

P.22 - Mapping QTL for resistance to *Mycosphaerella graminicola* in the winter wheat variety Liwilla

Czembor, P.Cz., Radecka-Janusik, M.

Septoria tritici blotch (STB) caused by fungus *Mycosphaerella graminicola* (anamorph *Septoria tritici*) is one of the major diseases affecting wheat in many growing areas. Development of cultivars resistant to the pathogen is the most economical and environmentally safe method of reducing losses. The objective of our study was to detect resistance *loci* to STB in Polish variety Liwilla. For mapping, a doubled-haploid (DH) mapping population was used from a cross between the resistant cultivar Liwilla and the susceptible cultivar Begra. The mapping population was evaluated under a controlled environment on seedlings with single isolate *M. graminicola* St1-3DEU. Using multiple-QTL model (MQM), only one QTL associated with resistance (QRL) was detected on a long arm of chromosome 3A. This QRL could explain phenotypic variance in 29,9% (LOD=3,49). The QRL effect detected on seedlings will be verified at the adult plant stage under field conditions in the near future. The preliminary results indicate a quantitative nature of resistance to STB in cultivar Liwilla.