



# Component 1

Model assisted characterization  
Of Targeted Population of Environment  
for breeding (TPE)

CIRAD  
CSIRO/UQ  
EMBRAPA

Session chaired by Reinaldo Gomide (Embrapa)

## I- two talks (external speakers)

8:30am: Keynote by David Jordan: “Progress towards the integration of model based environmental characterization in an applied sorghum crop improvement program” (30 min presentation, 15 min discussion).

9:15am: Charlie Messina (Pioneer): “Developing modelling technologies to enhance molecular breeding for drought tolerance in temperate maize” (30 min presentation, 15 min discussion).



# Project results

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10:20am: A. Heinemann: “Characterization of drought stress environments for upland rice and maize in central Brazil” (30 min presentation, 10 min discussion).

11:00pm: M. Dingkuhn – “The West African TPE for sorghum: varietal fit to agro-ecological zones” (30 min presentation, 10 min discussion).

## 1) Studies carried out at CIRAD with Ecotrop crop model

## 2) Both studies gave rise to one publication

Heinemann A, Dingkuhn M, Luquet M, Combres JC, Chapman SC (2007). Characterization of drought stress environments for upland rice and maize in central Brazil. In press in Euphytica.

Kouressy M, Dingkuhn M, Vaksman M, Heinemann AB (2007). Adaptation to diverse semi-arid environments of sorghum genotypes having different plant type and sensitivity to photoperiod. In press in Agric. For. Meteorol.



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## DEBATE

1:00pm: Discussion chaired by **S. Chapman**; Perspectives for model assisted TPE characterization vs. breeding - where we are, where do we go? Methodology usefulness in GCP context and beyond.

