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INFLUENCE OF SEVERAL WHEAT PATHOGENS ON THE LEAF RUST DEVELOPMENT

Jerkovic Z.[1], Putnik-Delic, M.[1], Jevtic, R.[1] Hanzalova, A.[2]

1)Institute of field and vegetable crops, Maksima Gorkog 30, 21000 Novi Sad, SCG, 2)Vyzkumny ustav rostlinne vyroby , Drnovska 507, Praha-Ryzine , CZ, jerkovic@ifvcns.ns.ac.yu

The investigations of the interactions between pathogens could be interrupted by single strong development of each on the same plant. The adequate methods were not developed until nowadays. The protection by fungicides against particular one was also impossible. The results of the study focused on changes in respond of some genotypes to different powdery mildew isolates in the presence of leaf rust were published.

In our investigation with aim to recognize the influence of some another pathogens on the leaf rust severity, the axiom was that different genotypes with prolonged vegetation period equal in the respond to leaf rust cause prevalent race as seedlings at greenhouse will allow the similar level of the parasite development as adults. The influence of the another pathogens on the density of *Puccinia triticina* pustules (estimated on with mentioned pathogen single diseased parts of the simultaneous multiple diseased leafs on low or intermediate level) in such circum tenses could be estimated according to comparing the pathogens development in the tested material.

The twenty varieties were sown on 25.10.2003. in the pots (three replications) and grown under the natural conditions. Most of them were extremely susceptible to the leaf rust cause. The weather conditions during the growing season were mostly favorable for wheat and diseases development. There was no artificial infections. The estimation of the leaf rust, powdery mildew, septoria leaf blotch and ten spot severity was applied near to the and of the vegetation period (16.06.2004) when the not diseased green leaf area was still present.

The attack of the leaf rust causer was not higher than 50% of the green leaf parts. The reducing of the leaf rust pustules number (to the trace on variety Rapsodia from Czech Republic, 10% on Alibaba or 20% on Complet and Asta) was due to *Pyrenophora tritici repentis* appearance. The density of tan spots was not higher than 20% of leaf area covered. The influence of powdery mildew (maximal attack intensity 50%) and septoria leaf blotch (30%) causers on leaf rust development was not strong separately (Mona) or simultaneous (Zlatoklas).

SCREENING FOR VIRULENCE OF BLUMERIA GRAMINIS TRITICI USING MOBILE NURSERIES

Radivoje Jevtić[1], Zoran Jerković[1], Srbobran Stojanović[2], Mirjana Staletić[2]

[1]Institute of Field and Vegetable Crops, Novi Sad, Serbia & Montenegro
[2]Small Grains Research Center, Kragujevac, Serbia & Montenegro, jevtic@ifvcns.ns.ac.yu

Blumeria graminis tritici, the causal agent of powdery mildew, is a regular and economically important disease of wheat in Serbia and a major disease problem in wheat crops in Europe, particularly in northern and western parts. Infection intensity varies in dependence of wheat variety, climate conditions and agricultural practices. Although there have been no epiphytotics in Serbia yet, this disease can play a significant role in yield formation. Successful wheat breeding for resistance to the causal agent of powdery mildew is based on the identification of virulence and changes in the pathogen population. The asexual part of the population of *B. graminis tritici*