



# The 6th International Symposium on the Molecular Breeding of Forage and Turf

## MBFT 2010

Buenos Aires, Argentina  
15 - 19 March 2010

### Program Agenda

#### Monday March 15

- Session 1: **Opening Keynote Address**
  - Molecular Breeding of Forages in a Climate of Change: from Biomass to Bioeconomy
- Session 2: **Molecular Breeding, Functional Genomics and Molecular Genetics – Biotic Stress Tolerance**
  - Development and implementation of molecular genetic tools for enhancement of herbage quality and other agronomic traits in perennial ryegrass (*Lolium perenne* L.)
  - Identification of genes involved in bacterial wilt resistance of *Lolium multiflorum*
  - Differential expression of proteins related to resistance mechanisms towards spittlebugs in *Brachiaria brizantha*
- Session 3: **Molecular Breeding, Functional Genomics and Molecular Genetics – Abiotic Stress Tolerance**
  - Molecular breeding to improve tolerance to abiotic stress in forage grasses
  - Mechanisms of tolerance to saline stress in *Chloris gayana*
  - Enhancing salt and drought tolerance in transgenic *Lotus corniculatus* L.

#### Tuesday March 16

- Session 4: **Molecular Breeding, Functional Genomics and Molecular Genetics – Quality**
  - Functional genomics of flavonoid biosynthesis for herbage quality improvement in white clover (*Trifolium repens* L.)
  - Production of transgenic tall fescue (*Festuca arundinacea* Schreb.) expressing a chimeric tall fescue NST repressor for improvement of forage digestibility
  - Quantitative trait loci of morphological traits and cell wall components in a F2 *Festulolium* mapping population
- Session 5: **Molecular Breeding, Functional Genomics and Molecular Genetics – Flowering and Reproductive Development**
  - Genetic approaches to optimized flowering and seed production in forages
  - Apomixis: mechanisms, research and the future isolation of apomixis gene(s) in tropical grasses
  - Genetic systems and exploitation of apomixis in the genus *Paspalum*
  - Isolation and expression analysis of a homologue of the Polycomb group gene Fertilization Independent Endosperm (FIE) in *Brachiaria brizantha*
  - Gene discovery and comparative transcriptome analysis in apomictic and sexual genotypes of *Eragrostis curvula* (Schrad.) Nees.
  - Map-based cloning of the Z self incompatibility locus in perennial ryegrass (*Lolium perenne* L.)
- Session 6: **Molecular Breeding, Functional Genomics and Molecular Genetics – Bioenergy and Bioindustry Applications**
  - Perennial grasses as feedstocks for green energy
  - Molecular breeding to develop cultivars for bioenergy and forage use
- Session 7: **Transgenesis and Biosafety Research**
  - Genetic improvement, field performance and risk assessment of apomictic Bahiagrass (*Paspalum notatum* Flugge) following biolistic gene transfer
  - Biosafety and risk assessment of transgenic forage and turf
  - Plant Breeding and Transgenesis in dallisgrass (*Paspalum dilatatum*) for enhanced herbage quality, yield and disease resistance

#### Wednesday March 17

- Session 8: **Comparative Genomics and Genome Analysis**
  - Analysis of the pangenome of the grass endophyte *Neotyphodium lolii*
  - Construction of a white clover linkage map and comparative analysis with red clover and model legumes
  - First linkage maps for improvement of subterranean clover (*Trifolium subterraneum* L.)
  - Using translational genomics to underpin germplasm improvement for complex traits in crop legumes
- Session 9: **Genetic Diversity, Genetic and Genomic Resources – Phenomics 1**
  - 40 years of genetic diversity studies: what have we learned and where do we go from here?
  - A survey of germplasm collection of *Brachiaria humidicola* (Rendle) Schweick. using microsatellite markers, cytogenetics, morphological traits and geographical origin
- Session 10: **Molecular Breeding, Functional Genomics and Molecular Genetics – Plant Symbiosis**
  - The *Epichloë festucae*-perennial ryegrass symbiosis: a fine balance between mutualism and antagonism
  - Lessons from the genome of the grass endophyte, *Epichloë festucae*
  - Molecular genetics of the symbiosis of forage legumes and nitrogen fixing bacteria

- Session 11: **Genetic Diversity, Genetic and Genomic Resources – Phenomics 2**
  - What about the phenome?
  - Origins of diploid *Dactylis* subspecies based on genealogical descent of molecular sequences
  - Genetic resources, genetic diversity and advances in red clover (*Trifolium pretense* L.) improvement

### **Thursday March 18**

- Session 12: **Closing Keynote Address**
  - Paving the way for GM agriculture in Argentina
  - Closing ceremony
  - BBQ lunch and visit University of Buenos Aires – Faculty of Agronomy (FAUBA)

### **Friday March 19**

- Field Trip to Pergamino and San Antonio de Areco

**The International Organizing Committee has announced that the 7<sup>th</sup> International Symposium of the Molecular Breeding of Forage and Turf will be held in 2012 in Salt Lake City, Utah, USA.**

