

Assessments on the behavior of bread wheat cultivars against Powdery mildew (*Blumeria graminis f.spp.tritici*) index and its impact on the yield in the ATTC in Lushnje[#]

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Abstract: 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. Observations on the behavior of wheat cultivars against Powdery mildew in wheat (*Blumeria graminis f.spp.tritici*) was conducted during 2010-2011 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 in wheat (*Blumeria graminis f.spp.tritici*). This study was conducted to determine the relationship of the Powdery mildew index at the soft dough stage to yield losses for eight bread wheat cultivars. Regression was used to determine the relationship of Powdery mildew index to yield and test weight losses. There were high negative correlations between yield-- (disease index (Imc in %) for powdery mildew ($r = -0.5634$) in year 2010 and ($r = -0.6683$) year 2011. According to study results the wheat cultivars Bullgar 3 x KB 703, Regina x L-776 1 have shown more high level of resistance against powdery mildew (*Blumeria graminis f.spp.tritici*). In Lushnje the yield ranking of varieties is also correlated with their powdery mildew index. We have not observed other pathogens no environmental irregularities in the field trials, and we concluded that the reductions in grain yield are mainly caused by powdery mildew.

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

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