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# Competence *Aedes* as Vectors Based on Biological Characteristics and Vulnerability of Dengue Virus in Semarang City-Indonesia



*Background*: Semarang city of central Java Province is one of the cities that have a very high incidence of dengue. In an effort to control dengue vector accurate data is needed. This study aimed to describe the profile of dengue vector *Aedes* sp. based on the density index and index *transovarial* transmission (ITT) and its relation to the incidence of dengue in the city of Semarang. *Method*: This research is a cross sectional survey with 18 samples of urban villages in the city of Semarang selected by random technique. To measure the density of *Aedes* larvae use survey techniques, installation *ovitrap*, and a survey of adult mosquitoes. Each village surveyed 15 homes and placed *ovitrap* inside and outside the home. Installation *ovitrap* attractant using a solution of 10% hay bath. *Result*: The results show the density of larvae in Semarang is very high based on larval density index HI = 42.4%, CI = 21.3%, BI = OI = 58.9% and 33.9%, so it can be said Semarang including areas with high risk of dengue. Type *Ae. albopictus* is still found in the city, especially in areas where the use of land for crops is still quite extensive. *Ae gonotropik* cycle time. *aegypti* 2.8 days, biological cycles 286.1 hours, and age a lot of mosquitoes belonging to old age. Transovarial index gained by 40.97%, indicating the status of *endemicity* in Semarang is getting longer. *Conclusion*: The physical environment, larvae density, density of the adult mosquito influenced the transmission of the dengue fever in Semarang City.

Keywords: Aedes sp; DHF; Dengue; Transovarial Infection

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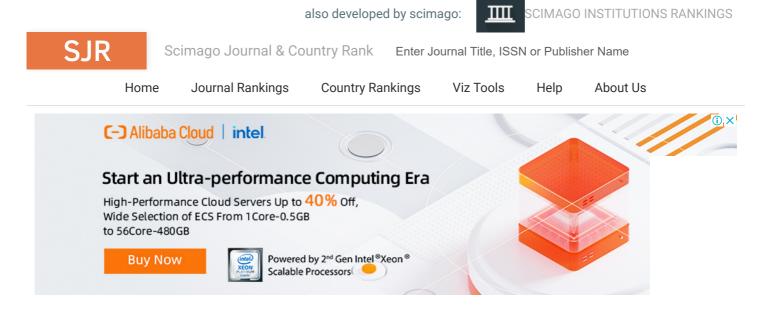
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