Theme: Typology and evolution of the number of mosquito habitats in Matamèyè, Niger

Paraiso H Fidèle*, Maaroufi I Abdou, Ismaêl Zakou, Salissou M Nazir, Jamilath Daré

IPF KAOURA MATAMEYE

Abstract

- The Zika virus is an arbovirus member of the Flaviviridae family of the genus Flavivirus, responsible for Zika fever in humans.
- Matamèye is a town in the, in the Zinder region of southern Niger.
- The general objective of the work is to categorize mosquito habitats.
- Specifically, it involves getting learners to recognize potential sources of larvae and mosquito breeding.
- we had identified six different types of mosquito habitats across
- These habitats clearly change in numbers over time.

Research Question

- **Different types of mosquito habitats across the city?**

- Habitats evolution ?

Introduction

- The general objective of the work is to categorize mosquito habitats.
- Specifically, it involves getting learners to recognize potential sources of larvae and mosquito breeding. In addition, have them categorize the different elements identified
- These signs occur within 3 to 12 days after the bite; they are in the vast majority of cases mild, and disappear in 2 to 7 days. It is estimated that 70 and 80% of Zika virus infections do not cause any symptoms and go completely unnoticed.
- The prevalence is also needed for decision-making about the value of scaling-up surveillance efforts.

Research Methods

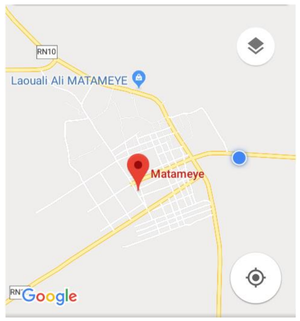
Methods

The data collected were: mosquito nets identification, number of nests by category, temperature, rainfall, etc. The material used for these surveys consists of:

- Mobil Application: Globe Observer, Globe mosquito habitat mapper
- some survey sheets for recording declarations;
- two pens for writing;
- a pencil for note-taking;
- a digital camera for photographs

Location of the working city

- Matamèye is a town in the Matamèye department, in the Zinder region of southern Niger.
- Altitude: 422 m
- Population: 58,025 (2011)
- Weather: 29°C, wind NO at 10 km/h, 17% humidity
- Contact details: 13° 25′ 26″ north, 8° 28′ 37″ east



GLOBE Badges

Be a **Collaborator**

Make an Impact

Be a **STEM Professional**

Results

In this section, we will present in turn the different mosquito habitats that we were able to identify in the city of Matamèyè

Discussion

- Since we are in a desert country, the annual precipitation rate is very low, which justifies the limited number of nests from the water.
- However, open sumps and poor public behaviour are the reasons that justify the existence of the few identified water systems.
- With regard to the categories of habitats not related to water, it should be noted that it is the consequence of the activities carried out in the area.
- Despite the efforts of the government and local socio-political leaders, we are very unhappy to read in a scientific article that the prevalence of malaria in the area, for example, is 49% and this is associated with malnutrition in general.
- This rate is contrary to the rate collected from the hospital administration of the area, which is 20% in 2017 and 19% in 2018.
- In any situation, it is good to educate the population, especially learners, about good practices to limit and destroy mosquito nests

Conclusions

- In conclusion, we had identified six different types of mosquito habitats across the city of Matamèyè. These habitats clearly change in numbers over time.
- Due to the lack of research resources, we would like to associate the identification of larvae with our work

Bibliography

- Mobil Application: Globe Observer, Globe mosquito habitat mapper, Globe Program, NASA, 2018
- Dr. Stephen Berger, Infectious Diseases of Niger: 2019 edition, Gideon Informatics, Inc., 2019
- Guidelines for surveillance of Zika virus disease and its complications, Washington: Pan American Health Organization; 2016