

Inclusion of farmers in *Coffea canephora* selection process through surveys



Introduction

Farmers are key stakeholders of breeding programs Selection depends on a defined set of breeding goals How to assess that new coffee varieties are fitting the local farmers expectations?

- Evaluation of varieties by farmers during field trials
- Creation of a methodology: the farmer's survey

Materials/Methods

- Focus group: 430 Thai & 39 Ivorian farmers
- Criteria: plant growth, plant vigor, plot homogeneity, fruit setting, fruit size, vield
- Acceptability: Would you plant the variety in your own farm?
- Analysis: Logistic regression model and correlations on R Shiny software

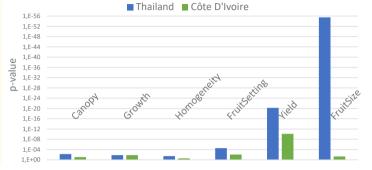


Figure 1: Significance of evaluation criteria on acceptability

Age categories	30-39	40-49	50-59	>60
20-29	0,713***	0,678***	0,696***	0,682***
30-39		0,876***	0,894***	0,851***
40-49			0,905***	0,856***
50-59				0,909***

Figure 2: Acceptability correlations between farmer age categories in Thailand





Results/Discussion

- Acceptability is driven by productivity rather than vegetative traits
- Fruit size is key in Thailand
- Acceptability of a variety depends on the country
- In both countries, positive and significant correlations between categories for:
 - Farmer age
 - Surface owned by farmer
 - Years of survey
- Similar way of scoring the acceptability between farmers

Conclusion/Perspectives

- Survey strategy validated
- Adaptation of breeding objectives based on local preferences
- Satisfaction of farmers, confidence in the planting material

- 2 clonal varieties with 40-50% more acceptability than the control are now distributed by the Nescafé Plan in Thailand
- Input for CNRA and Nestlé varieties selection in Côte d'Ivoire

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