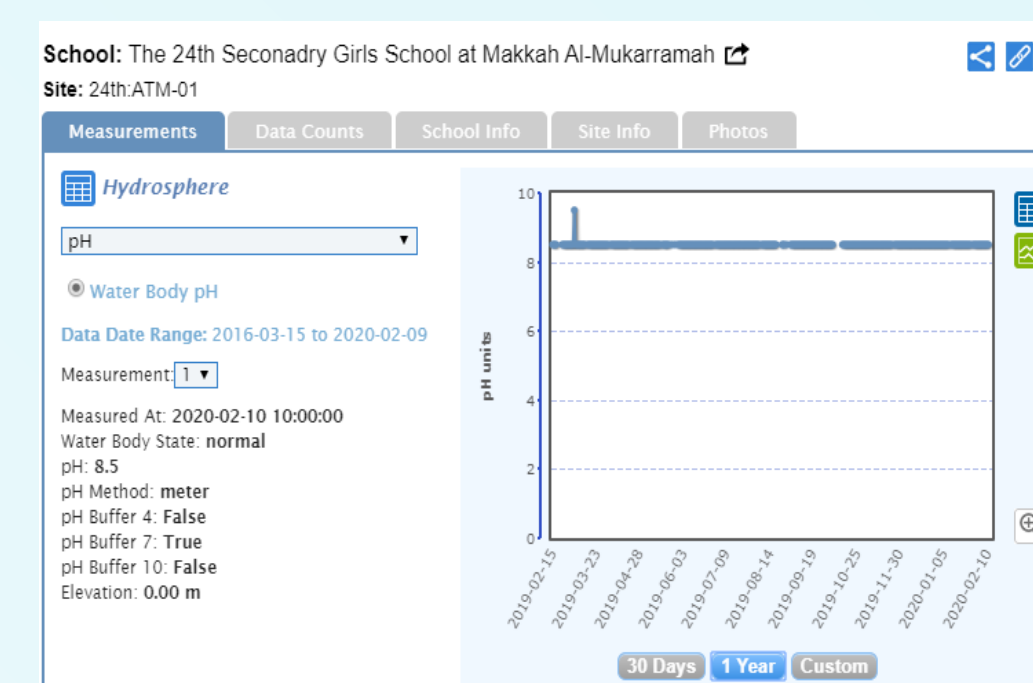
## The Steps of the experimet

- 1 - Placing bougainvillea plant in an environment that helps them grows naturally.
- 2- Providing enough polluted water to irrigate the bougainvillea for a period of four months.
- 3- Clean the pot and put the soil in it.
- 4- Take notes throughout the period of watering the bougainvillea with polluted water.
- 5- Analysis of charts and tables taken from Globe schools.

## Results



graph showing the relative humidity  
Secondary School 24 in Makah



Another graph showing  
the acidity percentage



Leaves before the experiment



## Discussion

From the following equation: iron rust + water acidity ÷ 10m

The above table shows Bougainvillea climbing in relation to the concentration of rust in the water in which Bougainvillea was grown.

He concluded that the higher the rate of rust in the water that irrigates Hell, the less growth and climb.

One of the improvements that can be added to the search

Study the effect of rust-contaminated water on other types of plants, and study research on a wide scale in different regions

## Conclusions

It has been found that one of the reasons for the appearance of stains is the high acidity in water, which may cause mechanical burns as a result of external spraying with polluted water or other harmful substances.

If the concentration is high and the plants are watered daily, this may cause melting or deficiency of some elements in the plant or the appearance of stains that may be caused by an external substance.

## References

Subject Encyclopedia

<https://mawdoo3.com/>

Riyadh Plants Guide book for Prince

Turki bin Abdullah bin Abdulaziz