An holistic approach to cropping practices, a prerequisite for an agroecological diagnosis of plantain cropping systems in Guadeloupe.

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An holistic approach to cropping practices, a prerequisite for an agroecological diagnosis of plantain cropping systems *in Guadeloupe.*

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-Context: No studies and no technical support for farmers about plantain production in Guadeloupe
Plantain cropping systems are mainly improved in the Cavendish production area
Cropping system duration is reduced to 1 or 2 years long because of telluric pathogens' pressure

-Aim: Characterize plantain cropping system diversity in order to run an agroecological diagnosis
Identify the factors influencing the cropping system sustainability

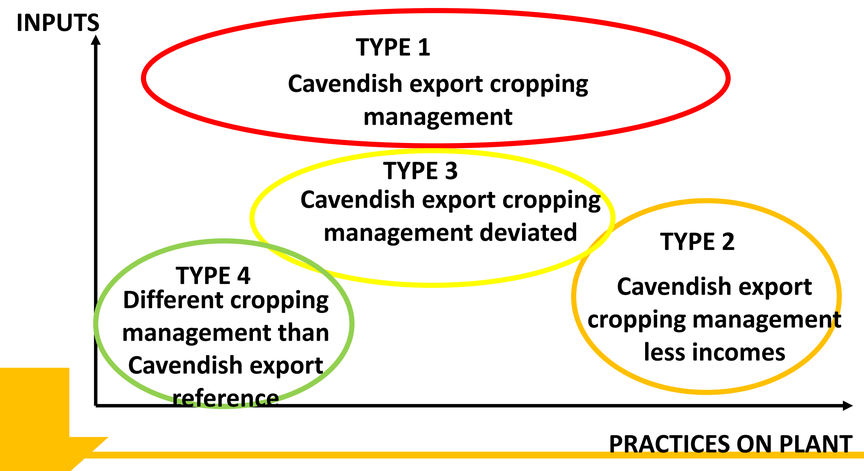
-Hypothesis: Plantain cropping practices are influenced by Cavendish reference cropping system

METHOD

- Survey improvement
- Plantain cropping systems typology
- Selection of 2 contrasted agroecological situations
- Plots' agroecological diagnosis

PLANTAIN CROPPING SYSTEM TYPOLOGY

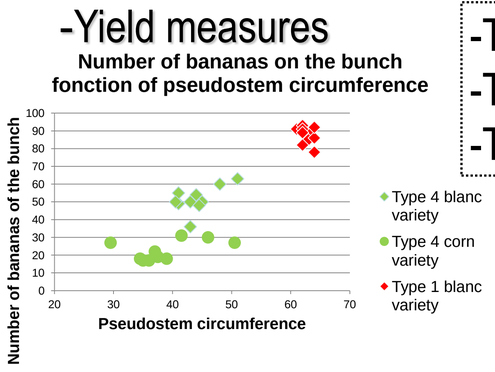
Different levels of Cavendish export cropping management deviation depending on incomes and plant management



Selection of plots from type 1 vs type 4

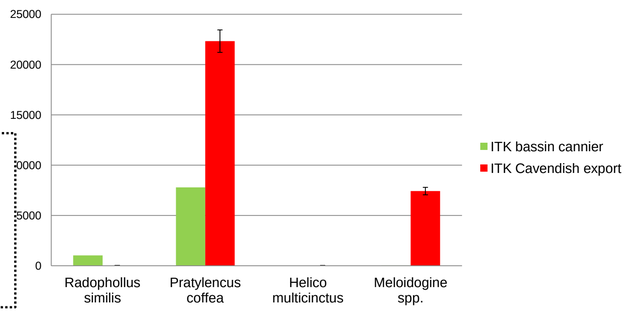
AGROECOLOGICAL DIAGNOSIS FOR CONTRASTED SITUATIONS

-Yield measures



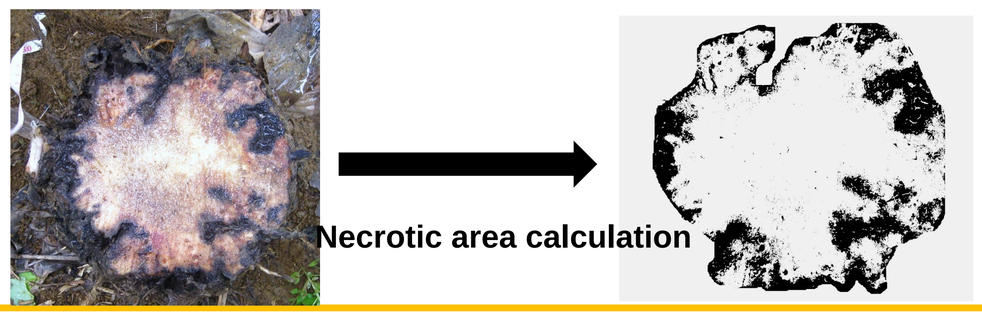
-Type 1: higher yields than type 4
-Type 1: better homogeneity of bunches in "blanc" variety
-Type 4:"Blanc" variety seems to be more productive

- Nematodes identification and counting



-Higher nematodes' infestation in type 1
-Different nematodes species combination in type 1 & 4
-Less roots' necroses in type 1

-Weevils infestation image analyzing



- Leaf diagnostic

CONCLUSION

- Different cropping systems according to the production area (type 4: out of the main Cavendish production area)
- Higher yields in more intensive systems

REMAINING QUESTIONS: What are the investments and benefits for each cropping system? What is cropping systems sustainability?

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