



Institut Louis Malardé  
Tahiti, French Polynesia

# INNOVENTOMO

Recent operational research  
achievements and way forward



PACMOSSI Inception Meeting, 22 March 2022

# A global burden



Health



Well-Being



Tourism- Economy



# Ongoing ILM Research Programmes



- **RESVEC**



To improve mosquito and pathogens surveillance

- **SUMOPAC**



To improve molecular detection of pathogens in mosquitoes

- **AeLIMIN**



To evaluate efficacy of *Wolbachia* male release strategy



# Innovative vector control

## Most advanced strategies

- Female release

- ▣ Blocks dengue transmission (*Wolbachia*)



- Male-only release

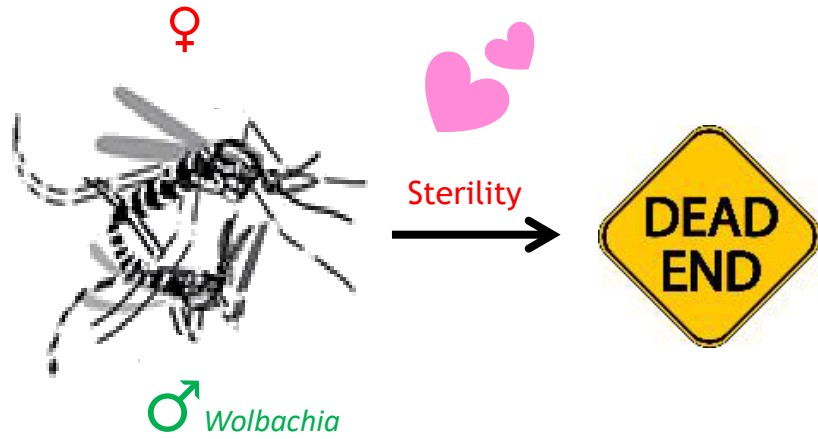
- ▣ Sterile Insect Technique



- ▣ Incompatible Insect Technique (*Wolbachia*)



## Release of *Wolbachia*-carrying males (IIT)

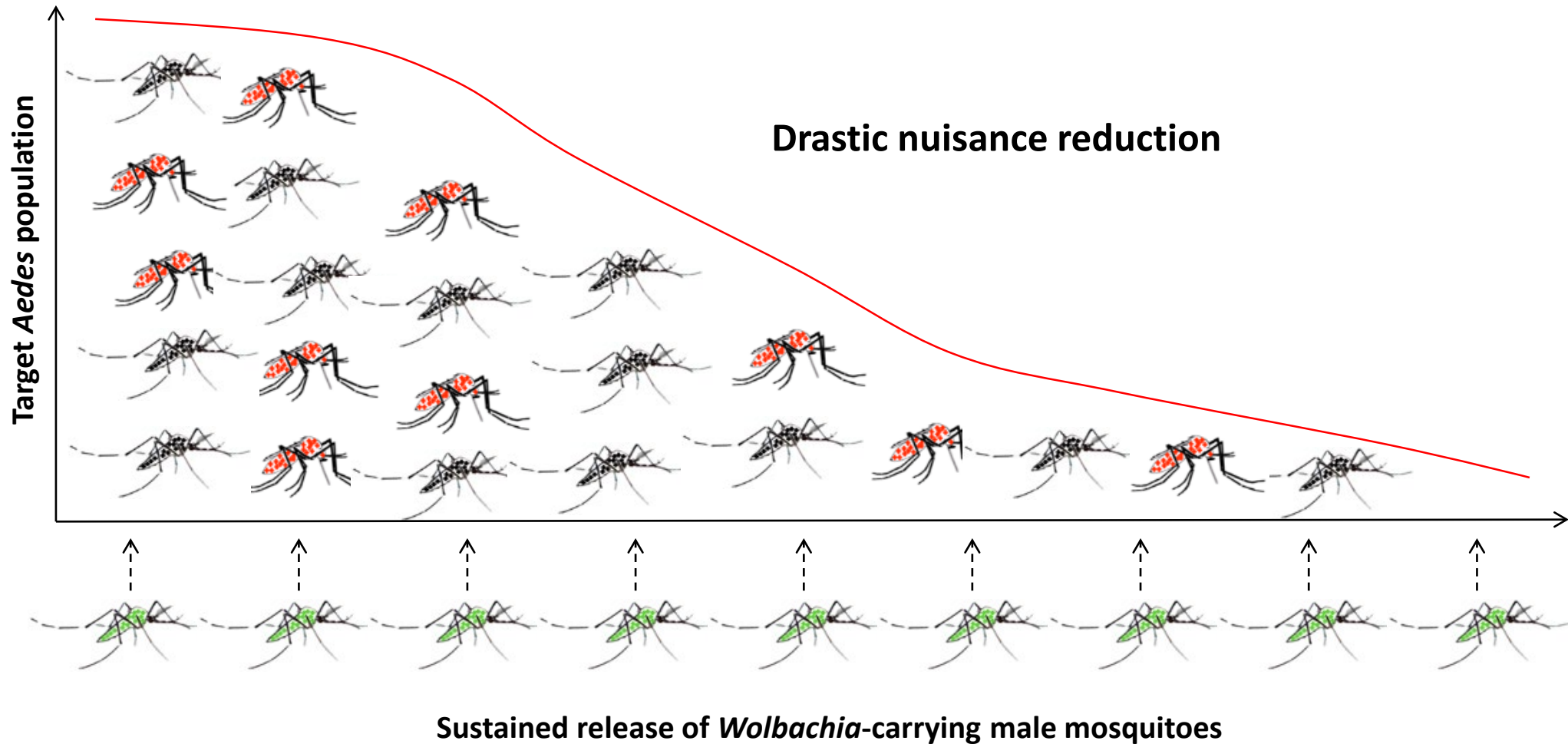


### Male mosquitoes

- Do not bite
- Do not transmit diseases
- Do not establish in the environment



# Incompatible Insect Technique (IIT)



Pilot interventions (ca. 1.5 km<sup>2</sup>)

Maupiti

Bora Bora



Taha'a

Huahine

Raiatea



Tetiaroa



Moorea

Moorea

Tahiti

Papeete



Tahiti

Polynésie française

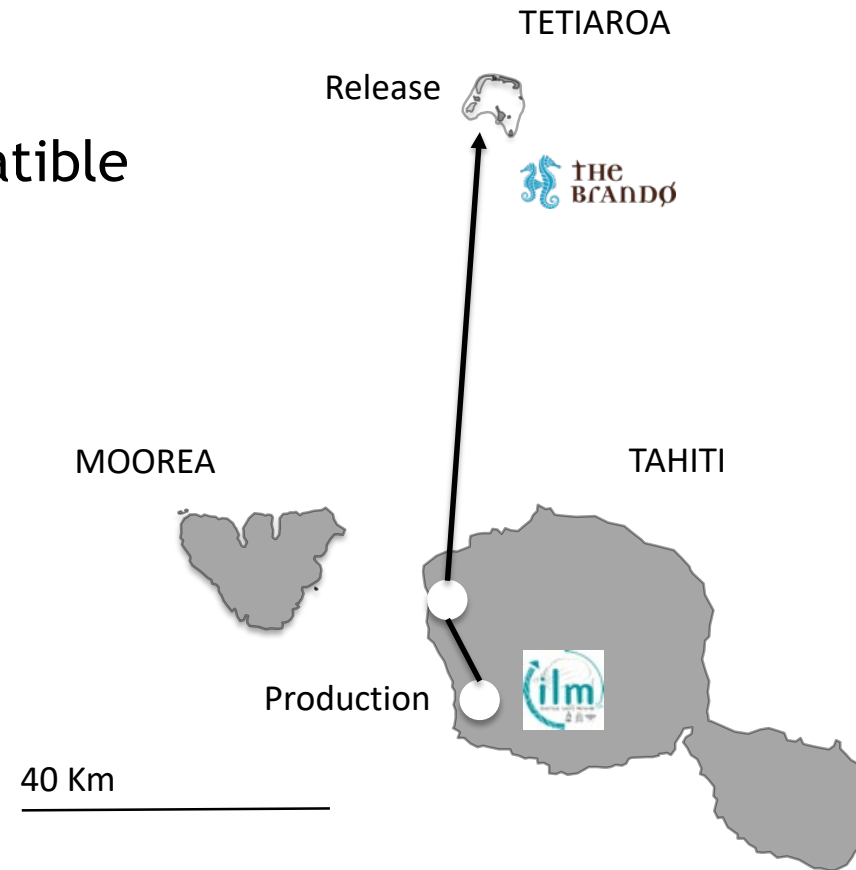
Society islands





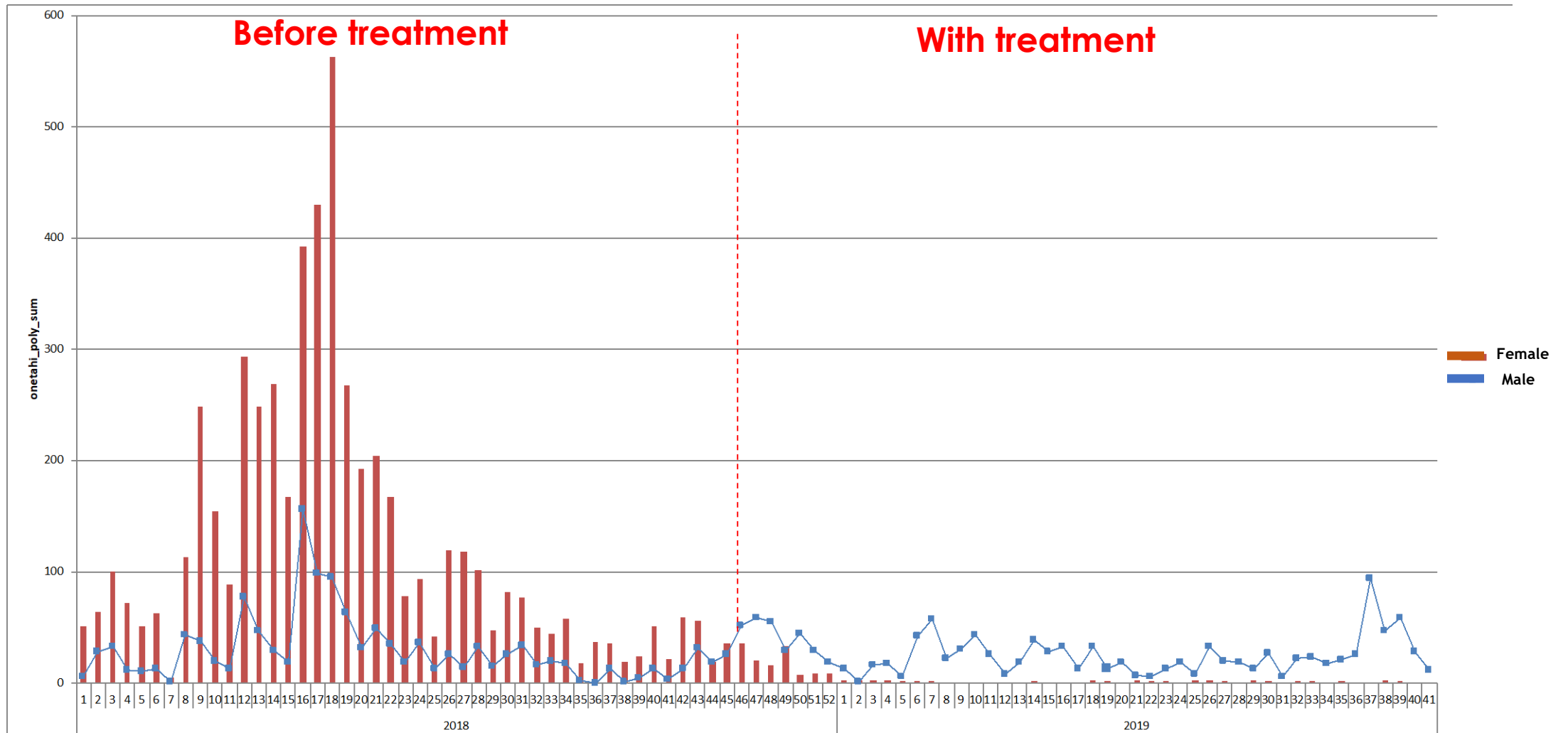
# Tetiaroa pilot trial

- Weekly production and release of incompatible male mosquitoes
- Mosquito population monitoring



# Outcome of mosquito suppression trial (2018-2019)

## Field dynamics of *Aedes polynesiensis* females population



# High Media Visibility

## Credibility, Trust



March 12, 2019

### ISLAND TIDINGS

We are delighted to share the latest news from The Brando resort.  
Please feel free to contact us should you have any questions: [info@thebrando.com](mailto:info@thebrando.com).



LIFE ON THE ATOLL



IN THE PRESS



## Mosquitoes May Meet Their End Thanks to Marlon Brando

An innovative program has nearly eradicated the insects on the late actor's private island, no pesticides or genetic engineering needed.

5 MINUTE READ

BY ANDREW HOWLEY AND KORENA DI ROMA



PUBLISHED OCTOBER 21, 2016



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Archive > Volume 548 > Issue 7665 > News > Article

NATURE | NEWS

## Bacteria could be key to freeing South Pacific of mosquitoes



## NEWS

Business

## The sea-cooled eco-resort that's nearly mosquito-free

By Jessica Bown  
Technology of Business reporter

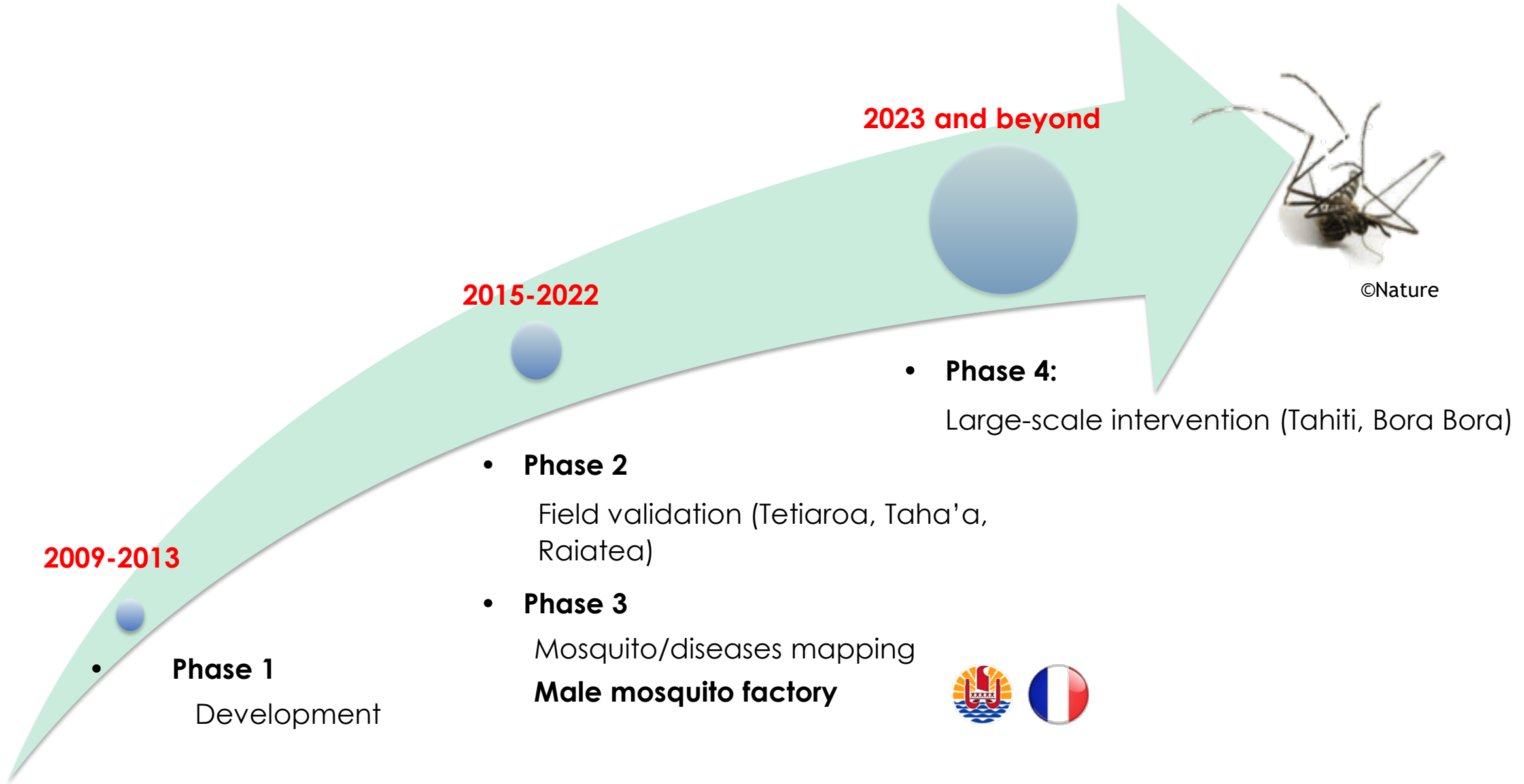
© 31 May 2019



Fancy top-notch luxury on a paradise island for a minimum of £3,200 a night for a two-room bungalow?

The Brando is one of the most luxurious eco-resorts on the planet, nestling on an atoll in

# Scale Up



# INNOVENTOMO facility TAHITI





# INNOVENTOMO Facility Overview

- 1 400 m<sup>2</sup> of mosquito-dedicated research space, including 600m<sup>2</sup> for male mosquito mass-production
- A unique facility in the South Pacific for conducting lab, semi-field and open field evaluations and training
- Ongoing pilot surveillance in urban, rural, and natural island settings
- Three priority islands (Tahiti, Bora Bora, Huahine) earmarked for integrated, pilot vector control interventions (incl. SIT/IIT)





# PAC-SIT consortium



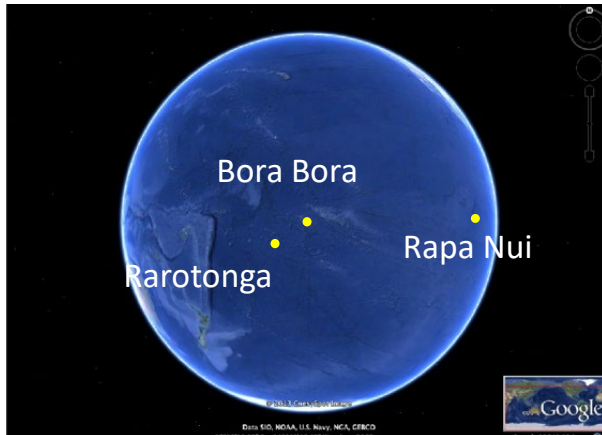
## Pacific consortium selected for testing the efficiency of the Sterile Insect Technique to control Vector Borne Diseases



Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture



World Health Organization





# Thank you

