

Project title:	Sweet Surveillance: Testing Scented Sugar Baits for Mosquito-Borne Virus Detection
Keywords:	arboviruses, mosquito surveillance, molecular diagnostics, vector behaviour, citizen science
Description:	Help develop a novel early-warning system for mosquito-borne viruses using DIY sugar baits that can be deployed by the public. These baits attract mosquitoes to feed and leave behind traces of viral RNA, allowing detection of pathogens like dengue and Ross River virus. As part of a large project, you will join a multidisciplinary team testing how attractive different bait designs are to mosquitoes under controlled laboratory conditions. You will also assist with RNA extraction and qRT-PCR to assess the sensitivity of virus detection. This work supports the development of a scalable, community-based surveillance toolkit for public health response.
Expected outcomes and deliverables:	- Learn how to run behavioural assays using live mosquitoes - Gain experience with RNA handling and real-time PCR diagnostics - Contribute to protocol development for public-facing virus surveillance tools - Present your findings in a short oral presentation and final report
Suitable for:	Students in biomedical science, microbiology, virology, or entomology. Ideal for those interested in lab work with real-world public health applications. Prior wet-lab experience is an advantage but full training will be provided
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