

## Objectives in a nutshell

Three centers of the CGIAR (IRRI, AfricaRice, and CIAT), in partnership with CIRAD and IRD in France and JIRCAS in Japan, have developed a global research agenda for rice that will be implemented within a Global Rice Science Partnership (GRiSP). Genetic improvement with the help of molecular tools and knowledge is one of the thematic pillars of GRiSP. Rapid advances in genomic research tools now permit genome mapping and sequencing with extremely high throughput. In conjunction with phenotyping, this opens the door for major discoveries and the systematic use of molecular markers for crop improvement. Climate change, increasing demand for food, and ever scarcer natural resources (namely, arable land and water) will require new genetic and agronomic solutions. Phenotyping techniques and capacities, as well as the understanding of genotype  $\times$  environment  $\times$  management interactions, are lagging behind the advances in genomics and have become a pace-limiting factor for progress. Global-scale collaboration and sharing of tasks and data are the necessary answer to this challenge. This workshop seeks to establish a global scientific, technical, and partnership strategy for rice phenotyping and characterization in the context of research on genetic improvement. Emphasis will be on brainstorming among experts to achieve a future-oriented vision and set priorities to enable coordinated research and fund-raising.

## Workshop Program 28-30 March 2011

### Day 1

0830–0900	Registration
0900–0915	Welcome and context (J. Glaszmann and D. Barthélémy or P. Caron)
0915–0940	Strategic statements (A. Dobermann)
0940–1000	Workshop objective: Toward a global phenotyping network (M. Dingkuhn)
1000–1015	Discussion and adoption of workshop agenda
1015–1045	Coffee break
1045–1230	<b>Session 1:</b> Stocktaking of current phenotyping objectives and capacities 5–10-min mini-presentations of IRRI, AfricaRice, CIAT, CIRAD, IRD, EMBRAPA, China, India, Australia...
1230–1345	Lunch
1345–1500	Cont. Session 1; General discussion on current status of phenotyping
1500–1630	<b>Session 2:</b> Shaping a vision <i>Session 2.1</i> Shaping a vision: 1. Priority traits for phenotyping Keynote: Adaptation strategies for future environments (M. Dingkuhn) Brainstorming
1630	Guided visit to PhenoArch and PhenoDyn phenotyping platforms on INRA/Montpellier

### Day 2

0900–1030	<i>Session 2.2</i> Shaping a vision: 2. Phenotyping in molecular breeding research Keynote: N. Ahmadi and B. Courtois Brainstorming
1030–1100	Coffee break
1100–1230	<i>Session 2.3</i> Shaping a vision: 3. Phenotyping for gene/allele discovery Keynote: Hei Leung Brainstorming
1230–1345	Lunch
1345–1500	<b>Session 3:</b> Network specifics <i>Session 3.1:</i> Network strategy and partners <i>Session 3.2:</i> Outline of network scientific infrastructure work plan (ideotypes, TPEs, populations/panels, linkage to other major projects...)
1500–1700	
1900–	Dinner reception

### Day 3

0900–1030	<i>Session 3.3:</i> Data issues (IPR, ontology, DB management, biostats...) (working group)
1030–1100	Coffee break
1100–1230	<b>Session 4:</b> Preparing the next steps (focal points, outline of proposals, identification of donors)
1230–1345	Lunch
1345–1500	Cont. Session 4
1500–1600	Wrap-up and closure

## List of workshop participants (status as of 25 Feb. 2011)

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# TOWARD A GLOBAL RICE PHENOTYPING AND CHARACTERIZATION NETWORK

**Workshop on developing a global rice phenotyping and multienvironment testing strategy (GRiSP PL 1.2 and PL 2.1),  
28-30 March 2011, CIRAD, Montpellier, France.**

Organized by

Centre International pour la Recherche Agronomique pour le Développement (CIRAD)  
International Rice Research Institute (IRRI)

In the context of the CGIAR Research Program 3 of GRiSP,  
the Global Rice Science Partnership

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Workshop opening: 28 March 2011 at 0900  
Workshop closure: 30 March 2011 at 1600

