



Presentation of Ecomore II project in Cambodia

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Steering committee
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Phnom Penh, Cambodia



**Do Vector control in
school lead to a
community decrease of
DENV transmission ?**



Epidemiological approach : cluster randomized trials

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Active detection of dengue-like syndromes in Community



Virological
characterization of
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Active detection of
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Serological monitoring
for dengue with salivary
test in school



Development and Evaluation of integrated vector method control management in schools

Virological characterization of circulating DENV

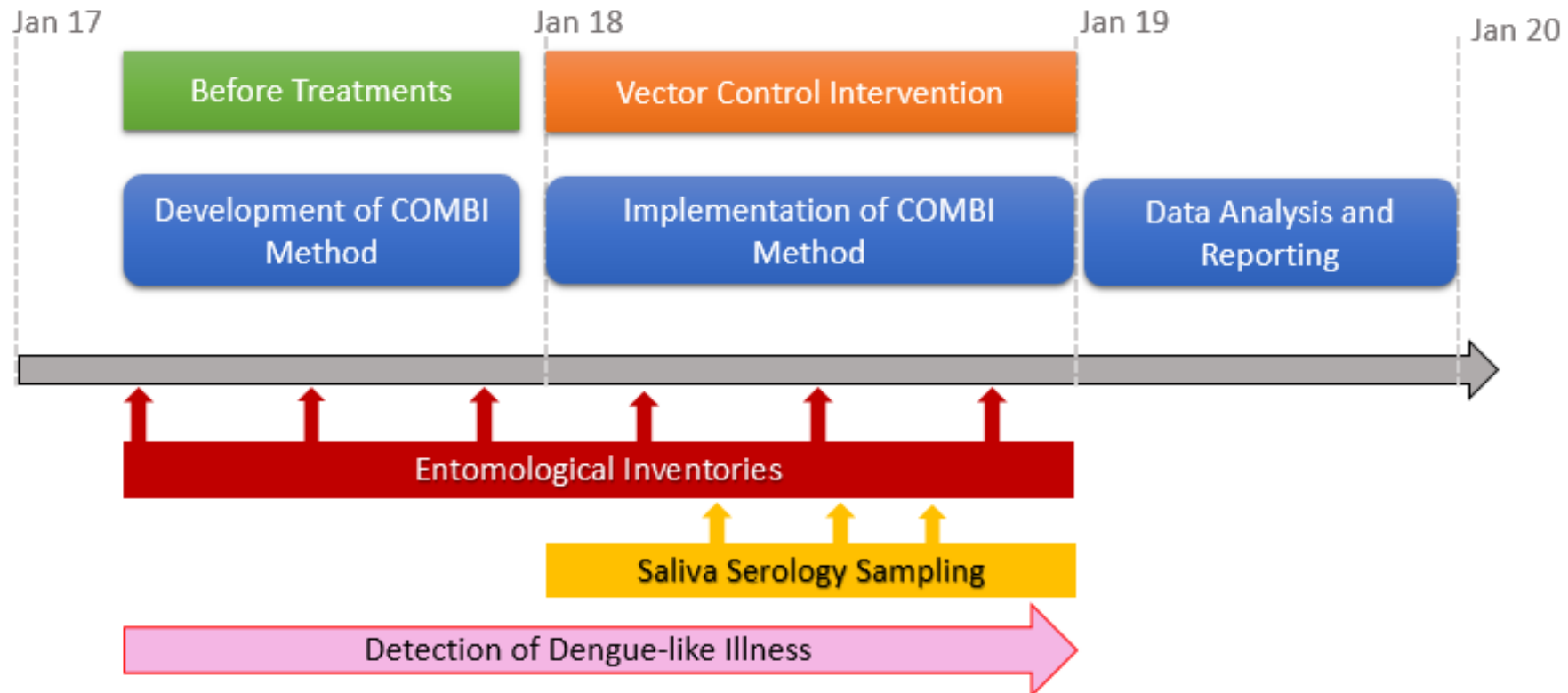
Do Vector control in school lead to a community decrease of DENV transmission ?

Active detection of dengue-like syndromes in Community

Serological monitoring for dengue with salivary test in school



Project Timeline





Development and Evaluation of integrated vector method control management in schools

Virological characterization of circulating DENV

Do Vector control in school lead to a community decrease of DENV transmission ?

Active detection of dengue-like syndromes in Community

Serological monitoring for dengue with salivary test in school



Development and Evaluation of integrated vector method control management (IVM) in schools

MAIN QUESTION

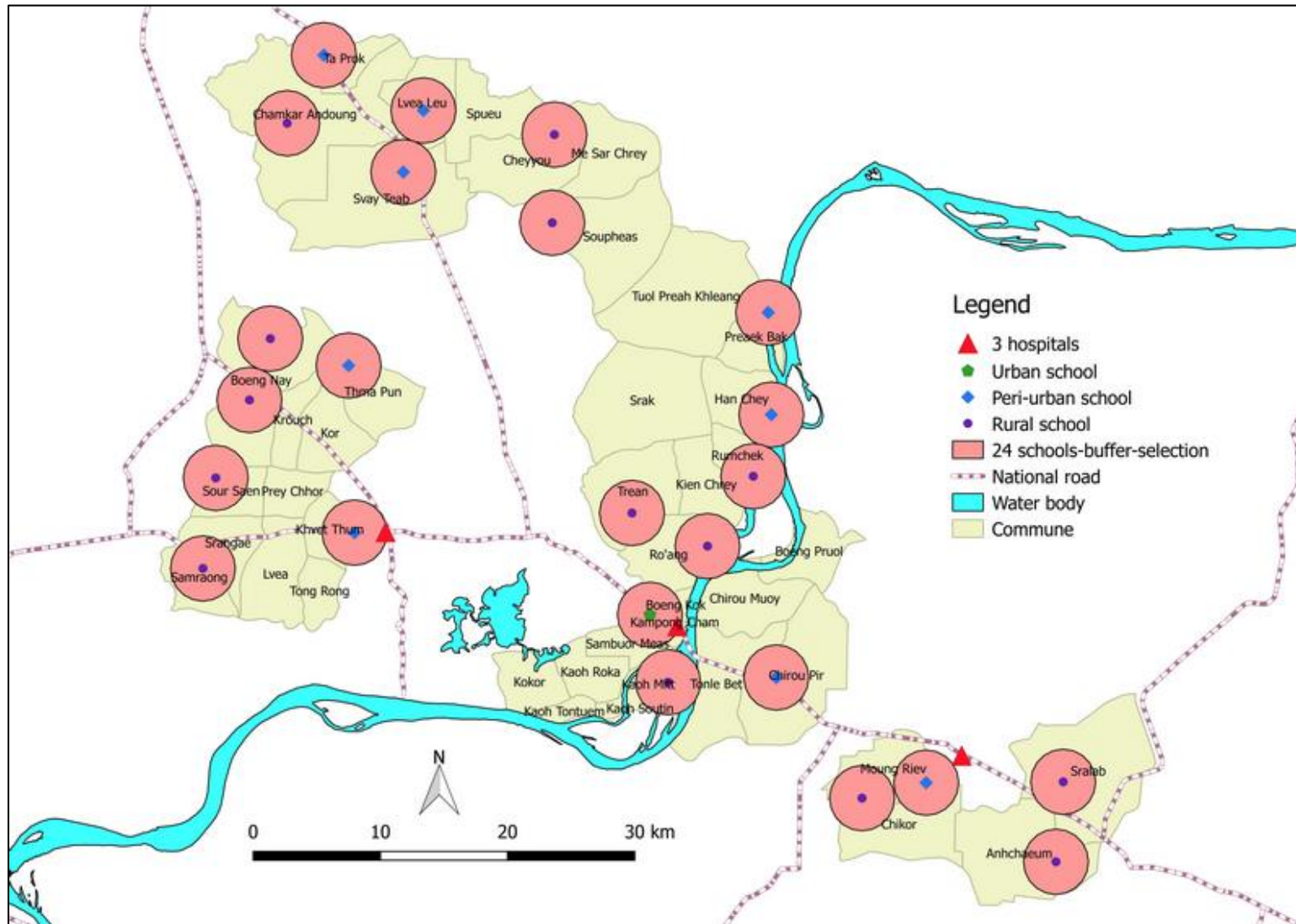
- Do the IVM decrease the population of *Aedes aegypti*?

RELATED QUESTIONS

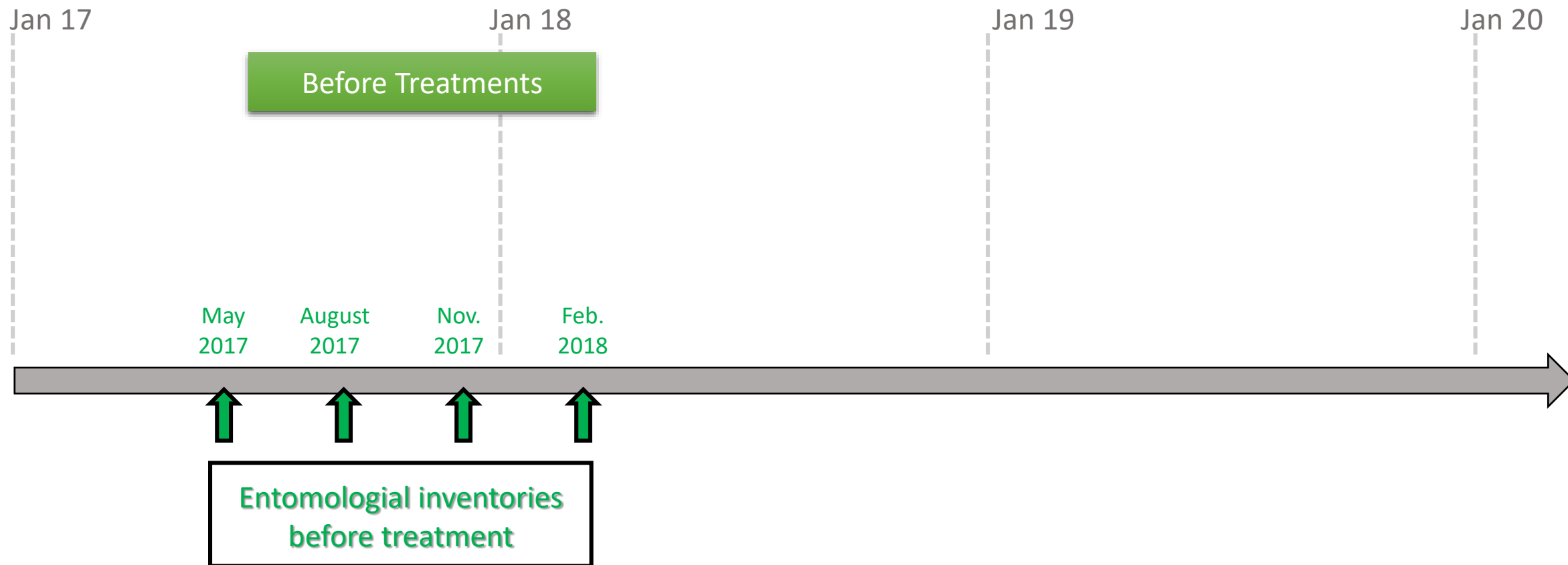
- Is the density of *Aedes aegypti* the same in the 2 clusters before treatment ?
- What is the mosquito composition species ?
- What are the breeding sites in/around schools ?
- Are *Aedes aegypti* resistant to insecticides ?



Randomly selected 24 clusters in 5 districts



One cluster: one school and several villages surrounding and depending on that school.





Trapping of mosquitoes



BG-sentinel trap with lure



CDC light trap



Trapping of mosquitoes





Trapping of mosquitoes



Discussion with children and answer their questions



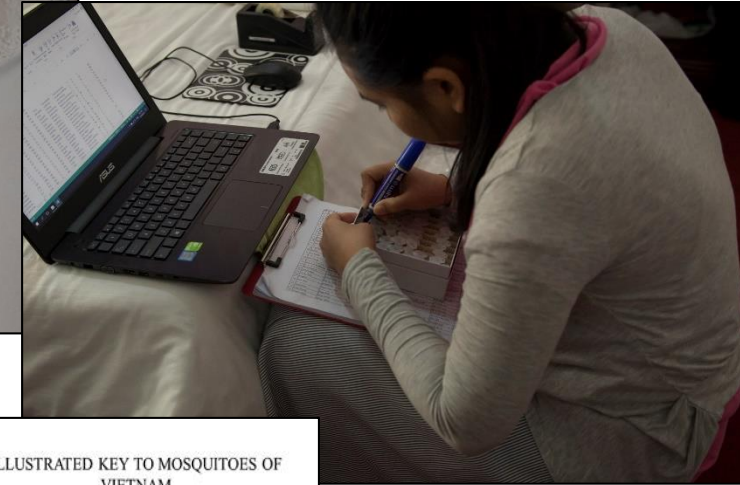
Trapping of mosquitoes



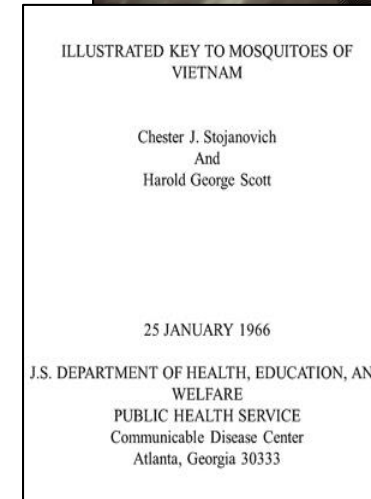
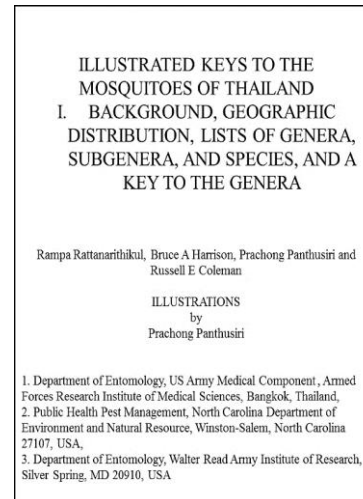
Installation of traps (CDC Light Traps and BG sentinel for 24 hours)

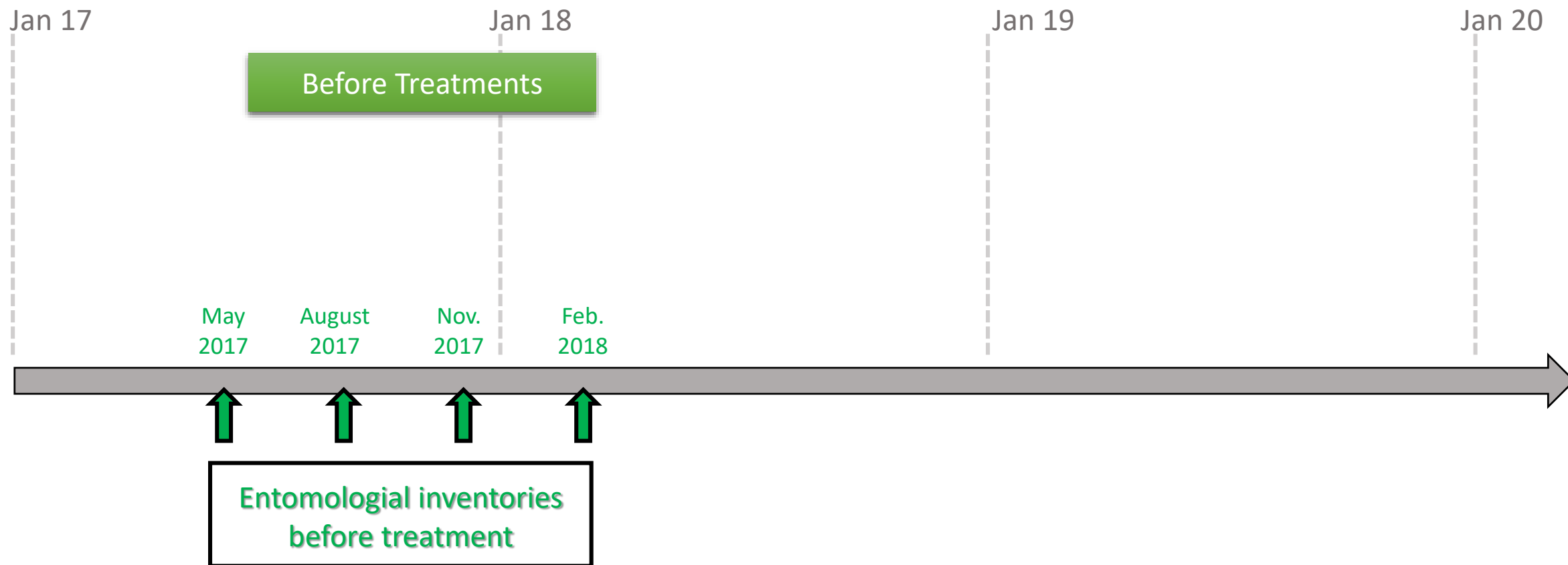


Trapping of mosquitoes



- Collection of mosquitoes from all traps
- Identification of mosquito species by using Thailand and Vietnam keys
- Sample storage: store at -20°C







March 2018
Main treatment

Jan 17

Jan 18

Jan 19

Jan 20

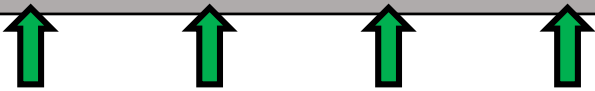
Before Treatments

May
2017

August
2017

Nov.
2017

Feb.
2018



Entomological inventories
before treatment





Integrated Vector Management

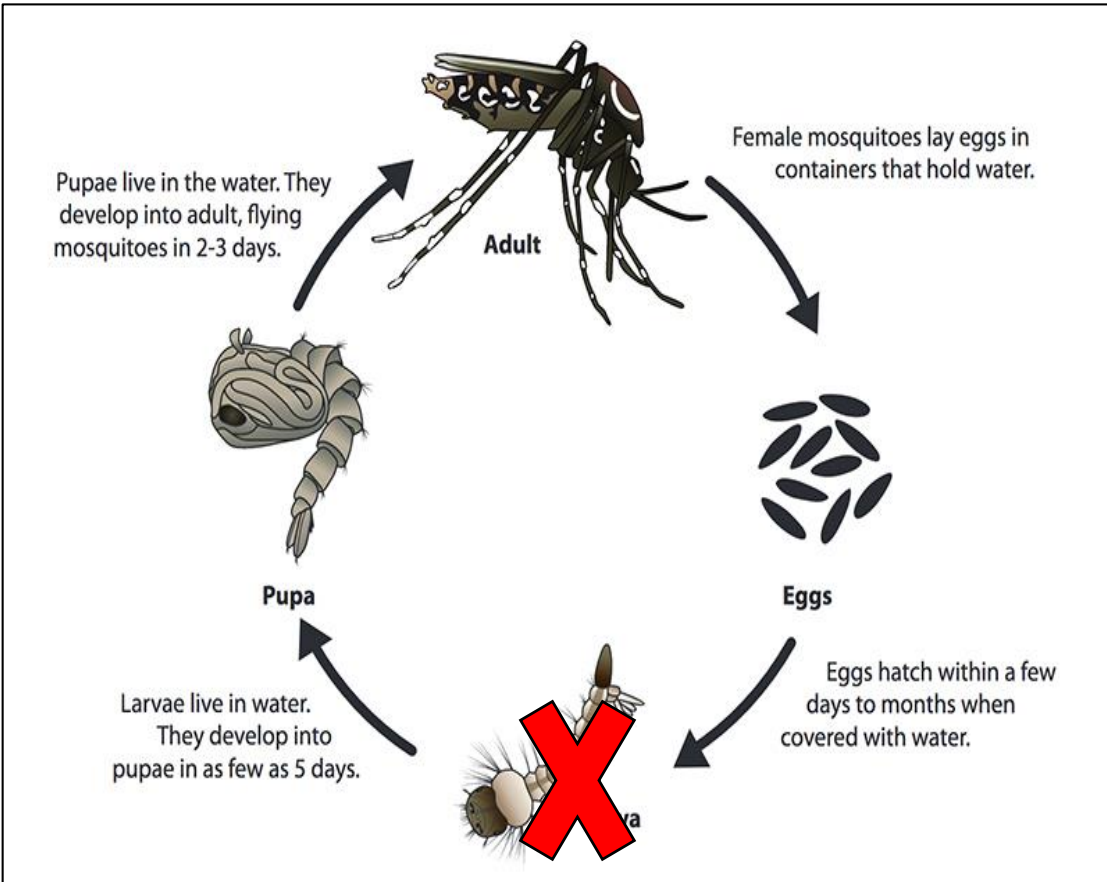
- Use of a larvicide : *Bacillus thuringiensis* var. *israelensis* (Bti) in big containers
- Physical destruction of breeding sites
- Use of desiccation insecticide : Pyriproxyfen in2Care
- COMBI = Communication for Behaviour Impact with children



Bti

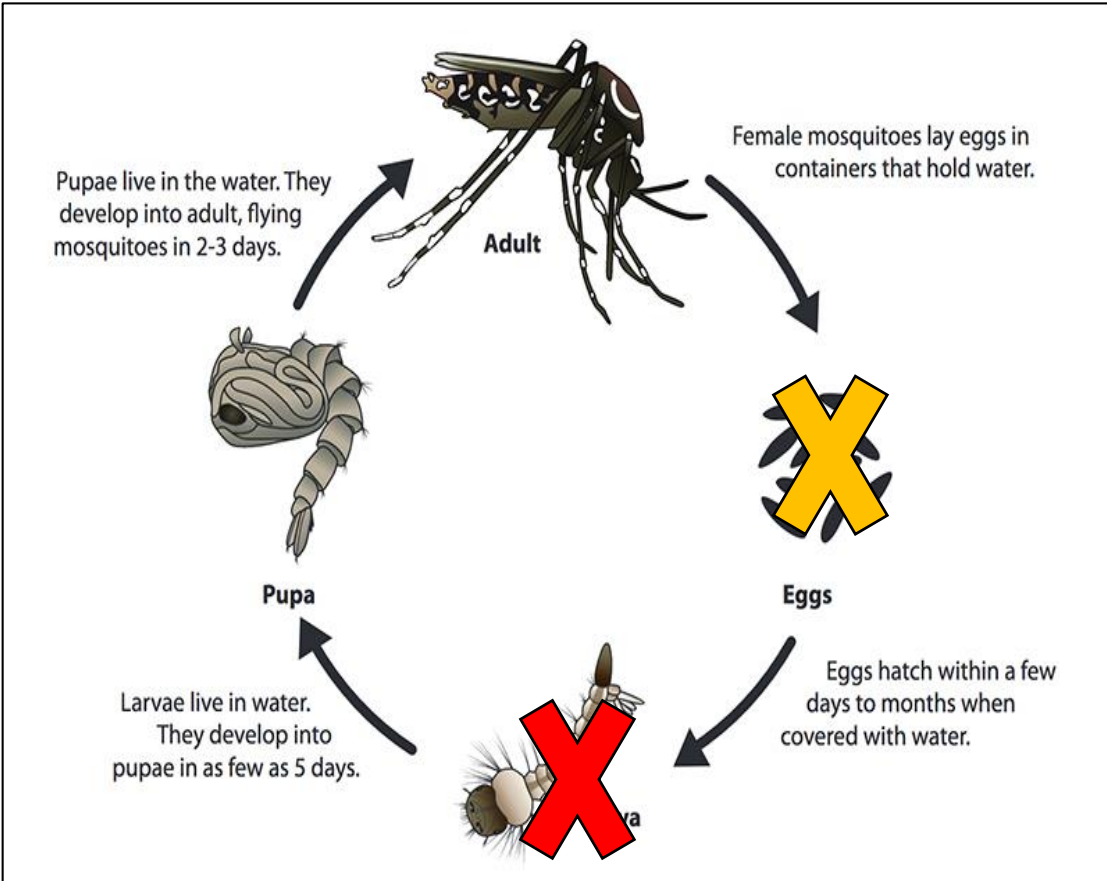


Pyriproxyfen in2care



Use of Bti

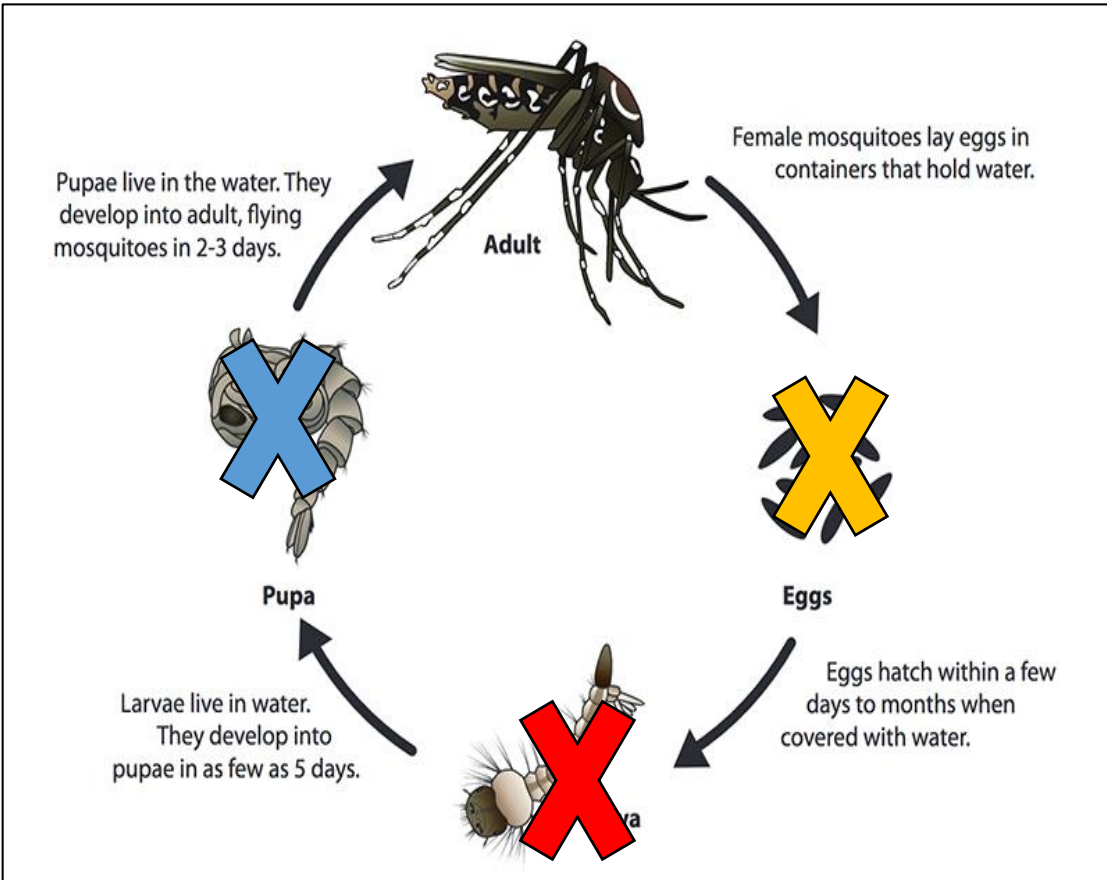




Use of *Bti*

Physical destruction





Use of *Bti*

Physical destruction

Dissemination PP



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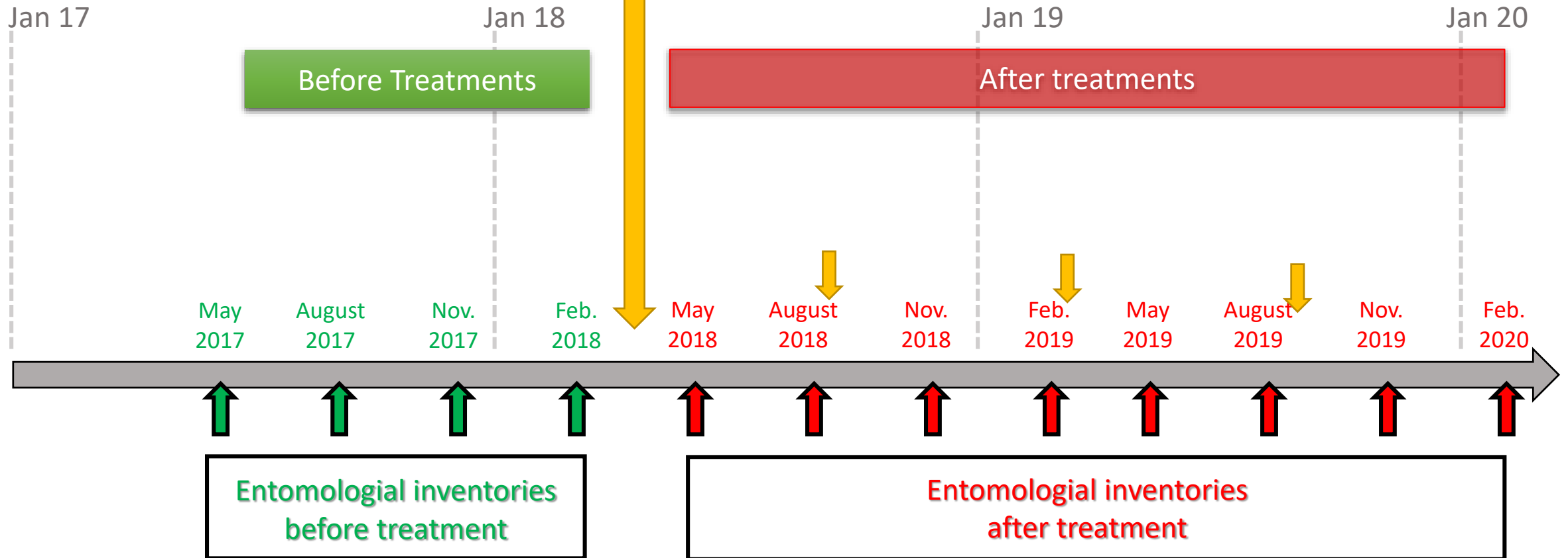


Entomological inventories
before treatment





March 2018
Main treatment





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