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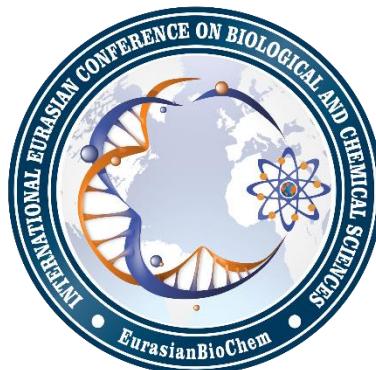
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ABSTRACT BOOK

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➤ ORAL PRESENTATION

The reactions of bread wheat lines against yellow rust population

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Abstract

Bread wheat has been important field crop in Turkey. In breeding trials, high yield and good quality are important selection criteria. Yellow (stripe) rust, (caused by the fungal pathogen *Puccinia striiformis* f. sp. *tritici* (*Pst*)), is significant diseases affecting produce yield and quality in cool and humid areas in Turkey. In this study, it was aimed to determine reactions 26 bread wheat genotypes (Zeleny sedimentation 55-66 ml (Bezostaja-1; 58 ml) developed by the Central Research Institute for Field Crops (CRIFC) Department of Quality Assessment and Food to local yellow rust population in the seedling stage and adult plant stage at the research facilities of CRIFC during growing season of 2015 in Ankara. For seedling stage reactions; the test lines were inoculated with suspension of urediniospores of *Pst* population (virulent on *Yr2*, 6, 7, 8, 9, 25, 27, *Sd*, *Su* and *Avs* in Europe/World differential set) in mineral oil (Soltrol 170[®]) at Zadoks growth stage 11-12. Following inoculation, seedlings were placed in a dew chamber overnight at 9±1°C and then transferred to greenhouse adjusted at 18±3°C. Diseases were scored according to 0-9 scale after 14 days.

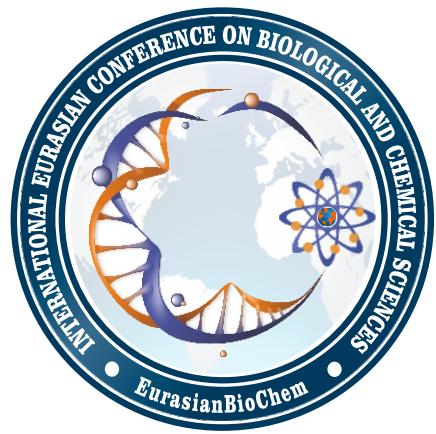
For adult plant stage reactions; the test lines were screened under artificial epidemic condition for local *Pst* populations (virulent on *Yr2*, 6, 7, 8, 9, 25, 27, *Sd*, *Su* and *Avs* in Europe/World differential set). Stripe rust developments on each entry were scored using the modified Cobb scale. The susceptible check cv. Little Club had reached 80S infection severity in June, 2015. Coefficients of infections were calculated and values below 20 were considered to be resistant.

Six (23%) genotypes were resistant to seedling stage, fourteen (54%) were resistant to adult plant stage; and six (23%) genotypes were resistant to both seedling stage and adult plant stage. To conclude, all 26 bread wheat lines were to stripe rust.

Key words: Bread Wheat (*Triticum aestivum*), yellow rust (*Puccinia striiformis* f. sp. *tritici*), selection, reaction

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