

## Abstract

Dengue is a major burden of public health in Kaohsiung City .The aim of the study is to identify the correlation of various dengue vector density indexes and ovitrap surveillance indexes. To realize the correlation between Ovitrap positive ratio and Breteau Index 、Adult index 、Larvae Index, House Index 、Container Index 、Pupa Index ,and ovum numbers in ovitraps is one of the most important factors in dengue surveillance.

In 2005, the correlation between dengue vector density indexes and ovitrap surveillance indexes in Kaohsiung City are obviously (Pearson Correlation). In this study, the indexes of various dengue vector density are correlated with each other, and find out one formula to describe the correlation between Ovitrap positive ratio and Breteau Index by linear regression. 『Breteau Index = 8.349 × Ovitrap positive ratio + 4.972 』 ,and the dengue vector density can be expressed by ovitrap surveillance index in Kaohsiung City.