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Resistance of Yugoslav present and future winter wheat varieties to *Puccinia recondita tritici*

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Since the early seventies, winter wheat varieties from the Institute of Field and Vegetable Crops in Novi Sad have become dominant in Yugoslav production, covering 60-80% of the acreage in wheat. Several varieties, such as Novosadska rana 2, Balkan, Partizanka and Yugoslavia, were, and in some regions still are, the most important. Very often they appear as parents in combinations the progeny of which was used to create new varieties. Fortunately, certain new genotypes from the same cross as Europe, France, Italy (Talent x Novosadska rana 2) covered a large area (40-50%) during the drought period of 1989-1993. when the development of *Puccinia recondita* f.sp. *tritici* was reduced. Those varieties, and Novosadska rana 2 for its part, were the cause of the 1994 epiphytotic. From that time on, their importance in production decreased in comparison with varieties with higher resistance levels.

Fifty present and possible future varieties were tested in field conditions in 1993-1996 in order to differentiate between them with respect to *Puccinia recondita* f.sp. *tritici* development (AUDPC). The severity of the attack sometimes reached 80% of leaf area in the above-mentioned varieties. The estimated resistance of varieties is mostly based on low infection efficiency or a combination of longer latent periods and lower infection efficiencies. Under controlled conditions, (20°C daily, 15°C during the night) differential reactions towards resistance are rare at the seedling stage (Rana niska, NS 8041 ect.). Some of the varieties expressed high susceptibility at the seedling stage but satisfactory resistance in the field. In our opinion, this could be due to the early senescence of leaves, the character which is in negative correlation with yield potential.