

## Malaria-Fighting Fish

### **Nile tilapia eat mosquitoes that spread malaria.**

Posted: August 16, 2007, 2 a.m. EST

The Nile tilapia (*Oreochromis niloticus* formerly *Tilapia nilotica*) is already a popular food fish in Kenya, but it may also be a great tool in mosquito control, which helps to reduce the spread of the infectious disease malaria, according to a new study published in the BioMed Central Public Health journal.

Researchers introduced the Nile tilapia into abandoned fishponds and the effect was measured over six months on the numbers of mosquito immatures. For comparison an untreated control pond was also used.

After *O. niloticus* introduction, mosquito densities immediately dropped in the treated ponds but increased in other control ponds with no fish present.

The results showed that after 15 weeks the fish caused more than a 94 percent reduction in two types of mosquitoes in the treated ponds, and more than a 75 percent reduction in another type of mosquito. They dramatically reduced mosquito larval densities in fishponds for at least six months and this reduction was directly linked to their predation.

Concern about resistance to pesticides has stimulated renewed interest in alternative control methods including biological control and biopesticides. This is largely due to the emerging threat of strong resistance to pesticides.

Benefits of larvivorous fish are that the mosquito larvae cannot build up a physiological resistance, also, fish populations are generally self-sustaining and do not depend on the presence of larvae. By contrast survival of other biological control agents is often dependent on the mosquito population not being entirely eliminated.

For the full research paper, go [here](#).