



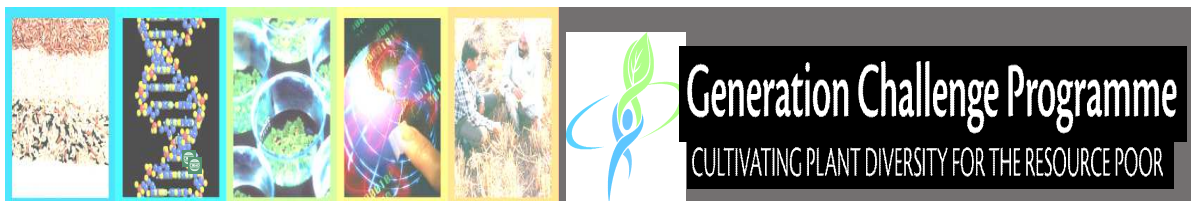
Component 2

Multi-site trial
model assisted phenotyping

Agropolis CIRAD
CSIRO/UQ
INRA
EMBRAPA

A challenging component

- Multi site trials designed to mimic process of genetic material evaluation
- Apply plant & crop model to define traits of interest vs. TPE and make a hierarchy
- Totally depends on the success of field experiments (always risky...)
 - **Wet season : gambling on dry spell occurrence**
 - **Dry season: stress monitoring**
- Large number of experiments planned (three species, 3 seasons, 3-4 sites per specie)
- 4 to 6 genotypes per specie (contrasted behavior)
- Need for specific, detailed protocol to apply models (not conventional for Embrapa)



Not a full success

- Experimental issues / protocol, drought (cf. Camilo, Cleber, Edson's talks)
- Only crop model based study on rice presented (and maize underway)

One added case study

- 10am: M. Dingkuhn "Phenotyping of sorghum photoperiod responses using heuristics". (20min presentation, 10 min discussion).
- Complementary to TPE characterization for sorghum in West Africa
- C2 Debate a bit shorten

Session chaired by Camilo Andrade (Embrapa)

C2

I- two talks (external speakers)

3:30pm: Keynote by José Araus – “Maize phenotyping for drought adaptation: contribution of physiological tools”. (30 min presentation, 15 min discussion).

4:15pm: Mark Cooper (Pioneer): “Applying modeling technologies within a maize drought molecular breeding program”. (30 min presentation, 15 min discussion). 5:00pm end of first day

