# Water temperature and pH Affecting Mosquito Larvae Occurence at the Pa Sak Jolasit Dam, Saraburi Province, Thailand

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# Contents

# Introduction

Mosquitos are vectors of diseases

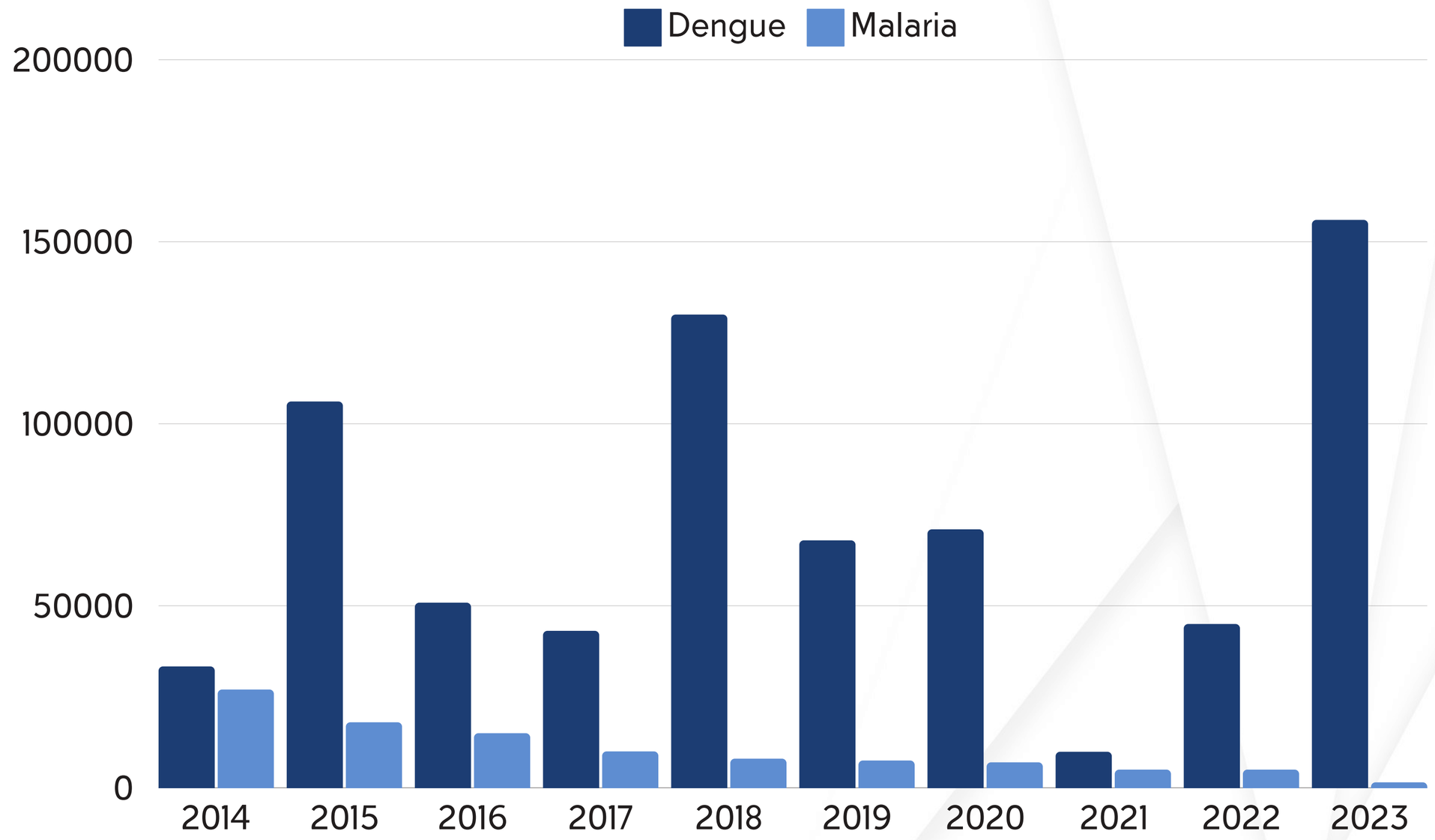
Malaria

Dengue

Zika Fever

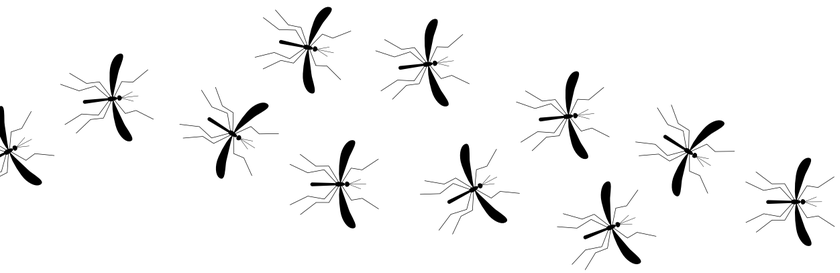
Lymphatic filariasis

# Dengue and Malaria cases in Thailand. (2014-2023)



# Objectives of this research

- To better understand the habitat of mosquitoes.
  For instance, the impact that pH and temperatures have on the growth of Larvae.
- To possibly decrease the risks or number of cases involving mosquitoes.

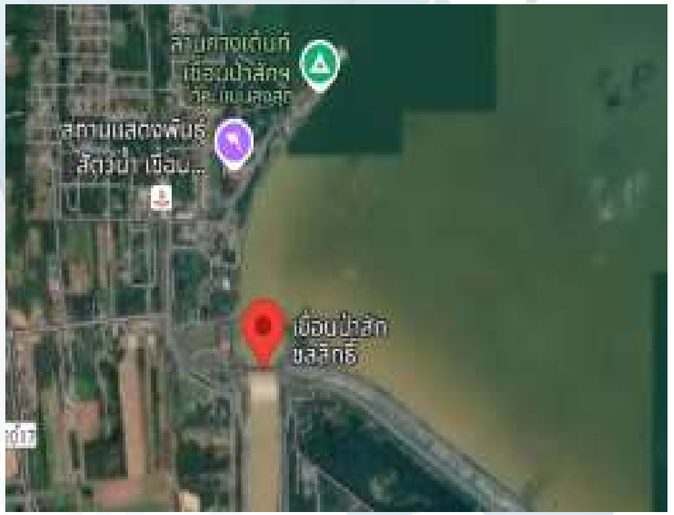


# Material and Methods

# Study sites


Thailand

Saraburi



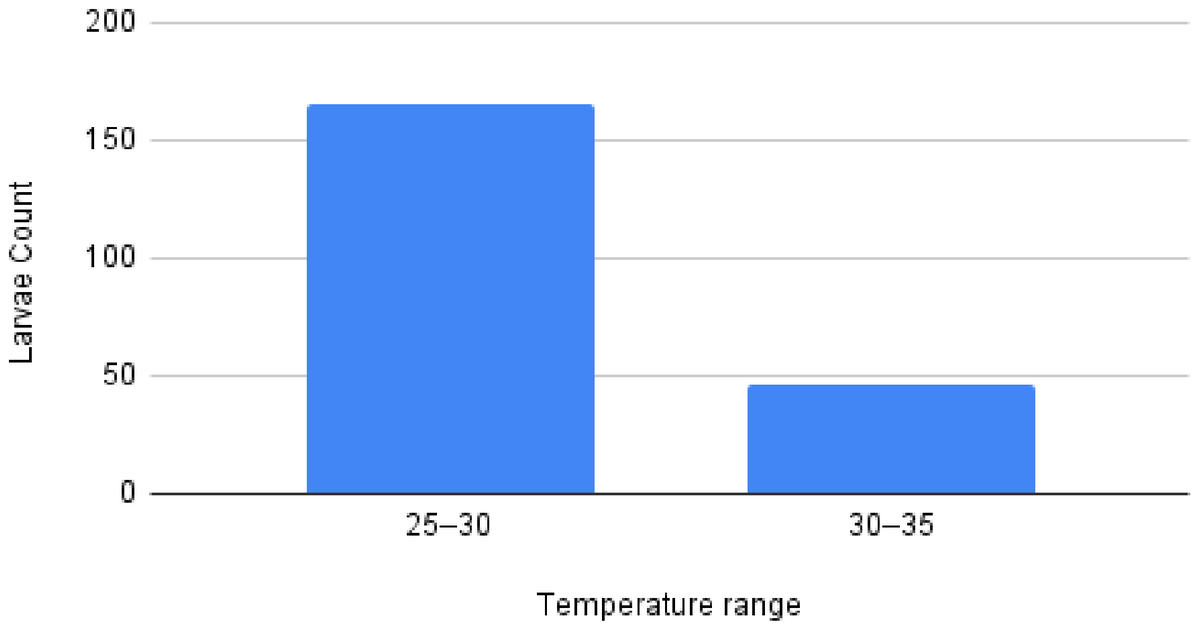

Supatta resort

# METHODS

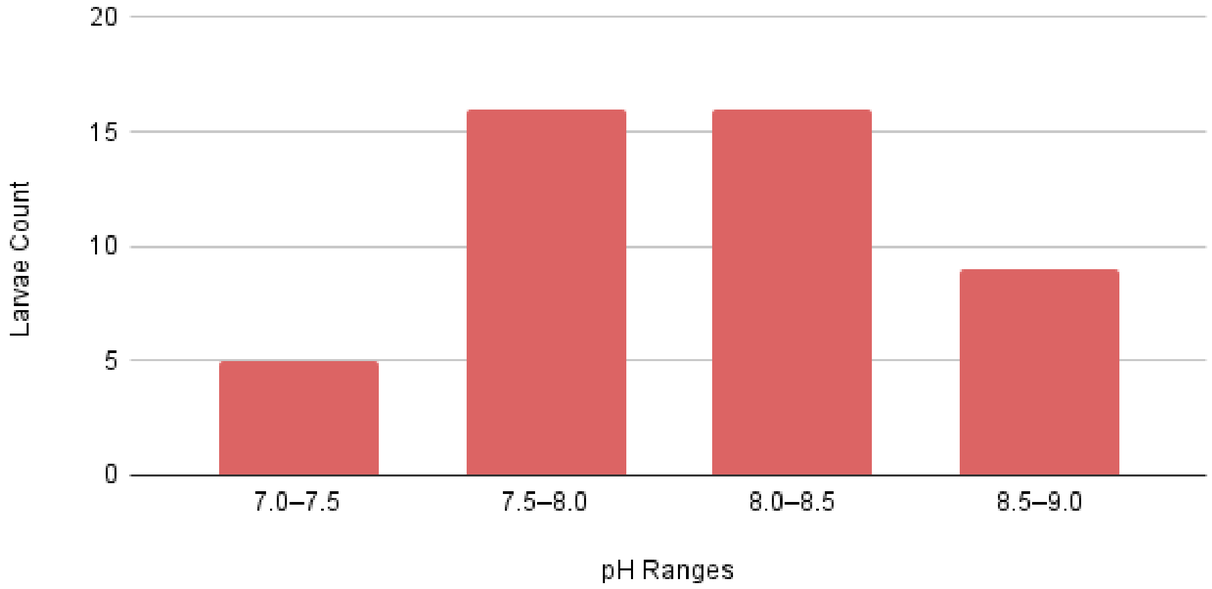
-Prepare a portable pH meter for measuring the water's quality.
-Measure the pH and temperature of the water and check for any mosquito larves. Afterwards, record the information.

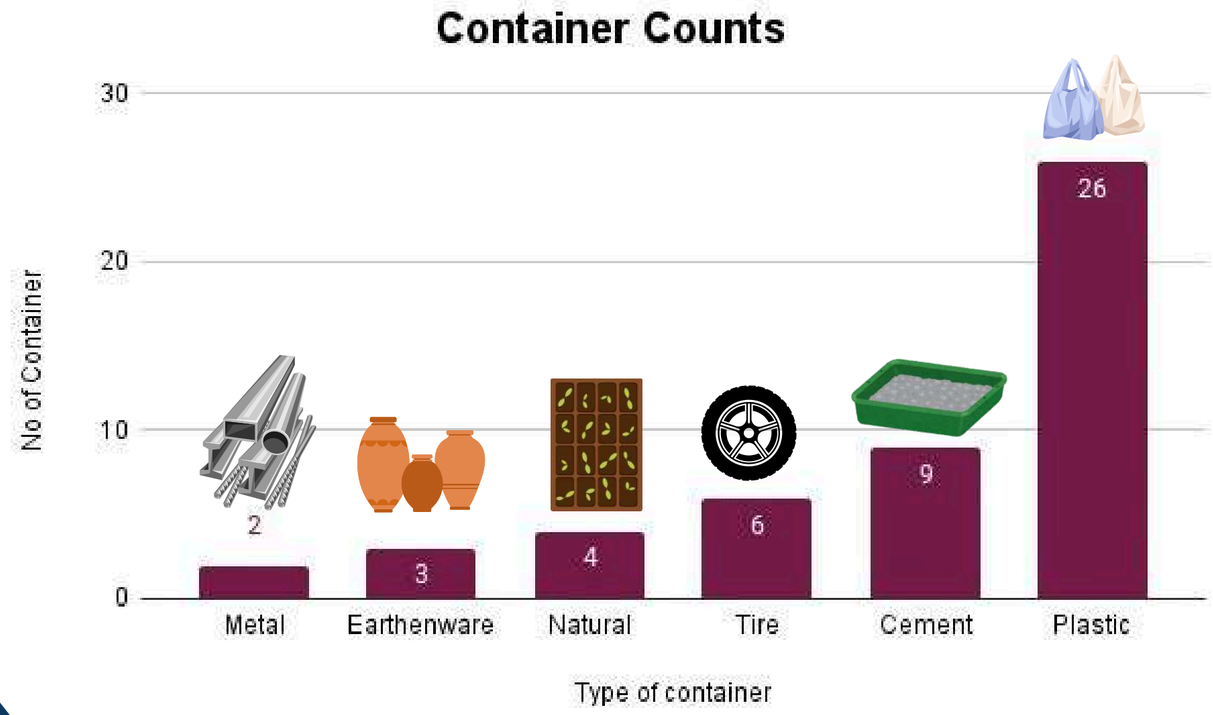
# Results

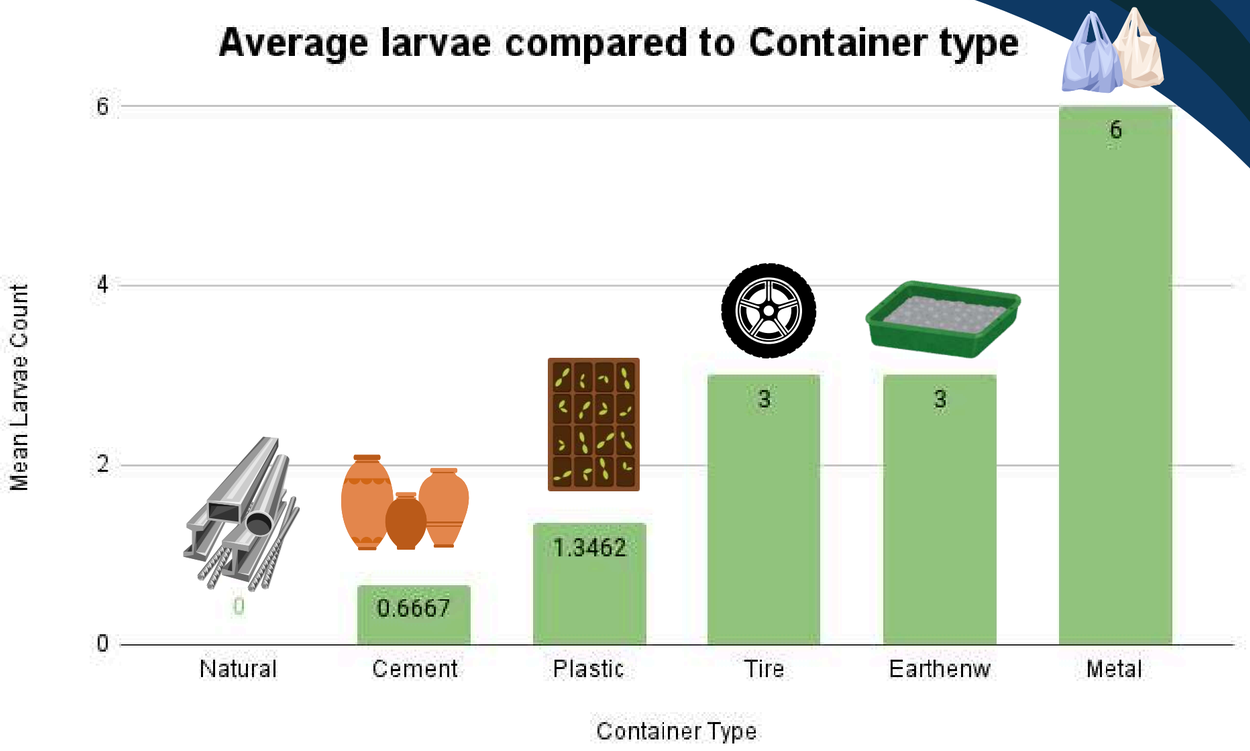
## Mosquito Larvae Distribution Across Different

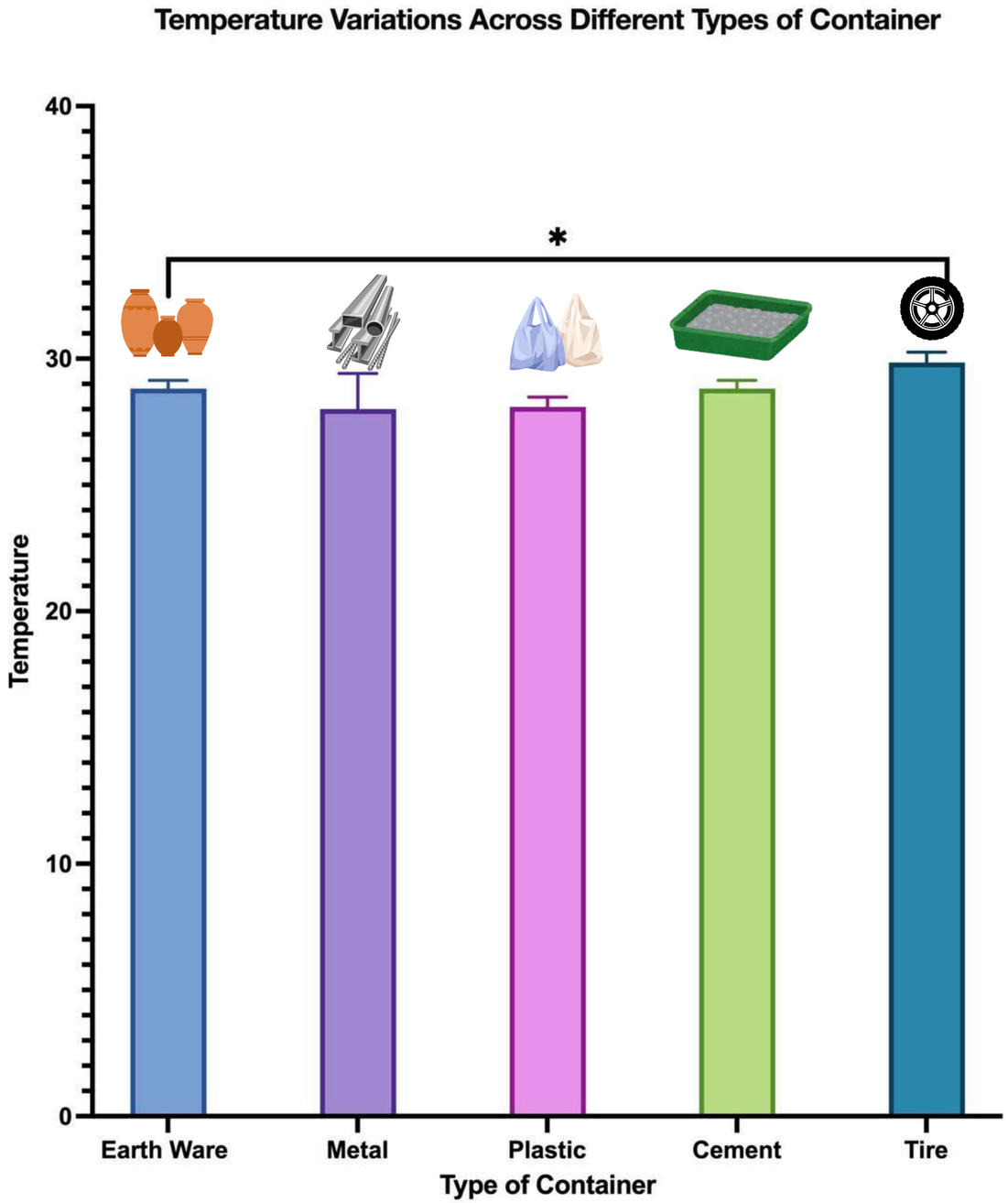



## The Effect of pH Variations on Mosquito Larvae Distribution




Container Counts
No of Container
30
20
10
0
2
3
4
6
9
26
Metal
Earthenware
Natural
Tire
Cement
Plastic
Type of container


Average larvae compared to Container type
Mean Larvae Count
6
4
2
0
0
0.6667
1.3462
3
3
6
Natural
Cement
Plastic
Tire
Earthenw
Metal
Container Type




-Temperature Variation accross different types of containers :The temperature remains relatively consistent around 30°C across different types of containers, with minimal variation observed.

-A significant temperature difference was found between Earthware containers and tires, suggesting varying thermal properties.

# Conclusion

-Ideal conditions for mosquito breeding: Water temperature of 25-30°C and pH between 7.5 and 8.5.
-Container type: Metal containers showed the highest larvae counts, despite being fewer in number.
-Plastic containers: More common but less effective for breeding.
-Temperature variation: Minor differences across most containers, with notable variation in earthenware and tires.
Implication: Findings help improve mosquito control strategies by focusing on water conditions and container types.

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# Acknowledgement

We thank Assoc. Prof. Dr. Krisanadej Jaroensutasinee, Assoc. and Prof. Dr. Mullica Jaroensutasinee staffs of Walailak University for helping with experimental design, fieldwork, data analysis, and manuscript preparation. Chonprathanwittaya School, the Center of Excellence for Ecoinformatics, and Walailak University partly supported this work.

# Thank You