

ASSESSMENTS OF THE SEVERITY DISEASE OF BREAD WHEAT CULTIVARS AGAINST POWDERY MILDEW (*BLUMERIA GRAMINIS* F.SPP. TRITICI) AND ITS IMPACT ON THE YIELD IN THE ATTC LUSHNJE IN ALBANIA

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Abstract

Observations on the behavior of wheat cultivars against Powdery mildew (*Blumeria graminis* f.spp.tritici) in wheat was conducted during 2009-2011 on experimental fields of the State of Seed and Saplings in the (ATTC) in Lushnje (Albania) where is defined index of vulnerability (PDI) to Powdery mildew (*Blumeria graminis* f.spp.tritici). Powdery mildew in wheat, caused by (*Blumeria graminis* f.spp.tritici) (syn. *Erysiphe graminis* DC f. sp. tritici Marchal), and is one of the most important diseases of wheat leaf Mediterranean conditions. This study was conducted to determine the relationship of the Powdery mildew disease index at the soft dough stage to yield losses for eight bread wheat cultivars. Analysis of variance revealed the presence of an important and significant variability in the experimental materials used to evaluate the susceptibility and the resistance of common wheat cultivars against powdery mildew (*Blumeria graminis* f.spp.tritici). According to study results the cultivars Bullgar 3 x KB 703, Regina x L-776 with the small mean values of McKinney's index DI (Imc in %) have shown very good results of resistance (R) level against powdery mildew (*Blumeria graminis* f.spp.tritici). Analysis of regression was used to determine the relationship of Powdery mildew disease index to yield and test weight losses. Correlations between two measured characters {disease index (Imc in %)} for Powdery mildew (*Blumeria graminis* f.spp.tritici) and grain yield, in year 2010-11 were also evaluated for all wheat cultivars. Multivariate correlation coefficients between yield – {disease index (Imc in %)} for powdery mildew ($r = -0.5634$) in year 2010 and ($r -0.6683$) year 2011.

Keywords: *Bread wheat, powdery mildew, Blumeria graminis, diseases index*