

06/09/2002

IMR dons invent test kit for insecticide resistance

KUALA LUMPUR, Thurs. - Two Malaysian researchers have developed a comprehensive rapid screening test kit which detects insecticide resistance in insects.

Dr Lee Han Lim and Nazni Wasi Ahmad of the Institute for Medical Research won a gold medal in the recent 30th International Exhibition of Inventions, Innovation and New Products held in Geneva, Switzerland, in May.

This achievement was announced by Health Minister Datuk Chua Jui Meng today.

"This first-ever rapid test kit is set to revolutionise the control of vector-borne diseases," he said.

The rapid test kit employs a colourimetric test. The degree of colour intensity in chemical solutions used correspond to the levels of enzymes present in the insect, which can be used to determine the degree of resistance.

Chua said the kit was cheaper and easier to use than the present standard kit used worldwide, the World Health Organisation test kit, which posed several technical problems to researchers.

"The WHO test kit, used for the last 40 years, needs to be carried out in a lab, and requires breeding of a large sample of insects," Chua said after opening the Fifth National Institutes of Health Scientific Meeting 2002 at the Crown Princess Hotel.

The standard test is also expensive, costing nearly RM30 per mosquito and takes 11 days to yield results, besides requiring skilled lab technicians.

However, the rapid test kit, which can be used on insects such as mosquitoes, flies and cockroaches, can be carried out in the field by almost anyone and will yield results in three hours.

"The cost of our rapid kit test, at 73 sen per mosquito, is more than 30 times cheaper than the WHO test," he added.

Lee and Nazni are researchers attached to the medical entomology unit of the infectious disease centre at the institute.

Chua added that Prime Minister Datuk Seri Dr Mahathir Mohamad had instructed that the kit be patented and marketed as a Made-in-Malaysia product.

The kit is being patented in 10 countries all over the world, and is used by Malaysian researchers.