

## ABSTRACT

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### THE RESISTANCE STATUS OF *Aedes Sp* LARVAE TO *TEMEPHOS* IN THE PERIMETER AND BUFFER AREAS OF SURABAYA TANJUNG PERAK SEAPORT

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The seaport was the gateway transmission of the disease. IHR 2005 stated that the perimeter and port buffer areas have to be free from larvae to maintain these conditions KKP Class 1 Surabaya conducts continuous control by employ the larvicidae with the activated ingredient *temephos*, that has been used for more than ten years and can trigger resistance. The purpose of this study to determined the resistance status from *Aedes sp* larvae to *temephos* in the Perimeter and Buffer area of the Surabaya Tanjung Perak Seaport.

Type of research used experimentation purified design with Postest Only with Control Group Design. The research sample were the third generation (F3) *Aedes Sp* instar III larvae used *temephos* with a variation concentrated 0.01 mg/L; 0,02 mg/L; 0,03 mg/L; and 0,04 mg/L with 24-hour contact time. Data analysis in determined the resistance status with reference to the standard categories of WHO.

The test results which was conducted a total of five times indicated test results of the status vector based on standards WHO that the status larvae against *temephos* with variations concentrated 0.01 mg/L; 0.02 mg/L; 0.03 mg/L; and 0.04 mg/L was resistant.

The concluded resistance status of *Aedes Sp* larvae to *temephos* in the Perimeter and the Buffer area have indicated resistant. Suggestion for the KKP Class 1 Surabaya to conduct further research on status resistance larvae *Aedes sp* to *temephos*.

**Keywords** : *Resistance, Aedes Sp, Temephos, Larvicides, Seaport*

**Reading list** : 5 Book, 6 E-Book, 30 Journal