Just Add Water: Oxitec's New Friendly Mosquito Mini-Capsule Technology Rapidly Suppresses 95% of Disease-Spreading Aedes aegypti in Brazil Trial

Tuesday 19 May, 2020

- *Successful 13-week field trial demonstrated effectiveness and safety of Oxitec's new just-add-water Friendly™ mini-capsule mosquito product in dengue-impacted city*
- *Friendly™ mini-capsules are designed to equip governments and communities of all sizes with a highly-effective and economically sustainable Aedes aegypti control solution*
- *Product eliminates costly adult mosquito production facilities, complex rearing systems, need for expert staff, vehicle-based deployment, and female releases*
- *94% of city residents supported Oxitec's Friendly™ technology*

Oxford, UK – May 2020 – Oxitec Ltd., a leading developer of safe and targeted biological solutions to control insects that transmit disease and destroy crops, today announced the preliminary results of a successful trial for new Friendly™ *Aedes aegypti* mini-capsule technology. Implemented in close partnership with the City of Indaiatuba, Brazil, the Friendly™ mini-capsule product method suppressed up to 95%[1] of disease-carrying *Aedes aegypti*
in urban, dengue-prone environments following just 13 weeks of treatment, as compared to untreated control sites in the same city.

Treatment involved the placement of small Friendly™ mini-capsule products in residential properties once per week, with no special tools or handling. The effort generated rapid suppression over an area of approximately 1,000 people and demonstrated 100% effectiveness of the female larvae-killing feature while validating its full biosafety.

This Friendly™ mini-capsule product trial represents a major advancement in safe, targeted vector control technology. While insect-based technologies have demonstrated promising suppression effects over the last few decades, this is the first insect-based solution built specifically to provide targeted suppression with simplicity, scalability, and economic sustainability, further unlocking the benefits of biological public health solutions for governments, communities and other end-users of all types and income levels.

The mini-capsule technology uses Oxitec's proprietary system for packetizing eggs of Oxitec's 2nd generation male *Aedes aegypti* technology that, when placed in a small box of water, releases safe, non-biting, self-limiting Friendly™ *Aedes aegypti* males that disperse to mate with wild-type female *Aedes aegypti* in an area of up to two or more acres. It is being developed to be the first insect-based *Aedes aegypti* technology that can be manufactured in centralized facilities around the world and then shipped, stored, and deployed on demand anywhere without expert staff or special equipment.

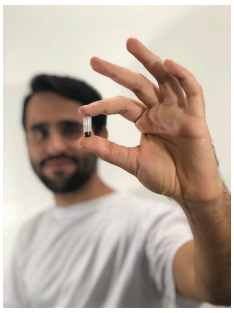
To accompany the trial, Oxitec commissioned independent research that found community support for the trial was high, with 94% of 1,200 residents surveyed in favor of Friendly™ mosquito technology and its use in their neighbourhoods.

Natalia Ferreira, Oxitec Brazil's director, said "*we are facing a devastating dengue epidemic in Brazil and new vector control tools are desperately needed for cities and communities alike. That's why this Friendly™ mini-capsule product is going to be so impactful – it can establish superior Aedes aegypti control safely with the easy deployment of tiny capsules in boxes that don't require costly infrastructure or complex operations. We're making it simple, sustainable, and scalable - in other words, this is exactly what Brazil's cities and communities need at this critical time.*"

Grey Frandsen, CEO of Oxitec, said "*this trial was ground-breaking. It's the first time a biological vector control technology has been packaged into a small solution that can be shipped, stocked, held in one's hand and deployed with multi-generation suppression and no female releases. To start fighting back against the expansion of Aedes aegypti-transmitted diseases, we need an entirely new generation of accessible, economically accessible vector control tools that can empower a broader coalition to participate in the fight. As we've successfully demonstrated in this trial, our Friendly™ mini-capsule approach is just that. This trial exceeded our performance targets and we're now preparing for our next larger field trials."*

Earlier this month, the U.S. Environmental Protection Agency (EPA) granted Oxitec an Experimental Use

Media:



Related Sectors:

Farming & Animals :: Health :: Medical & Pharmaceutical :: Public Sector & Legal ::

Related Keywords:

Mosquito :: Mosquitoes :: Biotech :: Innovation :: Science :: Dengue :: Malaria :: Brazil :: Disease :: Public Health ::

Scan Me:

Permit (EUP) for piloting this same technology in the United States.

The World Health Organization (WHO) estimates there are 390 million dengue infections per year, with approximately half of the world's population at risk. The number of dengue cases reported to the WHO has increased more than 15-fold during the past two decades. *Aedes aegypti*, an invasive mosquito found throughout the world, also transmits Zika, chikungunya and yellow fever.

[1] *95% was the highest 2-week rolling average, the individual weekly high was 98%; the highest 4-week rolling average was 92%.*

Company Contact:

Oxitec

E. press@oxitec.com
W. https://www.oxitec.com/

Additional Contact(s):
press@oxitec.com
+1 202 792 3080

View Online

Additional Assets:
https://www.oxitec.com/

Newsroom: Visit our Newsroom for all the latest stories:
https://www.oxitec.pressat.co.uk