

## Brazil OKs release of genetically engineered mosquitoes to control dengue virus

Thousands of British made genetically engineered mosquitoes were released by Brazilian researchers in Rio de Janeiro on Thursday infected with bacteria that suppress dengue fever. The hope is they will multiply, breed and become the majority of mosquitoes, thus reducing cases of the disease.

The British biotech firm Oxitec has altered the DNA of the *Aedes aegypti* mosquito to prevent it from spreading the potentially deadly virus. Oxitec's new factory in the Brazilian city of Campinas, outside Sao Paulo, is the first in the world to launch production of genetically modified (GM) mosquitoes to target dengue.

The mosquitoes, which Oxitec has dubbed OX513A, have been bred to carry a sort of genetic self-destruct mechanism that causes their offspring to die before they reach sexual maturity, preventing them from reproducing.

The Oxford-based biotech firm found the perfect way to cut down on the world's malaria and dengue numbers – create and release genetically engineered mosquitoes which are sterile and unable to reproduce. They also inherit a marker that is visible under a special light, making monitoring in the field simple and helping ensure that dengue mosquito control programmes succeed.

Brazil has now become the first country to allow the commercial release of the genetically modified (GM) mosquito, OX513A.

In several trials, successive releases of the Oxitec males have been shown to reduce substantially the wild population of dengue mosquitoes in the treated area.

**Read full, original article:** [Brazil releases genetically modified mosquitoes to fight dengue fever](#)