



Factors Affecting the Growth of Trentepohlia Algae In Tadwimanthip Waterfall



BUENGHONGLONG WITTAYAKOM SCHOOL



Background and importance



Tadwimanthip Waterfall is located in Phu Langka National Park. There are seven levels. It is a famous tourist attraction in Bueng Khong Long District, Bueng Kan Province, Northeast of Thailand, which has physical and biological diversity.



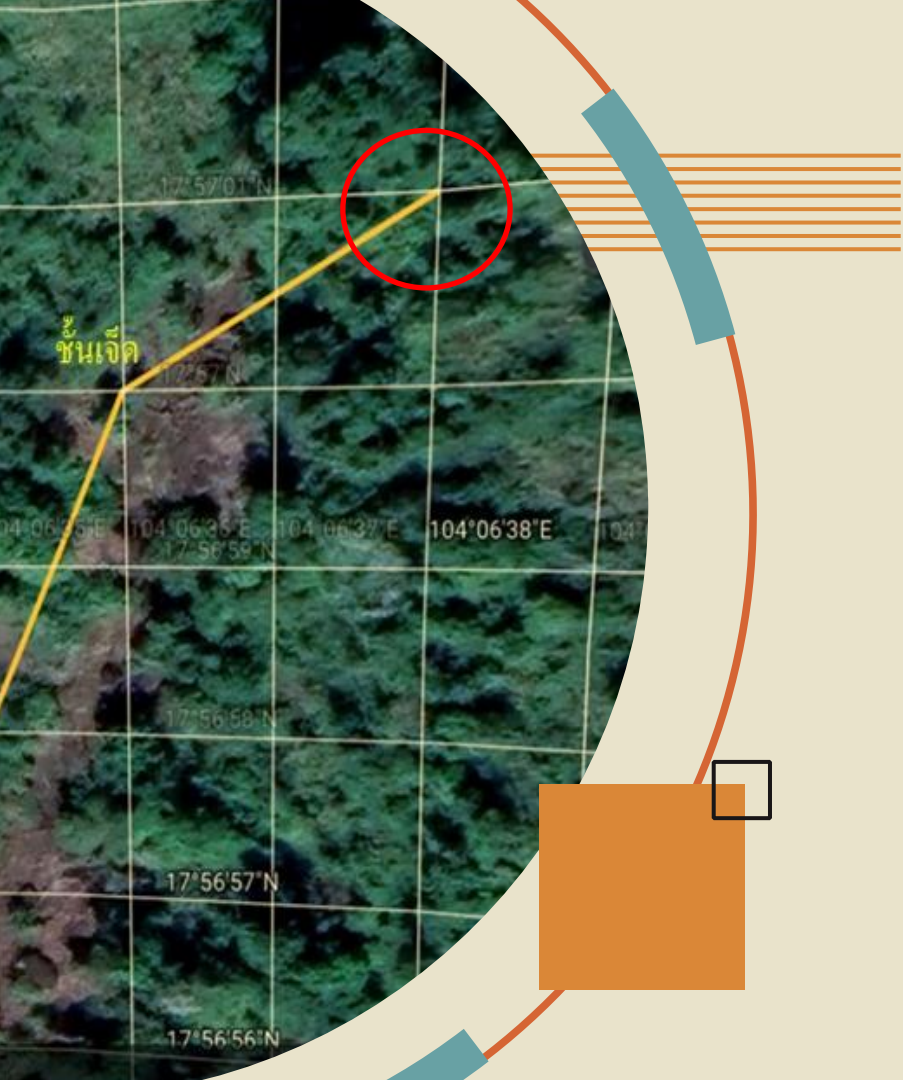
Research objectives

To study the factors affecting the growth of *Trentepohlia* algae in Tadwimanthip waterfall.

Research hypothesis

Light, temperature-humidity on the rock's surface and the air Affect the growth of orange algae. (*Trentepohlia*) In Tadwimanthip Waterfall





Research scope

Content scope

Explore Tadvimanthip waterfall, humidity, temperature, light, altitude

Research Population and Sample

This research the *Trentepohlia*, altitude and rocks in Tadvimanthip Waterfall.

RESEARCH TOOLS



1. Temperature measuring instruments
Measure the moisture value



2. Clip-type LED
Cellphone
Microscope



3. Altitude app
, Google
earth

Conducting research / data collection

1

Explore Tadwimanthip Waterfall by conducting a survey in the 7th floor



2

Find the latitude, longitude in the layer to be surveyed and pinned.



3

Travel to explore by collecting data. Is there *Trentepohlia* algae on the rock surface? If found, check temperature, humidity and light measurements.



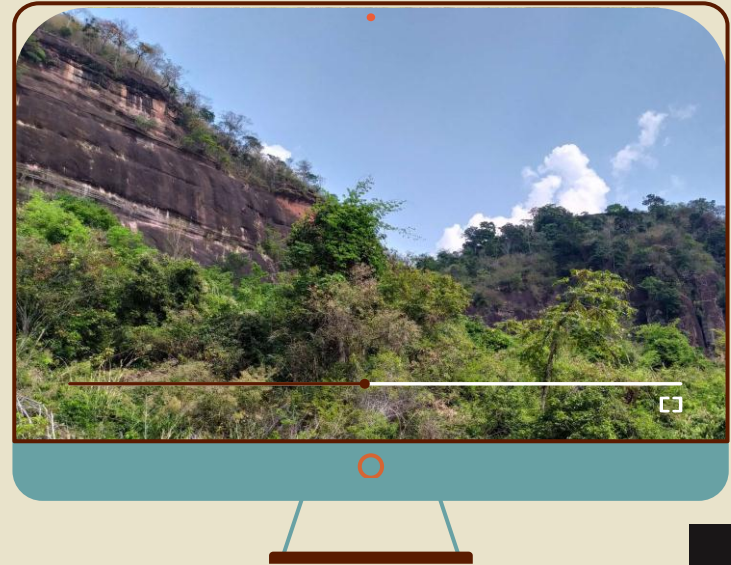
Objective research results



| Explore the algal habitats on the rocky surface (the same ones). | Air temperature (Degrees Celsius) | Air relative humidity (Percentage) | Temperature on the rock's surface (Degrees Celsius) | The moisture on the rock surface (Percentage) | Altitude (Meters above sea level) | Exposure |
|--|-----------------------------------|------------------------------------|---|---|-----------------------------------|-------------------|
| find | 35.1 °C | 11.43 % | 32.4 °C | 20.98 % | 417 | Light-exposed |
| Not found | 28.5 °C | 14.85 % | 28.4 °C | 18.97 % | 417 | Not light-exposed |

Conclude

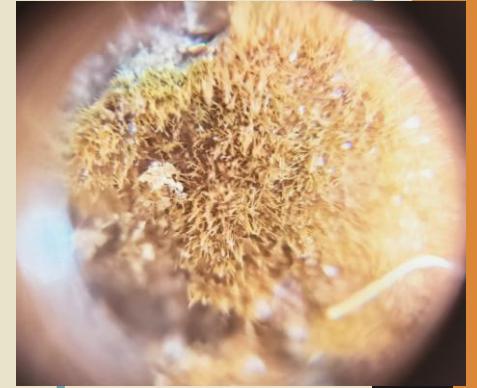
We found that the air temperature, air relative humidity, temperature on the rock's surface, the moisture at the rock surface and exposure had effect on the growth of *Trentepohlia*, and the elevation had no effect on the growth of *Trentepohlia* because they are at the same altitude.



Insert your multimedia content here

Discussion

This algae will protect itself from the dehydration and it will produce Trentepohlia and it makes the humidity on the rock's surface more than the rock's surface that has no Trentepohlia.



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THANKS

