## Re engineering mosquitoes

Engineering



Unfortunately that's not true, because if that was the case, the world wouldn't have witnessed diseases such as "Malaria" and "Dengue Fever" and also death cases caused by those tiny creatures. According to the World Health Organization, "Dengue Fever" which is also known as "Break Bone Fever affects approximately 50 to 100 million people every year. The reason behind naming dengue fever as break bone fever is because of the symptoms that people get from these diseases, for example: teaches, contractions in muscles as well as severe pain in bones which makes them feel as if their bones are actually going to break.

The reason behind the quick spread of this virus is generally because of transportation of the mosquito's eggs. In other words, when mosquitoes lay eggs in clear water which could be located near frights or ports, which would makes those eggs easily transported around the world. In order to get rid of such chaos, there are two main ways currently implemented which are: 1-The use of lava sights: whereas some chemical is put in water and is left to breed. - Fogging method: whereas chemical is being mixed with smoke and thus being spread into the environment.

This is the most common way to get rid of mosquitoes. It is worth mentioning that the above two ways are not very effective, therefore scientists have thought of another way to solve this issue. The main aim of the intended project is to reduce the population of the mosquitoes in a ways that would be safe for both, the people and the environment. But in order for the project to succeed, some basic understanding of the mosquito's characteristics was needed.

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Luckily, the following results were reached by the scientists: 1- Male mosquitoes don't bite, only the females do. 2- Secondly, male mosquitoes are quite good at finding the female mosquitoes. Using the above two factors, the situation would be that: when male mosquitoes meet the females, the offspring takes place and leads the female mosquito to lay approximately 1 00 eggs at a time. But if the male mosquito carries a gene which causes the death of the offspring, that means that the chances of the female's mosquitoes to lay eggs reduces.

Therefore from the above we can conclude that the main target of this project is to be able to make less fertile male mosquitoes meet the female in order to avoid offspring. Whereas its worth mentioning that this project has been studied and tested for the past 10 years by Oxford University, and the implementation of it started recently in several areas of the world such as: Malaysia and Brazil. So far the results are very pleasant, in which the population of the mosquitoes dropped by 85 % in just about four months.