



**Research on the age of  
the red ant nest and  
the temperature and  
relative humidity  
inside the red ant nest.**

# Origin and importance



Ants are important to the ecosystem. By managing the carcass, the relationship between ants and plants in which both sides are both the giver and the receiver Plants that are associated with ants are called "ant plants", which are examples of the common development between ants and plants in the field of food. In the food area of both sides is extremely scarce. And is one of the first food in the ecosystem and many other things overall, in the ecology of life on Earth Ants are very useful. Ants also prevent and eliminate pests through a combination of methods.

# Research objectives

-To find the relationship between age and temperature and relative humidity in the red ant nest.

# Research question

-What is the relationship between the age of the ant nest and the temperature and relative humidity in the red ant nest?



# Research hypothesis

-The age ranges in each phase of the red ant nest were related. With relative humidity and temperature on growth Red ant nest.

# Study scope

**-Venue: Bueng Khong Long Witthayakhom School,  
Bueng Khong Long District, Bueng Kan Province**

**-Duration 18 February - 1 March 2021 Expected  
benefits.**

**-Data from age surveys with temperature and  
relative humidity can be used. Is an index indicating  
the well-being of the red ants in the nest?**

# Terminology definition

- Red ant means the name of the species *Oecophylla smaragdina* in the formicidae family, approximately 1 cm long, its body, antennae and legs are orange or reddish brown, with short white hairs on the head and chest. Connect the leaves close together in a circular nest. If disturbed, it will release acid and bite into the skin. To make a burning sensation,-Temperature refers to the amount used to indicate the level of heat, which is commonly measured with a device called thermometer - Relative humidity is defined as the ratio between the mass of the actual water vapor in the air and the mass of the current saturated steam. By volume and the same temperature set the value as a percentage.

# Relevant documents and research

1. Red Ant.
2. Way of working ants in large society
3. Get to know the high-class food,
4. Red ant eggs.



# Sample group

1 ant nest in front of building 2  
(latitude 17.575468 north Longitude  
104.25262 East) in BuengKhong Long  
Wittayakhom School BuengKhong  
Long District BuengKan Province

# Research method

Research plan This research is a  
quantitative research. Objective To find the  
relationship between temperature and  
relative humidity in the red ant nest.

# population

Red ant nest in front of Building 2 in Bueng  
Khong Long Witthayakhom School

# Survey results record table

Storage date	Outside the red ant nest		Inside the red ant nest	
	temperature	relative humidity	temperature	relative humidity
18/2/21	27.1°C	53.79%	26.5 °C	59.86%
21/2/21	28.9°C	39.72%	28.2°C	52.67%
24/2/21	26.3°C	60.87%	25.8 °C	70.89%
27/2/21	29.4°C	56.78%	26 °C	70.81%
2/3/21	35.7C	30.87%	35.1 °C	33.47%

# Research findings

From the study of age and temperature and relative humidity in the red ant nest. In the area in front of Building 2, Bueng Khong Long Witthayakhom School, Bueng Khong Long District, Bueng Kan Province, it was found that when the red ant nest was old after the nest was built. The temperature increases and the relative humidity decreases, with days 1-9 the temperature drops every 3 days, but the relative humidity gradually decreases until the nest is deserted. However, the results of this study showed a complication, is the storage time was changed during the season, causing the temperature to change from it should be.

# Discussion

From the study results The age and the temperature and relative humidity in the red ant nest. The important issue that should be discussed is temperature and relative humidity. Affects the spawning of red ants. And depending on the climate, temperature and season, as well as the behavior of the ant nest.



# Suggestion

- Should be applied with additional studies in every season to study the change of temperature and relative humidity - Study the temperature of every season in order to be able to create a model of an ant nest. And can raise for a career - Applied on temperature and relative humidity to create an off-season model.



**Thank you**

**Kulapat Khamwan**

**Suchada Lawan**

**Suthima masri**

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