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## BOOK OF ABSTRACTS

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## Determination of Rust Reactions on Some Selected Bread Wheat Lines

Alaettin KEÇELİ<sup>1</sup>, Kadir AKAN<sup>2</sup>, Zafer MERT<sup>2</sup>, Turgay ŞANAL<sup>1</sup>

<sup>1</sup> *Quality Assessment and Food, Field Crops Central Research Institute, Turkey*

<sup>2</sup> *Plant Pathology, Field Crops Central Research Institute, Turkey*

Bread wheat is important cereal crop in Turkey. Rusts (caused by *Puccinia* spp.) are significant fungal diseases affecting quality and yield on the Central Anatolian Plateau. Aim of this study was to determine the reactions of 24 genotypes to local rust populations at the seedling stage (for *Pst*, *Pgt* and *Pt*) in Ankara and at the adult plant stage (for *Pst* and *Pgt*) in Ankara (YR; Yellow rust, SR; Stem rust) and Kastamonu (SR) during 2013-2014 growing season. In this study, rust reactions were determined at selected 24 bread wheat genotypes according to quality parameters having test weight (75.5-80.4 kg/hl), mixographe (3.5-6.0), Zeleny sedimentation (57-65 ml). These materials were developed by Field Crops Central Research Institute (FCCRI) Department of Quality Assessment and Food.

For seedling test; the seedlings were inoculated with local *Pgt*, *Pt* (LR; Leaf rust) and *Pst* populations. Yellow, leaf and stem rust developments on each entry were scored after 14 days with 0-9 and 0-4 and scale for yellow rust and leaf-stem rust, respectively. For adult plant test; the genotypes were inoculated with local *Pst* (YR) and *Pgt* (SR) populations. Yellow and stem rusts developments on each entry were scored using the modified Cobb scale. Coefficients of infections were calculated and values below 20 were considered to be resistant.

At the end of this study to determine rust reactions on 24 quality bread wheat lines; at the seedling stage, 8 (33%), 6 (25%) and 6 (25%) genotypes were determined as resistant to YR, LR and SR, respectively while at the adult stage, 10 (42%) and 0 (0%) lines were found resistant to YR and SR, respectively. These 8 and 6 materials which have been selected according to resistance for YR and LR respectively were selected for next yield trial. In addition to these materials can be used in disease and quality crossing studies.

**Keywords:** Bread wheat, quality parameters, rusts