

Genetic Diversity within *Coffea canephora* Germplasm Maintained in RCI Using SSR Markers, Results and Future Prospects

**P. CUBRY¹, P. MUSOLI³, H. LEGNATE⁴, P. ALUKA³, M. DUFOUR¹, D. POT²,
F. DE BELLIS¹, T. LEROY¹**

¹CIRAD, Perennial Crops Department, UMR 1096 PIA TA 80/03 Avenue Agropolis, 34398
Montpellier Cedex 5, France

²IAPAR (Instituto Agronômico do Paraná) LBI-AMG CP 481 86001-970 Londrina (PR)
Brazil

³NARO-CORI P.O. Box 185 Mukono, Uganda

⁴CNRA, BP 808, DIVO, République de Côte d'Ivoire

SUMMARY

Robusta coffee, produced by *Coffea canephora*, represents about 35% of the world coffee production. As part of studies aiming at the improvement of coffee cup quality, the knowledge of the genetic diversity of the wild and cultivated populations is an important task. Up to 210 individuals from different geographic origin were screened for diversity with a set of microsatellites markers take from the whole genome. The results of this analysis are consistent with the previous studies made with other kind of markers (RFLP and isozymes). Several genetic parameters were computed and indicate a very high diversity and structuration of the species. Original wild material from Uganda (1) was also studied in order to replace it within the previously known groups. Several genetic parameters (e.g. PIC, F statistics) were computed in order to better know the dynamic of these populations. These results will be discussed in the context of *Coffea canephora* genetic improvement.