



RESEARCH REPORT



Comparison of water
quality in *Dendrocalamus*
and *Bambusa burmanica*
in dry and rainy seasons



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Research team

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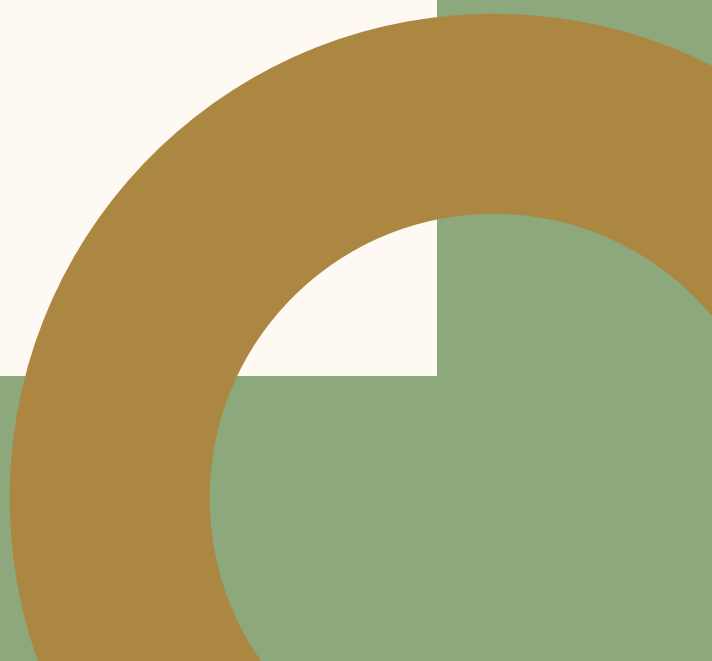
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OBJECTIVES

- 1.) Comparison of water quality in *Dendrocalamus* and *Bambusa burmanica* in the dry season.
 - 2.) Comparison of water quality in *Dendrocalamus* and *Bambusa burmanica* in the rainy season.
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RESEARCH QUESTION

- 1.) Is there a difference between the water in the Dendrocalamus and the Bambusa burmanica?
- 2.) Is there a difference between the water in the Dendrocalamus and Bambusa burmanica in different seasons?

ABSTRACT

The experiment of Comparison of water quality in *Dendrocalamus* and *Bambusa burmanica* in dry and rainy seasons aimed to study the comparison of water quality in *Dendrocalamus* and *Bambusa burmanica* in dry and rainy seasons. By measuring the acidity-base(pH) and Dissolved oxygen discovered the water of water in the *Dendrocalamus* in the dry and rainy seasons and *Bambusa burmanica* in the dry and rainy seasons It was discovered that the pH and Dissolved oxygen values of both bamboo species differed in each season. The *Dendrocalamus* in the dry season, the pH is neutral and average Dissolved oxygen of 5.2 mg/L. The *Bambusa burmanica* in the dry season, the pH is acidic and average Dissolved oxygen of 6.5 mg/L. The *Dendrocalamus* in the rainy season, the pH is acidic and average Dissolved oxygen of 7.8 mg/L. The *Bambusa burmanica* in the rainy season, the pH is acidic and average Dissolved oxygen of 8 mg/L.

RESEARCH METHODS

Equipment

1. Dendrocalamus
2. Bambusa burmanica
3. Beaker
4. Universal indicator paper
5. Dissolved Oxygen
6. Bottle
7. Plastic rope
8. Rubber tube
9. Cordless drill
10. Alcohol
11. Cotton



EXPERIMENTAL METHODS

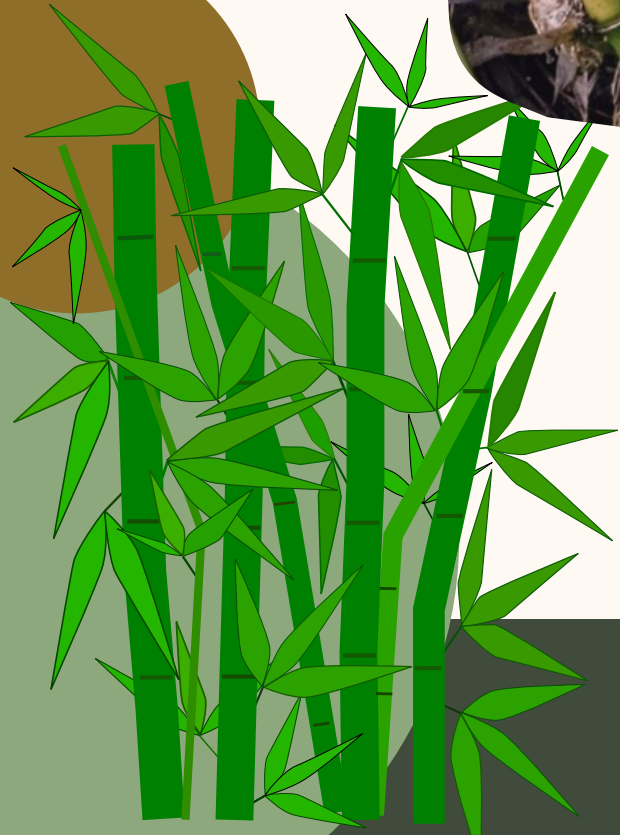
Experiment 1: Examination of water quality of both bamboo species in the dry season.

- 1.) Use a cordless drill to drill into the *Dendrocalamus* stems to collect water samples. Wipe the hole with a cotton dipped in alcohol and attach a rubber tube to the bottle and then tie to the bottle with a plastic rope.
- 2.) Use a cordless drill to drill into the *Bambusa burmanica* stems to collect water samples. Wipe the hole with a cotton dipped in alcohol and attach a rubber tube to the bottle and then tie to the bottle with a plastic rope.
- 3.) Observe the physical characteristics of cultured the *Dendrocalamus* and *Bambusa burmanica*, color and odour .
- 4.) Take note of the physical characteristics of the *Dendrocalamus* and *Bambusa burmanica*.
- 5.) Take the water from both species of bamboo to find the pH of the bamboo water obtained using universal indicator paper.
- 6.) Take note of the acidity-base(pH) of both species of bamboo water.
- 7.) Measurement of dissolved oxygen in the water of both bamboo species. Using the Dissolved Oxygen check.
- 8.) Take note of the dissolved oxygen in both bamboo species.

EXPERIMENTAL METHODS

Experiment 2: Examination of water quality of both bamboo species in the rainy season.

- 1.) Use a cordless drill to drill into the *Dendrocalamus* stems to collect water samples. Wipe the hole with a cotton dipped in alcohol and attach a rubber tube to the bottle and then tie to the bottle with a plastic rope.
- 2.) Use a cordless drill to drill into the *Bambusa burmanica* stems to collect water samples. Wipe the hole with a cotton dipped in alcohol and attach a rubber tube to the bottle and then tie to the bottle with a plastic rope.
- 3.) Observe the physical characteristics of cultured the *Dendrocalamus* and *Bambusa burmanica*, color and odour.
- 4.) Take note of the physical characteristics of the *Dendrocalamus* and *Bambusa burmanica*.
- 5.) Take the water from both species of bamboo to find the pH of the bamboo water obtained using universal indicator paper.
- 6.) Take note of the acidity-base(pH) of both species of bamboo water.
- 7.) Measurement of dissolved oxygen in the water of both bamboo species. Using the Dissolved Oxygen check.
- 8.) Take note of the dissolved oxygen in both bamboo species.



Results

Table 1: Shows the physical characteristics of water in the bamboo stems in dry season.

Physical characteristics of water in the bamboo stems in dry season		
bamboo species	Dendrocalamus	Bambusa burmanica
color	colorless	colorless
odour	odorless	odorless

Table 2: Shows the acidity-base(pH) values of water in bamboo stems in the dry season.

Acidity-base(pH) values of water in bamboo stems in the dry season		
bamboo species	Dendrocalamus	Bambusa burmanica
1st time	6	5
2nd time	7	6
3rd time	7	6
average	7	6

Results

Table 3: Shows the dissolved oxygen values in bamboo stems of water in bamboo stems the dry season.

Dissolved oxygen values in bamboo stems of water in bamboo stems the dry season		
bamboo species	Dendrocalamus	Bambusa burmanica
1st time	4.0 mg/L	7.0 mg/L
2nd time	7.0 mg/L	7.5 mg/L
3rd time	4.5 mg/L	5.0 mg/L
average	5.2 mg/L	6.5 mg/L

Results

Table 4: Shows the physical characteristics of water in the bamboo stems in rainy season.

Physical characteristics of water in the bamboo stems in rainy season.		
bamboo species	Dendrocalamus	Bambusa burmanica
color	colorless	colorless
odour	odorless	odorless

Table 5: Shows the acidity-base(pH) values of water in bamboo stems in the rainy season.

Acidity-base(pH) values of water in bamboo stems in the rainy season		
bamboo species	Dendrocalamus	Bambusa burmanica
1st time	6	7
2nd time	5	7
3rd time	5	5
average	5.3	6.3

Results

Table 6: Shows the dissolved oxygen values in bamboo stems of water in bamboo stems the rainy season

Dissolved oxygen values in bamboo stems of water in bamboo stems the rainy season		
bamboo species	Dendrocalamus	Bambusa burmanica
1st time	8.5 mg/L	7.0 mg/L
2nd time	7.0 mg/L	8.0 mg/L
3rd time	8.0 mg/L	9.0 mg/L
average	7.8 mg/L	8.0 mg/L

CONCLUSION

The comparison of water quality in *Dendrocalamus* and *Bambusa burmanica* in dry and rainy seasons was studied. It was found that the acidity-base(pH) of water in *Bambusa burmanica* is equal to *Dendrocalamus*. The Dissolved oxygen in the water of the *Bambusa burmanica* is higher than that of the *Dendrocalamus*. And when compared to different seasons It was found that the acidity-base(pH) in the water of the *Dendrocalamus* in the dry season is higher than that of the *Dendrocalamus* in the rainy season. The Dissolved oxygen in the water of the *Dendrocalamus* in the rainy season is higher than that of the *Dendrocalamus* in the dry season. And the acidity-base(pH) in the water of the *Bambusa burmanica* in the rainy season is higher than that of the *Bambusa burmanica* in the dry season. The Dissolved oxygen in the water of the *Bambusa burmanica* in the rainy season is higher than that of the *Bambusa burmanica* in the dry season.

THANK YOU

