

**MONITORING AND CONTROL OF Aedes Aegypti: IMPLEMENTATION OF
OVITRAPS IN AN EDUCATIONAL CONTEXT****CARVALHO, G.R.S.^[1]; DOS SANTOS, R.A.^[2]**

Aedes aegypti originally described in Africa and now widely distributed globally, is a primary vector of arboviral diseases such as dengue, Zika, and chikungunya. The spread of this mosquito, intensified by environmental factors and urbanization, underscores the need for robust monitoring and control strategies. This study, conducted between April and June 2024, adopts an innovative approach during the Supervised Internship in Non-Formal Education, focusing on the practical application of dengue monitoring techniques. Ovitrap traps were installed at two sampling points in a school in northwest Rio Grande do Sul, located in Cerro Largo, Brazil, with weekly assessments. The ovitrap traps, made from recyclable materials, consisted of containers with eucatex strips, water, and a 0.04% yeast solution used to attract female *Aedes aegypti* for oviposition. Instead of conventional buckets, PET bottles were used, and wooden strips were replaced with improvised strips from cardboard boxes. The educational content was structured in three stages: I) field practical activity, where students identified and selected strategic points for ovitrap installation, encouraging observation of ecological relationships in situ; II) dialogued expository lecture aimed at deepening students' interest in topics such as Public Health, Environmental Education, and Zoology; III) microscopic analysis of collected eggs, allowing the investigation of the physical and biological processes involved. The activities involved forming 29 groups, each composed of three students, distributed across four fundamental education classes: six groups in 8th grade, class 81; seven groups in 8th grade, class 82; nine groups in 9th grade, class 91; and seven groups in 9th grade, class 92. Each group received a technical sheet to record data, including the total number of eggs (Mn) collected. The quantitative analysis of data over the weeks showed variations in the number of eggs deposited in the ovitrap traps, with a tendency to increase. At Sampling Point 1, there was a 42.2% increase in the number of eggs collected, from 45 eggs in the first week to 64 eggs in the seventh week. At Sampling Point 2, there was a 39.5% increase, from 38 to 53 eggs in the same period. These results indicate the effectiveness of the ovitrap traps, confirming their sensitivity as a monitoring tool. The observed variations may be attributed to environmental factors such as temperature and humidity, which directly influence mosquito oviposition activity. The findings of this study suggest that the continuous use of ovitrap traps is crucial for the early detection and control of *Aedes aegypti*, contributing to the reduction of dengue outbreak risks. Additionally, the role of environmental education is highlighted as an essential component in raising community

awareness, promoting civic engagement, and preserving public health. The educational activities conducted in this context not only aid in understanding scientific concepts but also prepare future educators to address public health challenges, strengthening their professional development and active citizenship.

Keywords: *Aedes aegypti* Monitoring; Ovitrap; Environmental Education; Arboviral Disease Control.

Field of Knowledge: Biological Sciences

Origin: Teaching

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