

# Insects diversity on vegetable crop in Benin



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## Background

Vegetables play an important role in food security in West Africa. However, their production faces many constraints, including pests and diseases. Although the pests and diseases management relies on the use of synthetic pesticides, pest population dynamics and their damages are increasing. The situation is more alarming due to the climate change.

## Objective

This study aims to map the main pests, diseases and natural enemies of vegetable crops.



View of a vegetable production site

## Methodology

- Survey areas: In the north (Malanville) and in the south (Adjohoun, Bonou and Dango).
- Pest samples were collected on tomato, okra, pepper/habanero, onion, and Gboma.



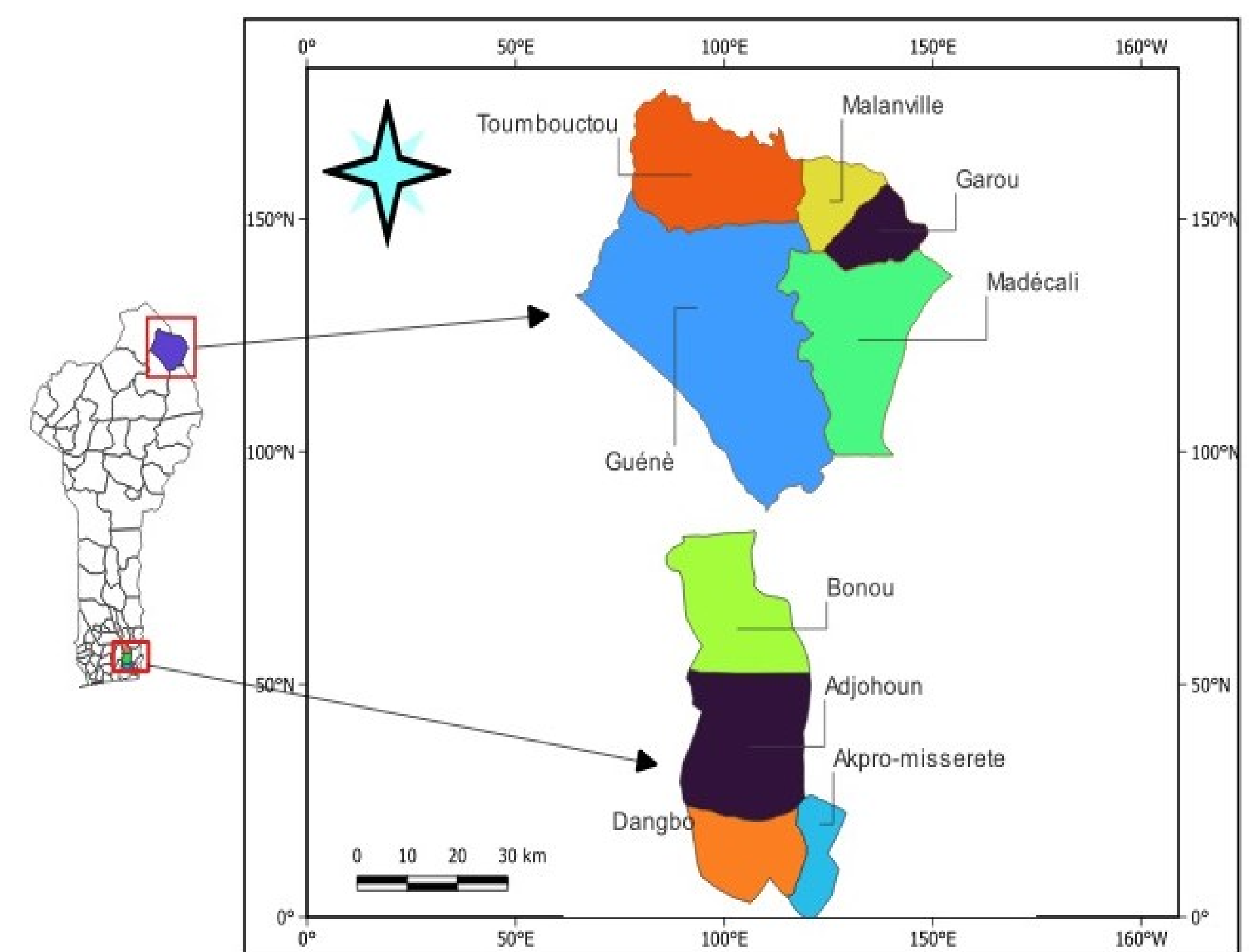
Sampling insects on tomato crops using a sweep net



Sampling pests on onion by direct observation



Conservation of insects in alcohol (70°C) for identification



Map of the survey areas

## Principal results

### Some Pests



*Helicoverpa armigera* larvae



*Earias spp* larvae



*Tetranychus spp* damage



*Zonocerus variegatus*

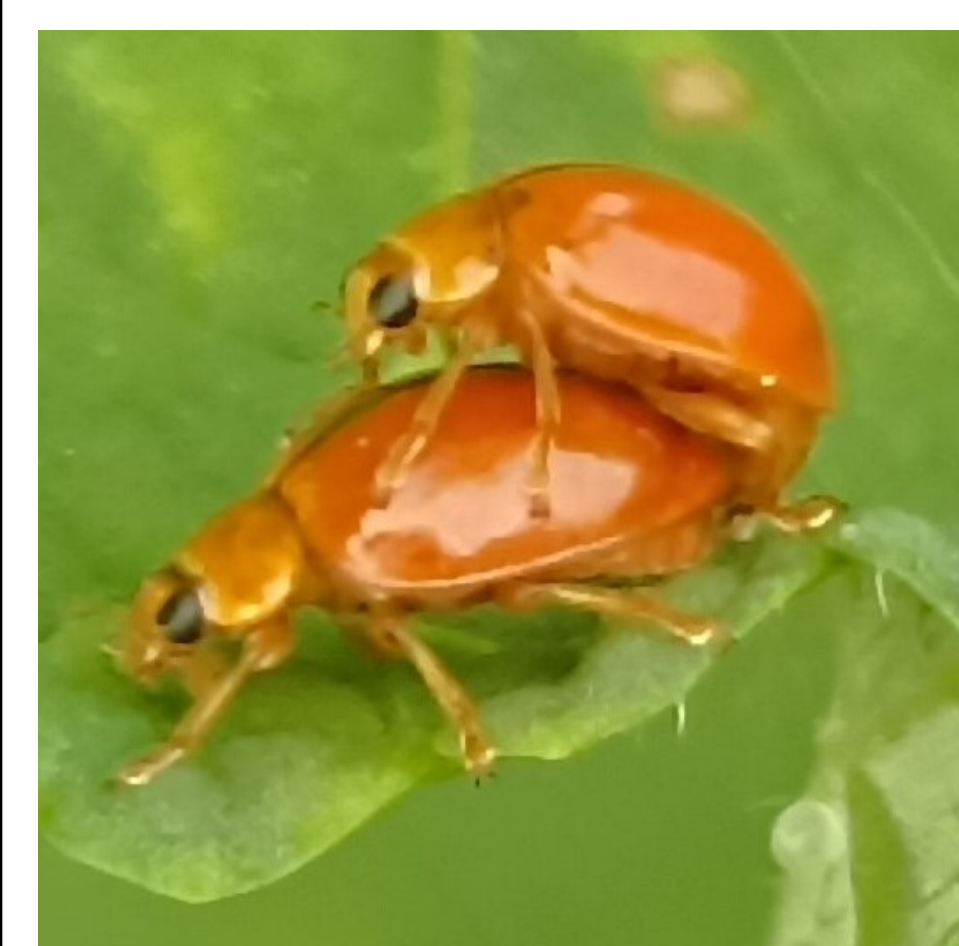


*Dysdercus voelkeri*

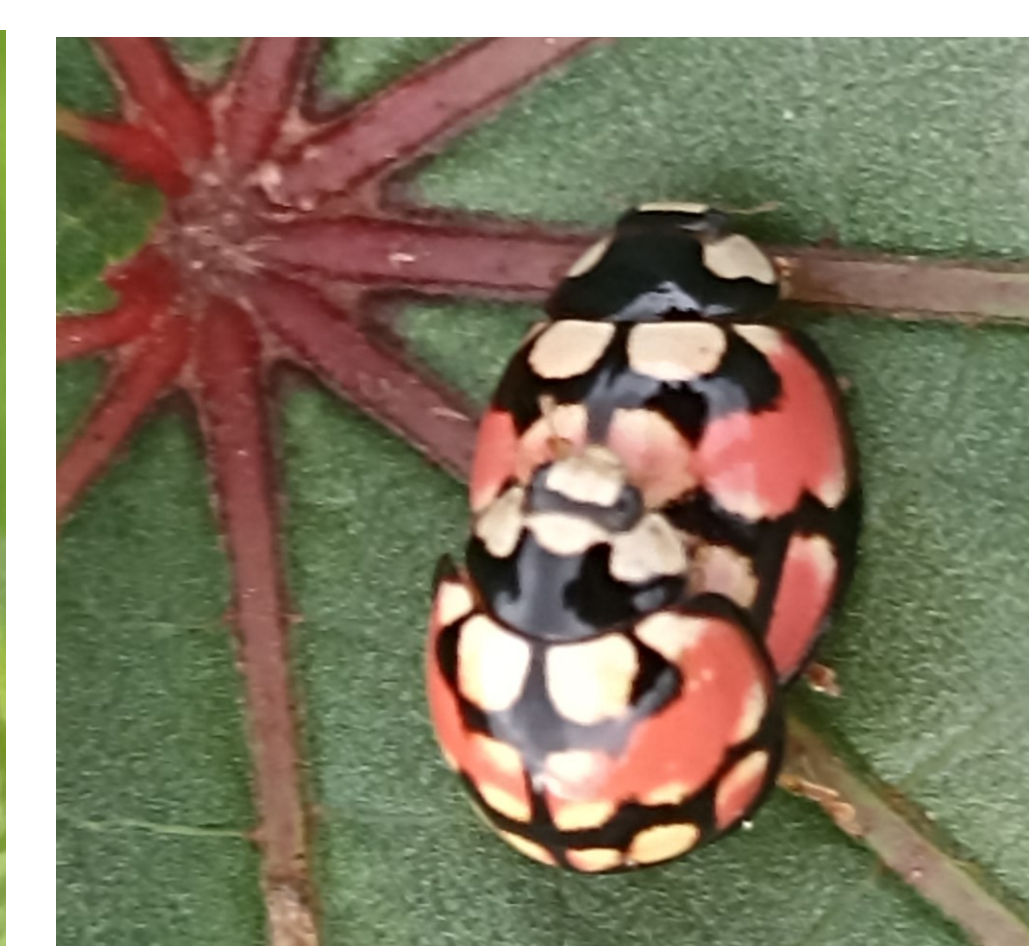


*Amrasca biguttula*

### Some Natural enemies



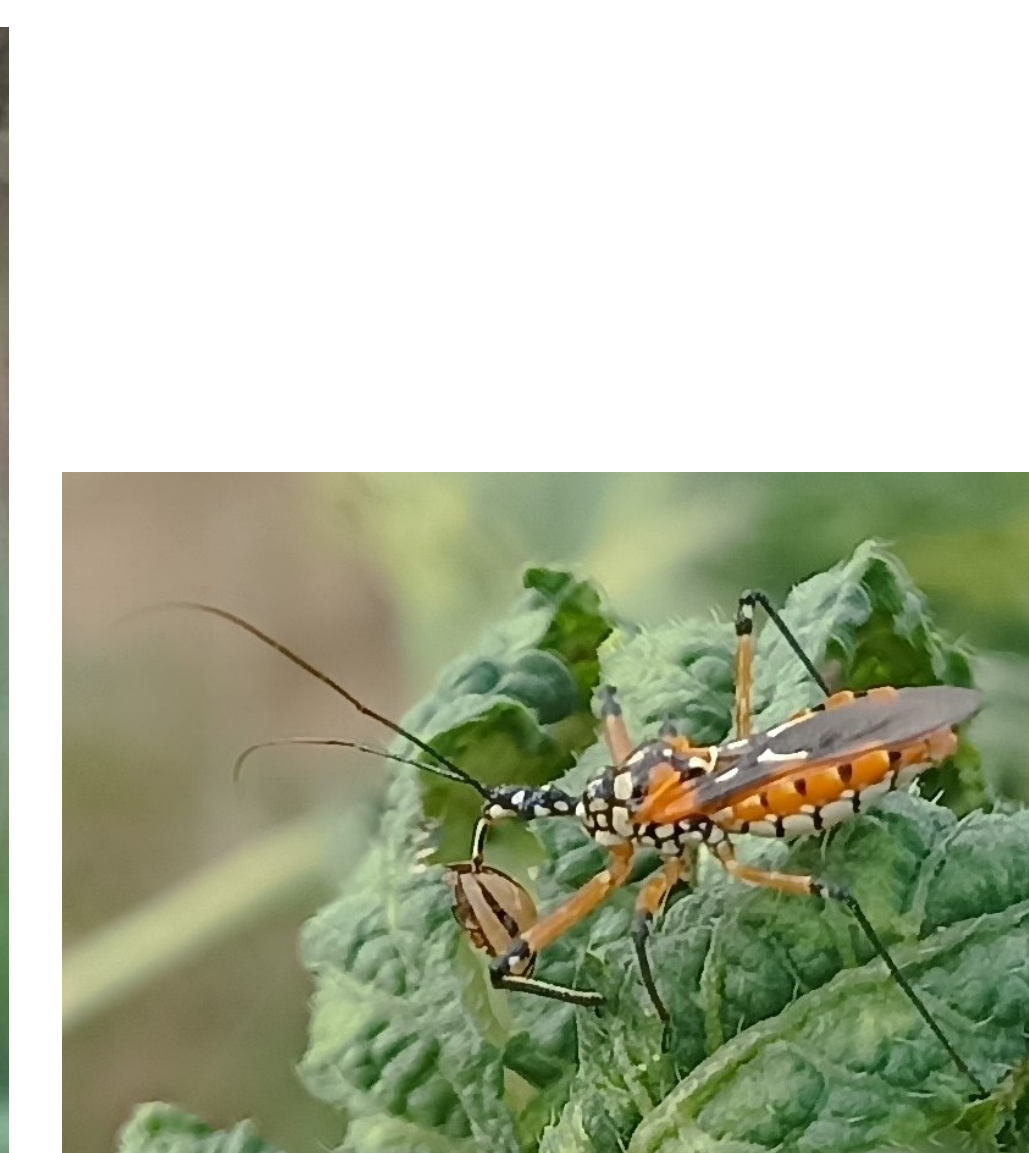
Coccinellidae (Predators)



Syrphidae (Predator)



Chrysopidae egg (Predator)



Reduviidae (Predator)



*Cotesia spp* (Parasitoid)

## Conclusions

- Diversity of pests and natural enemies.
- Knowledge of the main pests, their geographical distribution, population density, characteristic damage and natural enemies is crucial to the development of a sustainable and agroecological management approaches of vegetable crops.

### Acknowledgment



Sowing seeds, meeting needs

