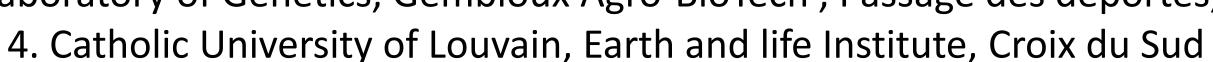
# CASSAVA VIRUSES DIAGNOSTIC AND CONTROL IN THE SOUTH **KIVU REGION**

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### CONTEXT

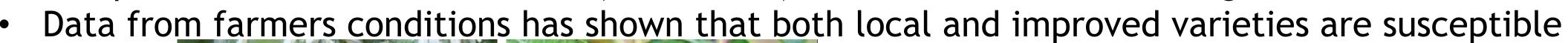




50 % of emergent pathogens are viruses (1)









« Virus Rush » with

**Technological** 

revolution of NGS

**Remote-Sensing** 

facilities

>50 new viruses

Fig. from left to right: Cassava mite, Whiteflies (Bemisia spp.), MealyBugs on cassava plant, Cassava Bronstreak Disease symptoms on cassava tuber roots.

**Mobile Data** 

collection

**Bio-Informatic** 

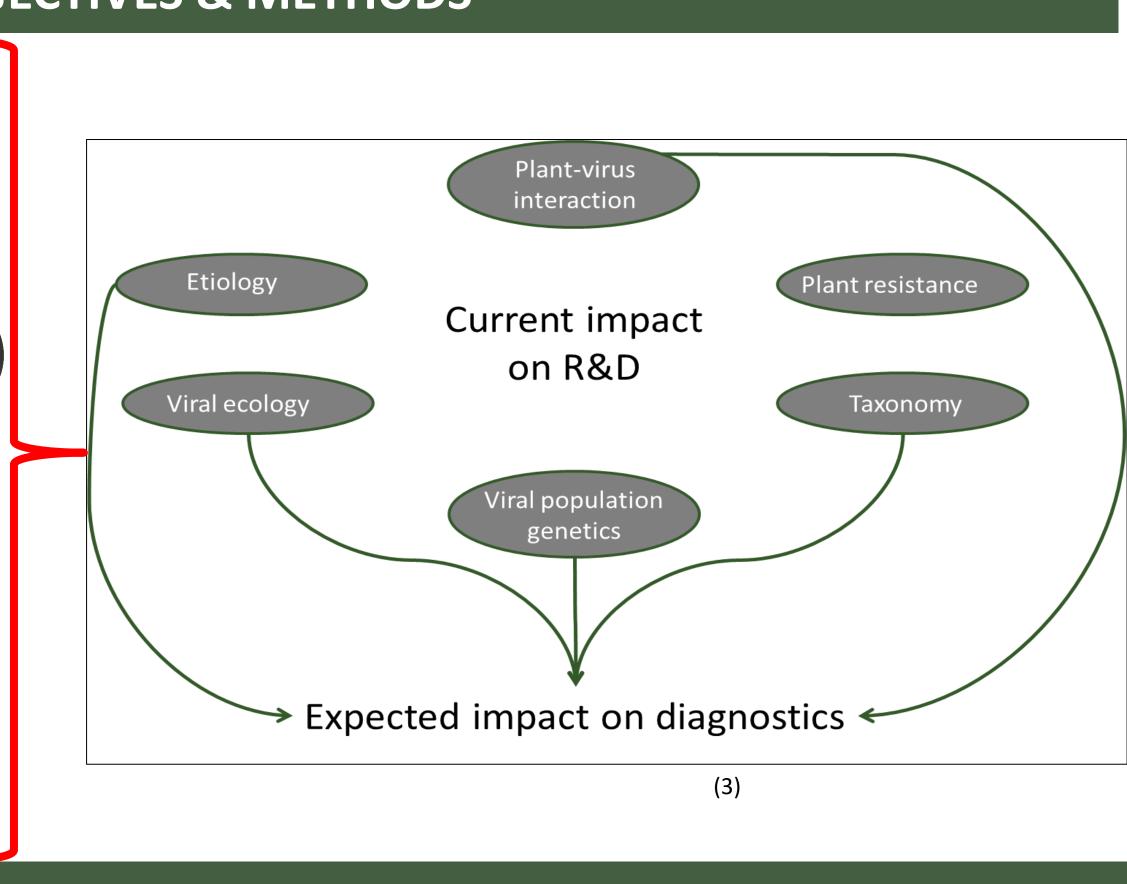
simplification

- Seed systems of root and tubers is known to be difficult to organize. Farmers rely to their own local varieties to ensure continuity of production.
- Low acces of farmers to good quality of planting material -> the main driver of the increasing disease prevalence

#### **OBJECTIVES & METHODS**

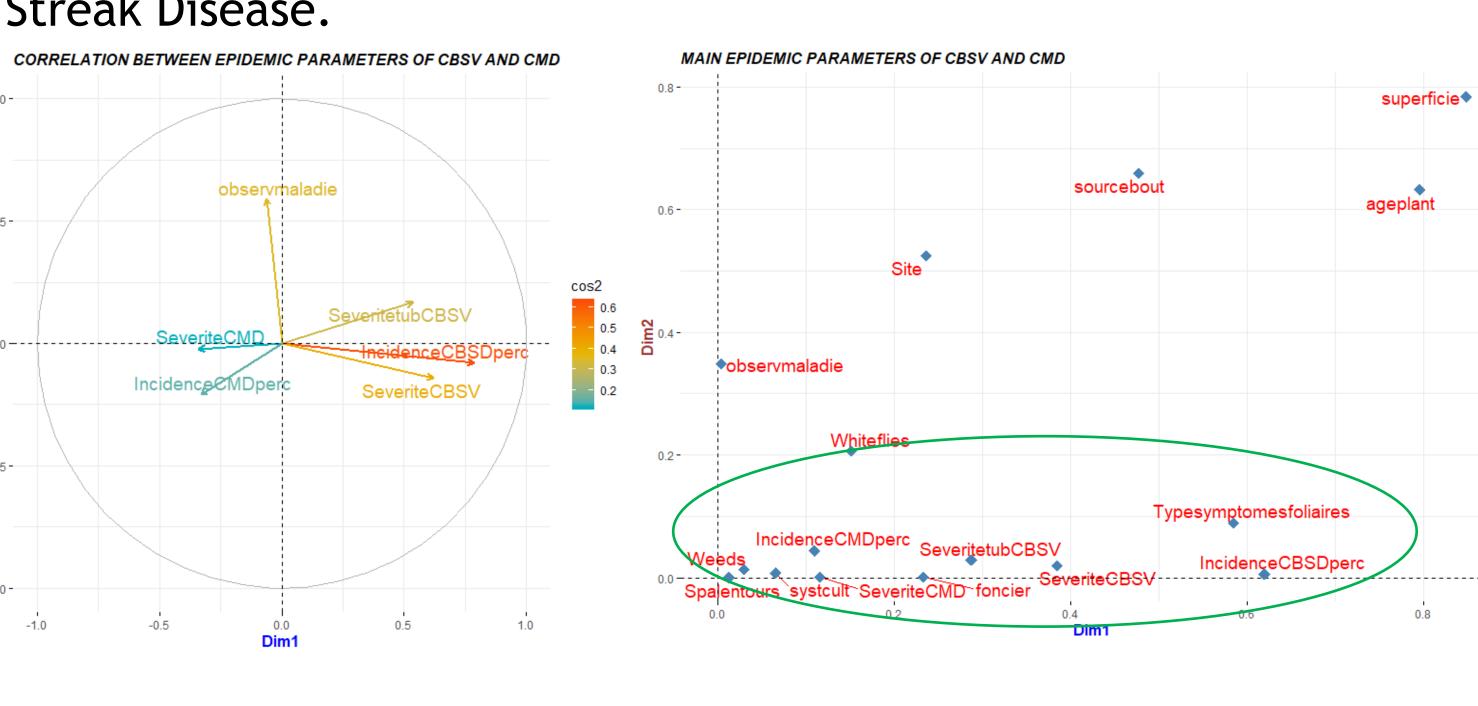
- Less knowledge exist about the viral population of viruses infecting cassava in South Kivu and relatively less is known about characteristics of both CBSD&CMD epidemiologies.
- > Recent studies of the CMD epidemiology in the South Kivu Province has given some signals of the possibility for this region to stand for a possible center of diversity of plant viruses (2).

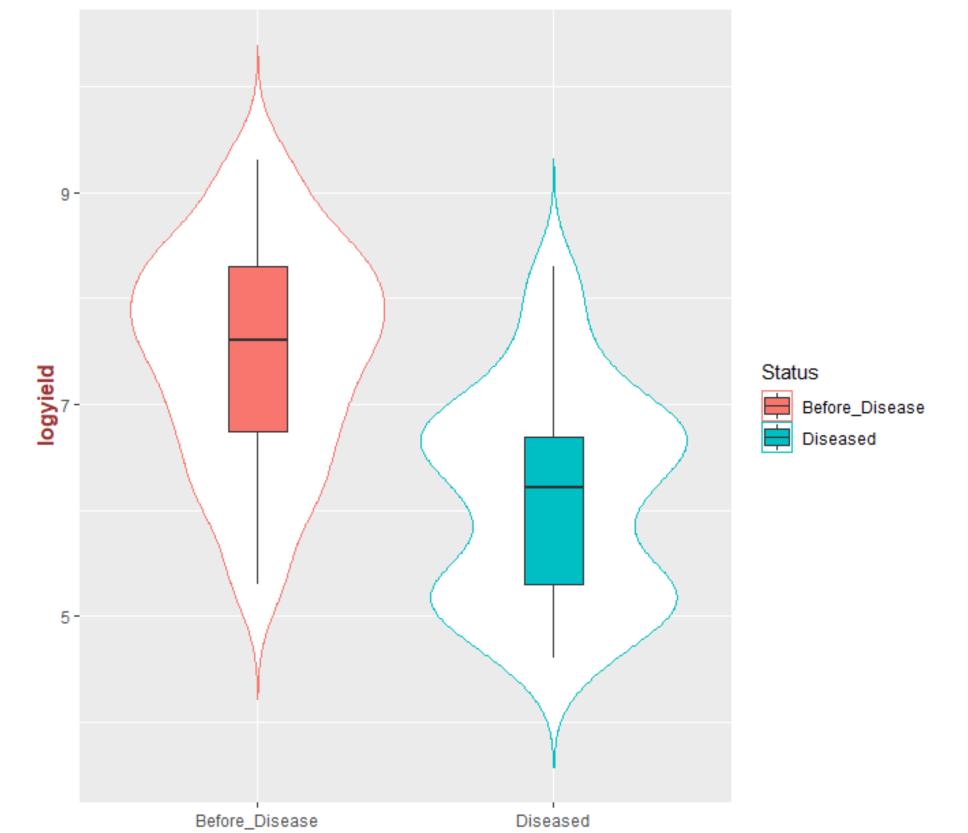
## **OBJECTIVES & METHODS**



#### RESULTS

- ✓ Preliminary results has identified negative correlation between epidemic parameters from Cassava Mosaic Disease and those from Cassava Brown Streak Disease.
- ✓ The role of some parameters related to the cropping system and the whitefly vector has proven to potentially influence epidemic parameters of both diseases.
- ✓ Results indetified a dicrease approximately 2t/Ha of cassava production from the period before the occurrence of CBSV and actually.





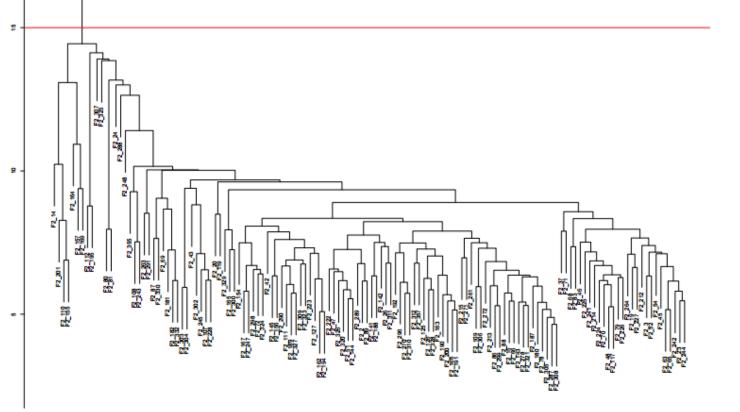
✓ Probably new recombinants of CBSV species was identified. But results still under analysis

✓ Activities related to the improvement of seed system and access to good quality of planting material

**Search for practices for** 

stem production

branching enhancement



Cassava local germplasm collection: < 96 (UCB) Search for technologies for

**Strategies for enhanced** site production and multiplication of cuttings

## REFERENCES

- Anderson, 2004. Trends Ecol.
- Bisimwa, (2012). U.C.L

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