

# NYP team's fight against mozzies: Wash to repel

Hassle-free body wash wards off insects for up to 8 hours

**Carolyn Khew**

When protecting yourself against dengue or Zika, an insect repellent could be your best defence.

A team of students from Nanyang Polytechnic (NYP) has made applying such repellents easier by developing a body wash that wards off insects, including mosquitoes and ticks, for up to eight hours. It was part of a school project for the molecular biotechnology students.

While there are such body washes in the United States, the team said it is the first to be developed here.

"We thought it would be a hassle-free way to protect yourself against mosquitoes," said Ms Teo Seok Yee, 20, who has since graduated from NYP and is now studying biological sciences at Nanyang Technological University (NTU).

She added: "The idea is to keep mosquitoes away so hopefully this will prevent any unnecessary illness or deaths associated with dengue and Zika."

In order to test its effectiveness, the students tried the wash on themselves. They visited MacRitchie Reservoir on four occasions, spending four to five hours hiking each time in relatively similar conditions, and using the repellent wash before heading out. They then went out on another day without using the wash.

"There was a decrease in the number of mosquito bites we got when we used the repellent wash... That was our indication that something must be working" said Ms Teo.

The idea was conceived when Ms Lam Ching Man, a former NYP student who also worked on the project, was thinking of developing a repellent that would protect chilli



NYP students (clockwise from far left) Brian Lee, Rebecca Chua, Iann Hussi, Lam Ching Man and Teo Seok Yee with the MOX Body Wash they developed, which can be used to repel insects for up to eight hours. ST PHOTO: KUA CHEE SIONG

**HASSLE-FREE PROTECTION**

**We thought it would be a hassle-free way to protect yourself against mosquitoes. The idea is to keep mosquitoes away so hopefully this will prevent any unnecessary illness or deaths associated with dengue and Zika.**



**MSTEO SEOK YEE**, a member of the team that developed the Deet-free body wash.

or garlic plants from pests like ants.

The team later decided to develop one that would work for humans instead, said Ms Lam, 20, who now studies food and human nutrition at Newcastle University.

They spent \$3,000 on the prototype. The key was finding out what would make the ingredients "stick" to human skin and ensuring that the ingredients were of low enough concentration not to cause chemical burns and yet still be effective.

Both Ms Lam and Ms Teo also worked with students from NYP's School of Business Management to market the product, which has been on sale since last September. So far, more than 20 bottles have been sold on their online store, [www.chaperone.com.sg](http://www.chaperone.com.sg)

Made of citronella, lemon eucalyptus and tea tree essential oils, the price of the Deet-free MOX

Body Wash starts at \$12.90.

Mr Benson Ong, a lecturer at NYP's School of Business Management, said he believes there will be demand for it. He added: "Many people we interviewed during our market survey said they did not like having to spray something on their skin because the substance could get into their nose or ears."

Associate Professor Roderick Wayland Bates, from NTU's School of Physical and Mathematical Sciences, said: "The wash is more convenient for children and parents and most importantly, it does not contain Deet, which has been used by millions as mosquito repellent since it came on the market in the 1940s. It is a synthetic chemical, so some people may have concerns about using it."

[kcarolyn@sph.com.sg](mailto:kcarolyn@sph.com.sg)