

XXII EUCARPIA Maize and Sorghum Conference 2011 Report

The XXII Maize and Sorghum Conference „Resources in Maize and Sorghum Breeding“ was held in Opatija (Croatia) from 19 to 22 June, 2011. The Organization Committee was composed by: Yves Barrière (France), Janos Berenji (Serbia), Alain Charcosset (France), Alfons Gierl (Germany), Frank Hochholdinger (Germany), Kosana Konstantinov (Serbia), Csaba L. Marton (Hungary), Albrecht E. Melchinger, (Germany), Mario Motto (Italy), Montserrat Pages (Spain), Athanasios Tsiftaris (Greece), Fred van Eeuwijk (The Netherlands), Johan van Waas (Belgium).

The Conference consisted of invited full lectures (18), short oral communications (19), and selected posters (77) covering the following topics:

1. **Genetic resources in maize and sorghum.** Assessing maize and sorghum germplasm for new traits. Collecting local landraces in South East Europe. Evaluation of landraces *ex situ*. Diversity studies. Genome-wide association studies.
2. **B73 and Mo17 sequence data, high-resolution mapping populations.** Generating a near-complete sequence of the maize inbred B73. Using intermated B73 × Mo17 maize population. Comparison of intermated and conventional populations.
3. **Internet genomic databases and post genome and phenotypic publicly accessible data.** The informatics tools and technologies for maize genetics and genomics databases. The MaizeGDB informatics service. Sorghum functional genomics.
4. **Breeding for specific traits.** Fuels: Breeding for ethanol, biogas and biomass production. Native resistance of maize against the western corn rootworm. Resistance to corn ear rots, northern corn leaf blight. Drought stress tolerance. Root and inflorescence architecture of maize. Utilizing leafy genes for silage in maize. Nitrogen use efficiency.
5. **New tools and technologies for breeding.** High-throughput phenotyping. Nuclear male sterility in maize. Statistical mixed models in QTL studies. Improving double haploid techniques. New technologies for maize hybrids tolerance to water deficit.

6. **Optimal allocation of resources in maize and sorghum breeding.** Resource allocation in breeding programs for resistance to western corn rootworm, European corn borer; in joint linkage-association mapping studies. Multi-location trials and geo-statistical methods.
7. **Educational and human resources; public and private research and development.** Resources for public maize breeding programs in southeast Europe.

One hundred and 32 participants from 24 countries took part in this Conference that was informative and successful for all participants. The quality of the presentations was mostly very good and rich in substance.

In the business Section, senior researcher from the Agricultural Institute Osijek, Croatia, Domagoj Šimić was elected new chairman of the EUCARPIA Maize and Sorghum Section. In addition, the EUCARPIA members have chosen Montpellier, France, as the location of the next Conference that will be held in 2014 and organized by Dr. F. Tardieu.

Domagoj Šimić
Section Chairman