COFDROnet

Genetic diversity of coffee trees for drought tolerance

ABSTRACT

Plants exchanged under this project are being evaluated (phenotypic) within trials established in Brazil (EMBRAPA), French Guyana (CIRAD) and Cameroon (IRAD), following exchanges of plant materials that were made officially through signed MTAs between partners. Exchanges will continue in 2014, including the transfer to Guyana and to Cameroon of C. arabica F1 hybrids first created in 2012 (H1) then in 2013 (H2) using progenitors from Cameroon and Brazil. These transfers should also continue beyond this project by sharing H3 hybrids that will be made this year. These hybrids are made in Brazil, with the participation of CIRAD, EMBRAPA, and IRAD researchers associated within the project.

Keywords : Developing the plant of the future, Microscopic (Gene/cell), Plant, Genomics, Operation/adaptation, Drought, Genetic diversity, Coffee

Year : 2011
Project number : 1102-002
Type of funding : AAP CAPES
Project type : AAP
Research units in the network :
Start date : 2013-01-01
End date : 2014-12-31
Flagship project : no

Project leader : Pierre Marraccini
Project leader's institution : CIRAD
Project leader's RU : AGAP

Budget allocated : 35000 €
Total budget allocated (including co-financing) : 85000 €
Funding : Labex

PERSPECTIVES

The above materials shall be analyzed for physiological and agronomic traits (monitoring drought tolerance, growth, yield etc ...) over several years (see Appendix 2) so that the results are meaningful and comparable between different places. These data will then be compared in order to identify the most tolerant hybrids to drought and with characteristics tailored to each soil and climate conditions. Once identified, these plants may be planted in multisite trials on a small or large scale to confirm possible Genotype x Environment interactions. The results of this research will be shared among the participants of the project and will be reported (articles, communications, international conferences).