EFFECTIVENESS OF OVITRAP TOOL MODEL YELLOW LIGHT WITH WHITE WATER MODIFICATION SINDANG KELINGI DISTRICT IN 2021

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ABSTRACT

Indonesia is a tropical area which is an excellent place for mosquito breeding, because the temperature, weather, and seasons in Indonesia are very supportive in the mosquito breeding process, so that the mosquito population becomes high and very dangerous for human life, the existence of vectors that are detrimental to human life, because Mosquitoes are vectors that cause and transmit diseases in human life. To control the mosquito population, it is necessary to eradicate it by reducing the mosquito population. This study aims to determine the effectiveness of the yellow light ovitrap model with a modified water bottle, in the intervention group and the control group. Observational research, cross sectional study design. Survey of mosquito locations on the terrace of the house. The survey data were analyzed using the chi-square test. The results of Chi-square analysis obtained value = 0.08 > 0.05. So Ho is accepted and Ha is rejected, which means that there is no statistically significant relationship between the yellow light ovitrap and the modified waterbottle, does not rule out the possibility of 2.33 times being found trapped mosquitoes

Keywords: Modeli, yellow light Ovitrap and mosquitoes.

Introduction

Indonesia is a tropical area which is an excellent place for mosquito breeding, because the temperature, weather, and seasons in Indonesia are very supportive in the mosquito breeding process, so that the mosquito population becomes high and very dangerous for human life, the existence of vectors that are detrimental to human life, because Mosquitoes are vectors that cause and transmit diseases in human life. To control the mosquito population, eradication needs to be done by reducing the mosquito population, with the effectiveness of the yellow light ovitrap device model with modification of white water, researchers used it as a mosquitotrap tool on the terrace of the house that was installed at night. This study aims to determine the effectiveness of the yellow light ovitrap model, with a modified water bottle, in the intervention group and the control group. The research location is on the terrace of the house.

Methods

Observational research, cross sectional study design. Survey of mosquito locations on the terrace of the house. The survey data were analyzed using the chi-square test. This study uses a quasi-experimental design, with a post-test only control group design, namely there is an experimental group and a control group. The experimental group was given X1 treatment andthe control group was not given treatment (Nursalam, 2008)

Research Hypothesis

The hypotheses in this study include:

- 1. Ho: The yellow light ovitrap model is more effective with a modified bottle filled with water
- 2. Ha: The yellow light ovitrap model is not effective with a modified bottle filled with water

Result and Discussion Research result

The results of Chi-square analysis obtained P value = 0.08 > 0.05. So Ho is accepted and Ha is rejected, which means that there is no statistically significant relationship between the yellow light ovitrap tool and the modified bottle filled with water. , it is possible 2.33 times to find trapped mosquitoes.

Table 1. The effectiveness of the yellow light ovitrap model with a modified bottle filled withwater, in the intervention group and the control group on the terrace of the house

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|--------------|---------------------|-----------------|------|----------|------|-------|------|------|------|-------|-------|
| Num b e r | Mo - dific atio n - | Effectiveness | | | | | | | | CI (9 | 95%) |
| | | Yellow Light | | No Light | | Total | | P | OR | Lower | Upper |
| | | F | % | F | % | F | % | | | | |
| 1 | without | 5 | 13.9 | 2 | 5.61 | 7 | 9.7 | | | | |
| | wat er | | | | | | | 0.23 | 2.74 | 0.496 | 15.17 |
| 2 | Wat | 31 | 86.1 | 34 | 94. | 6 | 90.3 | 3 | 2 | | |
| | er | | | | 4 | 5 | | | | | |
| Te | otal | 36 | 100 | 36 | 10 | 7 | 100 | • | | | |
| | | | | | 0 | 2 | | | | | |

Based on Table 1, it is known that almost 34 mosquitoes (94.4%) were trapped in the ovitrap model without a lamp, a modified bottle filled with water. Based on Chi-square analysis, the P value = 0.233 > 0.05. So Ho is accepted and Ha is rejected, which means that there is no statistically significant relationship between the ovitrap tool without a lamp, a modified bottle filled with water.

Conclusion

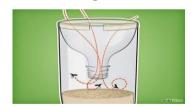
In the ovitrap model without lights, modify the bottle containing water, where mosquitoes want to put their eggs in a bottle filled with white water.

Botol Plastik Mineral



Gambar.1 Pemotongan Botol Plastik

Botol Ovitrap



Gambar 2 ilustrasi nyamukterperangkap

Suggestion

The Health Office is expected to be able to disseminate information to the public regarding the use of ovitrap as an alternative in controlling the Aedes aegypti mosquito vector, by only using plastic bottles used for drinking mineral water. Further research needs to be done with a modified fermented ovitrap model based on the rainy or summer season and the transition season.

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