Podcast: GMO insects loose in the wild? Inside scoop on controversial Oxitec mosquito in Brazil

The tiny mosquito is a nuisance in the industrialized world, yet in developing countries it is a ruthless killer, spreading blood-borne diseases that bring about pain and suffering. In many regions, these mosquitoes are invasive species with little to no ecological importance.

For years scientists have used "sterile insect technique" (STI) to control these pests, a process that treats sexually compatible insects with radiation, rendering them infertile. The insects are released into the wild to crash problematic populations. Biotech firm Oxitec is trying to build on this familiar and effective technology with genetic engineering. The company's mosquitoes contain a lethal gene that can be turned off in the laboratory with a simple chemical. Upon release, these mosquitoes breed with their wild relatives, spreading the lethal gene and creating a reproductive dead end.

While Oxitec's field trials have been quite successful, these studies have failed to win public acceptance of GMO mosquitoes in some parts of the world. A recent article in *Scientific Reports* from a credible lab raised serious but unsubstantiated doubts about Oxitec's engineered insects. This unwarranted speculation was then amplified and exaggerated by credulous media outlets and ideological activist groups, further eroding public trust in a promising technology.

Om this episode of Talking Biotech, host and plant geneticist Kevin Folta sits down with Kelly Matsen, research development and operations lead at Oxitech. She offers an inside look at the controversial experiments with GMO mosquitoes, separating sound science from overheated media gossip.

https://geneticliteracyproject.org/wp-content/uploads/2019/09/205_Oxitech.mp3

Kelly Matsen is the research and development and operations lead at Oxitech. Visit the Oxitec Website and follow the company on Twitter <a>@Oxitec

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