

Not so fast: Nature's defenses may dampen effectiveness of gene drives targeting entire species

Rest easy, folks. Armies of genetically modified super-species are unlikely to conquer Earth anytime soon.

In a [paper](#) recently appearing in the journal *Genetics*, a University of Kansas researcher and colleagues from Cornell University have revealed daunting challenges to changing the DNA of entire populations of species via the most promising techniques available today to produce “gene drive.”

For decades, scientists have proposed various methods of genetically altering natural populations to solve problems that plague human beings.

“A lot of times nature interferes with how humans would like the world to be,” said lead author Robert Unckless, assistant professor of molecular biosciences at KU. “Good examples of that are pests in crops and insect-vectored diseases, like the Zika virus or dengue or malaria.”

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[F]aced with the new and sophisticated CRISPR/Cas9 method of gene drive, nature is still likely to fight back to resist the mutation successfully, [Robert Unckless, professor of molecular biosciences at KU, said.]

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Unckless and co-authors ... used mathematical modeling to calculate the likelihood of this resistance evolving, which hadn't been performed previously. They show nature still has the edge over scientists hoping to solve human problems with GM organisms.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Research shows nature can beat back scientific tinkering with genes of entire species](#)