

Scientists Build Anti-Mosquito Laser

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A laser that kills mosquitoes could help reduce the spread of malaria. Image credit: [PlaneMad/Wikipedia](#)

(PhysOrg.com) -- In an effort to prevent the spread of malaria, scientists have built a laser that shoots and kills mosquitoes. Malaria, which is caused by a parasite and transmitted by mosquitoes, kills about 1 million people every year.

The anti-mosquito [laser](#) was originally introduced by [astrophysicist](#) Lowell Wood in the early 1980s, but the idea never took off. More recently, former Microsoft executive Nathan Myhrvold revived the laser idea when Bill Gates asked him to explore new ways of combating [malaria](#).

Now, astrophysicist Jordin Kare from the Lawrence Livermore National Laboratory, Wood, Myhrvold, and other experts have developed a

handheld laser that can locate individual [mosquitoes](#) and kill them one by one. The developers hope that the technology might be used to create a laser barrier around a house or village that could kill or blind the insects. Alternatively, flying drones equipped with anti-mosquito lasers could track the insects with radar and then sweep the sky with the laser.

The researchers are tuning the strength of the laser so that it kills mosquitoes without harming other insects or, especially, people. The system can even distinguish between males and females by the frequency of their wing movements, which may be important since only females spread the parasite.

In experiments, the system could target mosquitoes with a flashlight, and then uses a zoom lens to feed the data to the computer, which fires at the insect. Each time the laser strikes a mosquito, the computer makes a gunshot sound. When the mosquito is hit, it bursts into flame and falls to the ground, and a thin plume of smoke rises.

The anti-mosquito laser is just one of many novel ways to kill the disease-carrying insects, in addition to the conventional strategy of vaccinating humans. Other ideas include devices that disrupt the mosquitoes' senses of sight, smell, and heat; feeding them poisoned blood; infecting them with a genetically altered [bacterium](#); and creating a malaria-free mutant to overtake the natural mosquitoes.

via: [Wall Street Journal](#)

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