

**International workshop on  
“Crop Improvement under Drought Condition: an Integrated  
Approach”  
January 31<sup>st</sup> to February 2<sup>nd</sup> , 2009, Karaj, Iran**

**January 31<sup>st</sup>**

- 8:00-8:30 Registration  
8:30-8:35 Welcome address (Khayam Nekoei, DG of ABRII)  
8:35-8:45 Opening Remark (PourHemmat , Deputy Minister and Head of AEERO)  
8:45-8:50 Course introduction (Hosseini Salekdeh)  
8:40-9:00 Participants introduce themselves  
9:00-9:30 Metrological aspects of drought (Javad Bodagh Jamali)  
9:30-10:00 Impact of drought on agriculture (Heidari Sharifabad)  
10:00-10:30 *Break*  
10:30 -11:15 Introduction to physiological breeding (Matthew Reynolds)  
11:15-12:00 Dimensions of Resource Capture: complementary research platforms to raise yield potential (Matthew Reynolds)  
12:00-13:30 *Lunch*  
13:30-14:15 Yield improvement in dry environments: benchmarks and principles for progress (Richard Richards)  
14:15-15:00 Physiological traits for water-limited environments - what are the success stories? (Richard Richards)  
15:00-15:30 *Break*  
15:30-16:15 Examples of physiological interventions in breeding wheat for drought adaptation (Matthew Reynolds)  
16:15-17:00 A case study in wheat: A physiological and molecular breeding program to improve yields in dry environments (Richard Richards)  
17:00-17:30 General Discussion  
19:00-21:00 Welcome dinner

**February 1<sup>st</sup>**

- 8:30-9:15 Spring wheat breeding at CIMMYT for drought tolerance (Alexey Morgounov)  
9:15-10:00 Winter wheat breeding for drought tolerance (Alexey Morgounov)  
10:00-10:30 *Break*  
10:30 -11:15 Conservation Agriculture: Potential Solution to Enhance Crop Productivity, Crop Water Use and Reverse Soil Degradation (Matthew Reynolds/Ken Sayre)  
11:15-12:00 Strategies for wheat productivity improvement in the regions with low moisture availability (Kazakhstan, Turkey, Canada, Russia, USA, Ukraine) (Alexey Morgounov)  
12:00-13:30 *Lunch*  
13:30-14:15 Breeding for drought tolerance at SPII: history, achievements and prospects (Mostapha Aghaei, Director General of SPII)  
14:15-15:00 Plant breeding strategies against drought stress in DARI (Reza Haghparast)

15:00-15:30 *Break*

15:30-16:15 Introduction to plant transformation technology: particle bombardement and *Agrobacterium tumefaciens* mediated transformation (Khaled Masmoudi )

16:15-17:00 Molecular basis of improving drought and salinity tolerance in cereals (Khaled Masmoudi )

17:00-17:30 General Discussion

## **February 2<sup>nd</sup>**

8:30-9:15 Towards a molecular understanding of drought-induced starch mobilization (John Bennett)

9:15-10:00 Exploiting proteomic to identify drought tolerance candidate genes (Hosseini Salekdeh)

10:00-10:30 *Break*

10:30 -11:15 The impact of drought on the development and function of anthers (John Bennett)

11:15-12:00 Apomixis as a route to greater drought tolerance (John Bennett)

12:00-13:30 *Lunch*

13:30-14:15 Could drought tolerance in rice be enhanced by introduction of fructan biosynthesis genes from wheat? (John Bennett)

14:15-15 Conservation of stress-induced growth arrest phenomenon across plant species and developmental stages (Zahra Sadat Shobbar)

15:00-15:30 *Break*

15:30-17:00 Analysis of drought tolerance in barley (Michael Baum)

17:00-18:00 General Discussion

18:00-18:30 Closing ceremony