LARVAE PRESENCE IN LARVICIDE DISSEMINATION STATIONS TREATED WITH DIFFERENT PRODUCTS AT THE UNIVERSITY OF BRASÍLIA

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Dengue represents a significant public health challenge in Brazil. The 2024 epidemic registered the highest incidence rates ever documented in the country. Innovative technologies, such as larvicide dissemination stations (DS), are being integrated into vector control campaigns. This technique commonly utilizes Pyriproxyfen (PPF), an insect growth regulator (IGR), to hinder mosquito development. However, concerns regarding the potential emergence of mosquito resistance to PPF highlight the need for alternative insecticides. Diflubenzuron (DFB), another IGR, is a potential substitute for PPF. In this study we evaluated the larvae presence in DS treated with PPF or DFB. By the end of October 2024, 600 DS were deployed across 12 areas at UnB. Each area was assigned 50 DS. Four areas were randomly chosen to receive either PPF, DFB or a product with no larvicide effect as a control. Over three months, researchers conducted regular maintenance of the DS, assessing their integrity and recording the presence of *Aedes aegypti* (Linnaeus, 1762) larvae. Results showed that 20.73% of DS with PPF contained larvae, closely matching the 22.15% observed in control areas. In contrast, DS treated with DFB exhibited a lower presence of larvae (4.56%). These findings suggest that PPF has a subtle mode of action when compared to DFB, which apparently disrupts larval development more immediately.

Supported By: UNB, CNPq, CAPES.

Keywords: Dengue, innovative control, insecticides.