

Generation Challenge Programme Final version March 2010
New commissioned Proposals in the context of the CI
ONE PROPOSAL PER SPECIFIC OBJECTIVE
July 2009

Project Title: Phenotyping cassava for drought tolerance to identify QTLs

Targeted Challenge Initiative: Cassava

Targeted Subprogram: SP3 – Trait Capture for Crop Improvement

Principal Investigator and Lead Institution: Alfredo Alves, Embrapa Cassava and Tropical Fruits (CNPMPF)

Specific Target Countries: Brazil and Colombia

Collaborating Scientists and Institutions:

- Hernán Ceballos (CIAT)
- Tim Setter (Cornell University)

Executive Summary

Given cassava's long breeding cycle and duration to harvest maturity, there is a strong incentive to use molecular markers and enhanced phenotyping methods that will assist the breeding process. This project will use a mapping population representing diversity in cassava drought tolerance that was developed in our previous GCP project (G3005.03-Identifying the Physiological and Genetic Traits that make Cassava one of the most Drought Tolerant Crops). This population will be phenotyped for drought tolerance in Brazil and Colombia, and QTLs will be identified. This information will be valuable in future marker assisted breeding of cassava