## GM mosquito offer alternative to potential overuse of pesticides

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Along with the <u>explosion of Zika virus infections</u> in Latin America, we have a similar spike in conspiracy theorists.

In my <u>earlier post on GMO mosquitoes</u>, I explained the high rates of pesticide resistance and why we need new ways of combating the many viral infections transmitted by mosquitoes.

Last year, my focus was on the rise in Chikungunya and dengue infections, and how those threaten the U.S. as well as Latin America. Now Zika, which many think might be the cause of the serious birth defect, microcephaly (abnormally small skulls), is spreading rapidly north from Brazil.

Mosquitoes species that weren't previously present in the U.S. have arrived and are now expanding their ranges. *Aedes albopictus*, or the <u>Asian tiger mosquito</u>, has spread throughout the world via international <u>trade</u>, and the mosquitoes follow major transportation routes. Also, infected travelers can bring their infections home with them, causing further spread. This is one strong hypothesis as to how Zika began in Brazil — brought by attendees to the 2014 World Cup. This is a growing concern about the upcoming summer 2016 Olympics in Brazil, along with spreading <u>multi-drug-resistant bacteria from the markedly polluted water</u>.

Along with the range expansion, we're seeing the spread of disease, with <u>locally transmitted dengue in Florida in 2009</u>, then <u>Chikungunya in Florida in 2014</u>. Antibodies to dengue, indicating previous infection, were found in <u>5 percent of Key West residents and in 38 percent of the Brownsville, Texas, residents tested...</u>

Again, while there are risks with any technology or drug, we are facing a crisis with mosquito-borne arboviral infections spreading throughout Latin America and the Caribbean, and undoubtedly soon to threaten swaths of the continental U.S., as climate changes makes the habitat of southern states more welcoming and extends the mosquito range further north and west.

I, and many other scientists, prefer the use of targeted interventions with *Wolbachia* or Oxitec's genetically modified mosquitoes, to the alternatives of indiscriminately harmful pesticides or widespread, painful and debilitating infections of dengue, Chikungunya, yellow fever and now Zika.

**Read full, original post:** Mosquito Wars Update: Would You Choose GMO 'Mutants,' Pesticides Or Dengue And Zika Virus?