

**CORNET**  
MINUTES OF NATIONAL SME USER-COMMITTEE MEETING  
“*Winter Wheat cultivars maintaining high yield under environmental stress*”

**Location:** Cereal Research Non-profit Company. – Hungary Szeged, Kecskés-telep

**Date:** June 03<sup>rd</sup>, 2010. 1.00 pm.

Experiments of the project, which started in 2009, were presented after the National Cereals Field Day in Szeged and Mr. János Pauk and Mr. László Cseuz showed the trials. SME user-committee members and numerous farmers, professionals’ of authorities, seed traders were present at the meeting.

The aim of the two-year long examination is the evaluation of drought tolerance of winter wheat varieties. Research institutes and breeding companies from three countries (Austria, Hungary and Germany) work together on the project. They test 25 varieties of different origin (8 Austrian cultivars, 8 Hungarian cultivars, 8 German cultivars and 1 standard: ‘Capo’) in as many as 40 locations.

***Trials presented to SME user committee members:***

- *Evaluation of cultivars grown in plots under natural water limited conditions (Kecskés-telep and Kiszombor) and irrigated conditions (Kecskés-telep).* 25 winter wheat cultivars were sown in four irrigated and not irrigated repetitions. Due to the extremely wet weather irrigation hasn’t been used so far.
- *Evaluation of translocation.* The aim of the examination is the evaluation if wheat cultivars lose their leaves, how they translocate the starch from the stem into the seeds in sugar form. Plants lost their assimilation surface because two weeks after blooming they were sprayed with NaClO<sub>3</sub> solution.
- *Evaluation of varieties grown in 2-row micro-plots under managed drought conditions (rain out shelter).* An automated tent, 2m deep stone bed and drainpipes were constructed in order to prevent entry of the water of any kind. Unfortunately the tent can not block water flow on the surface. This never happens in an average year, but in case of 100 mm rain within two days there is no way to prevent the water flow. The tent has worked automatically since January 1<sup>st</sup>, 2010. There are watered repetitions, but the irrigation also has not been needed yet. Data of two tests will be compared.
- *Evaluation of cultivars grown in greenhouse.* Three plants of each variety were placed in 1-1 pots in ideal and in short (only 20% of sufficiency) water conditions respectively. In the end of the study the size of ears, the plant height, number of grains and thousand kernel weight will expectedly show differences.
- *Examination of mapping population.* Besides experiments of 25 cultivars, there is examination of a population (340 DH lines), which originates from the crossing of drought tolerant variety (Plainsman V.) and a variety without drought tolerance (Capelle Desprez). The aim of the test is describing important traits associated with drought tolerance (phenotyping) to map the genetic background of drought tolerance.

***Questions raised by the attendants:***

- *Do the plants get less light under the tent?* Answer: if the tent is closed for a long time, plants get less light but it is not considerable difference in an average year.
- *Will you publish the results?* Answer: Yes, researchers want to publish the results.

Next national meeting will be at the beginning of July when cultivars will expectedly show big differences.

Three countries will present their results and conclusions in a conference in the end of the two-year long examination.



SME user-committee members and numerous farmers were present at the meeting



100 mm rain within two days



Mr. János Pauk and Mr. László Cseuz showed the trials

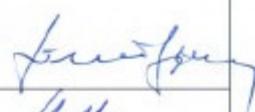


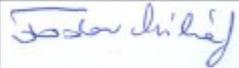
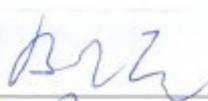
Micro-plots under rain out shelter

### CORNET WHEAT STRESS

National demonstration on the CORNET Experiment, 2010  
Kecskés Experimental Station, June 3, 2010, Szeged, Hungary

#### Attendance list

Company (cég neve)	Name (olvasható név)	Signature (alírás)
Hungarian Seed Association	Ruthner Szabolcs	
Agromag Kft Szeged	Mátvai Péter	
Agromag Kft Szeged	Müller Zsolt	Müller Zsolt
Teleküzemelési Földműv. Szöv.	Lőrincz József	
MAKT-AGROKOLB KFT	Kóka János	
MAKT-AGROKOLB KFT MARSÓ	DR. BORSOS IMRE	
MFTM Szeged	MACZAR Miklós	
MgkH-Központ Budapest	Somogyi Ferenc	
Hungarian Seed Association	Wéberth István	

Agrozemek Kft.	Feczek János	
—	Urbanovics Magyar Katalin	
Fodor Mihály Építési gépezet		
MEZŐMAG Kft. Szarvas	Gazsó János	
Kavcag	Örsi Sándor Gábor e.v.	
Szentannai Sándor Gimnázium, Székhely: 1011 Budapest, Kavcag	Örsi Péter gyakorlati oktatásvezető	
MgSzH Központ	Benke Zoltán	
— " — Ny	Parlagi Gábor	
AGRO-LIPPO ZRT LIPPO	LAWTOS ZOLTÁN	
Fajtaoktatás Nemzeti Kft, Szeged	ISTVÁN ISTVÁN	
MgSzH Központ	ZENY LAJOS	