# Studi QSAR dari Larvacidal Phytocompound Sebagai Anti-Aedes Aegypti menggunakan Metode GA-SVM

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**Abstract**

***Aedes aegypti is one of the most dangerous mosquitoes that can cause several deadly diseases, such as dengue fever, Chikungunya, Zika, and jaundice with high mortality rate. For now, no specific drug has been found that can cure the disease caused by Aedes Aegypti. One possible solution for handling this problem is to inhibit the growth and development of Aedes aegypti larvae. This study aims to implement Genetic Algorithm-Support Vector Machine to develop Quantitative Structure-Activity Relationship model for identification larvicidal phytocompounds as anti-aedes-aegypti. Hyperparameter tuning was performed to improve the performance of the models. Based on the result, we found that the best model was developed by the RBF kernel with the value of $R^2$ and $Q^2_{loo}$ score are 0.64 and 0.64, respectively***

**Keywords: Aedes aegypti, Genetic Algorithm, QSAR, Support Vector Machine**