

*(d) Insecticides are chemicals used to kill insects.

Anopheles mosquitoes have developed resistance to the insecticides currently used.

Metarhizium pingshaense is a fungus that infects *Anopheles* mosquitoes.

Scientists in West Africa have genetically engineered (GE) this fungus using a gene from a spider.

When the GE fungus infects an *Anopheles* mosquito this gene becomes activated. A toxin is released, which kills the mosquito.

In an investigation, four huts each containing a group of 500 breeding pairs of mosquitoes were used.

Three different treatments used to kill mosquitoes were compared with a control group.

The walls and ceiling of the huts were sprayed with the treatment.



(Source: © Ivan Vdovin / Alamy Stock Photo)

The table shows the number of adult mosquitoes in the first two generations of offspring from each hut after spraying.

Treatment	Number of adult mosquitoes in each generation	
	First	Second
Control (no treatment)	921	1396
Insecticide	919	1353
Normal fungus	436	455
GE fungus	399	13