

**'Lingers on surfaces for 2 weeks, instead of 2 to 3 days'**

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**T**HOSE found breeding mosquito larvae in their homes and fined by the National Environment Agency (NEA) officers can at least take cold comfort from one fact.

The larvae collected were used by scientists to develop a more effective anti-mosquito spray, the Mozzie Zap.

A three-month collaboration between the Environmental Health Institute (EHI) and Trojan Hospitality Asia, which manufactures insecticides, produced the spray.

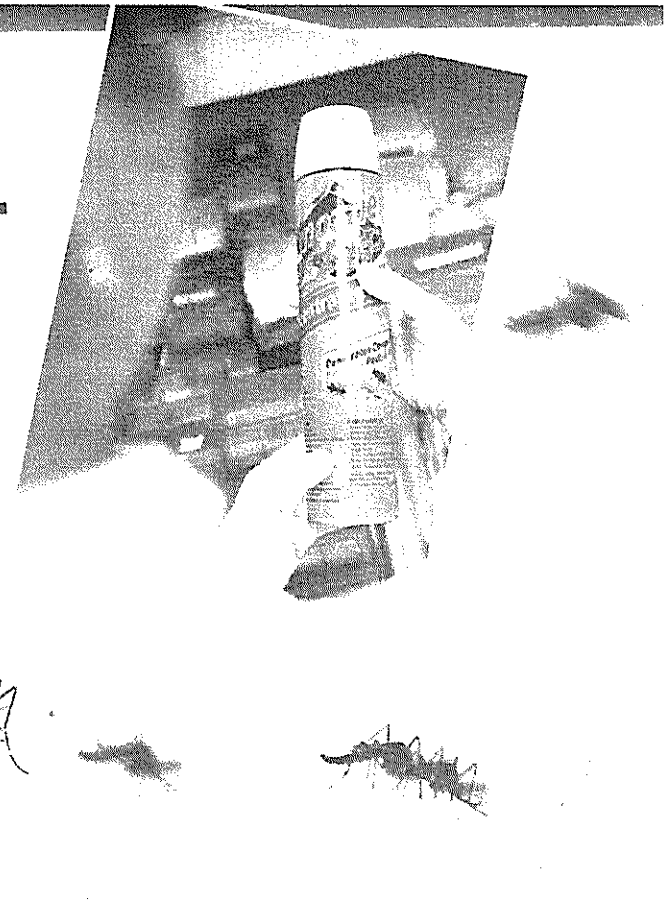
It kills mosquitoes over longer periods than other commercially available sprays.

Ms Pang Sook Cheng, one of the seven EHI scientists involved, said her team took an indoor fumigator and designed a new nozzle for it. This seems simple, yet the results are striking.

Previously, the residue from the spray lasted two to three days on wood and ceramic surfaces, but "after we changed the nozzle, it lasted for two weeks", said Ms Pang.

The new nozzle does this by changing the size of the aerosol particles released.

# New spray to 'ZAP' mozzies



**MORE EFFECTIVE:** (Inset) The newly developed Mozzie Zap spray. TNP PICTURES: ARIFFIN JAMAR

At 11 to 12 microns in diameter, they are half the size of particles found in other available insecticides.

Mozzie Zap neither damages furniture nor is it dangerous to humans or animals,

said Ms Pang.

Still, home owners are required to stay away from their properties for 30 minutes after the spraying and can reoccupy their homes only after ventilating it for 15 minutes.

tain residents and the dramatic rise in dengue cases that prompted the development of Mozzie Zap.

The main challenge was finding enough mosquitoes to test the spray.

That was when the NEA hatched the larvae collected from homes.

Although EHI is one of the few places in Singapore with a licence to breed mosquitoes in its laboratories, the research team needed to get those found in their natural habitats, in case the laboratory specimens had developed different genetic traits over generations.

Ms Pang said getting and breeding enough mosquitoes to ensure accuracy in every step of their experiments took a lot of effort

## Anti-mosquito efforts

Mozzie Zap is already being used by a growing number of NEA officers in dengue clusters around Singapore, and is making their anti-mosquito efforts more effective.

Said Dr Christina Liew, assistant director (partnerships) of EHI: "With the new spray, every NEA officer can be equipped with one can and they can therefore spray in the targeted areas of your home. This will increase the productivity and the coverage for NEA."

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