

## Pest control decreases dengue by 40% within KL

By TAN SHIOW CHIN  
starhealth@thestar.com.my

**PETALING JAYA:** Dengue cases reduced by 40% in six sites within Kuala Lumpur after the release of Wolbachia-carrying *Aedes aegypti* mosquitoes there.

Released between March and November 2017, two of the six sites are still maintaining a population of over 90% Wolbachia-carrying mosquitoes, eliminating the need for other dengue control methods

like fogging.

*Wolbachia pipiensis* is a bacteria that naturally prevents RNA viruses, including the dengue, cikungunya, yellow fever and Zika viruses, from replicating in mosquitoes.

Thus, a Wolbachia-carrying mosquito will not be able to transmit those viruses to humans.

This release used the wAlbB strain of the bacteria, which can survive well in tropical temperatures of 36°C and above, unlike other Wolbachia strains.

In a press release, MRC-University of Glasgow Centre for Virus Research Prof Steven Sinkins, who was part of the study, said: "We are excited by these findings, which show that we have a strain of Wolbachia that can be used to effectively reduce the number of dengue cases in very hot climates.

"The next step is to deploy this strain in more and larger sites, but we are now confident that this will become an effective way to control dengue on a large scale."

Health Minister Datuk Seri Dzulkefly Ahmad previously said that this biological pest control programme would be expanded to other states in Malaysia.

A pilot project in Selangor involving seven dengue hotspots, also conducted in 2017, found that dengue cases had reduced by 70%-80% in those areas by this year.

The number of dengue cases for this year up to Wednesday was 116,011 with 158 deaths as at Nov 16, with the most number of cases

occurring in Selangor and Kuala Lumpur.

Both male and female Wolbachia-carrying mosquitoes are released in this mosquito replacement strategy.

Wolbachia-carrying female mosquitoes that mate with either wild or Wolbachia-carrying males will only produce Wolbachia-carrying offspring.

Meanwhile, *Wolbachia*-carrying male mosquitoes that mate with wild females will not produce any offspring at all.