Resistance of Wheat (Triticum aestivum) to Septoria Tritici Blotch (Mycosphaerella graminicola) on Leaf Segments

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Abstract: Selected winter wheat cultivars, breeding lines; old Czech and Slovak landraces and wild wheat relatives were infected with three isolates (R-116, UH-105, BR-331) of Mycosphaerella graminicola (anamorph Septoria tritici) isolated in the Czech Republic. The cultivar CW9358 was the most susceptible to R-116 and UH-105; the most resistant cultivars were Ordeal and SG-U7029. Estica, CWW93/58 and Verna were the most susceptible cultivars to R-116; the most resistant was SG-U7029. The most susceptible cultivars to UH-105 were CWW93/58 and NSL9257, the most resistant cultivar Samanta. The most susceptible cultivars to BR-331 were Estica and Verna. The most resistant was the advanced line SG-S1990. Of the old Czech and Slovak land races the cultivar Rokycanská Sametka was the most susceptible and the Hanácká Bělka was the most resistant to all three isolates. Wheat wild relatives T. monococcum, T. dicoccoides and T. araraticum were completely resistant to the isolate R-116. Nearly resistant was Hanácká Bělka. The cultivars Dobrovická 10 and Pyšelka were the most susceptible to this isolate. The cultivars Hanácká Bělka, Slovenská B, Kostomlatská Sametka and Dobrovická 10 were completely resistant to UH-105. Nearly resistant was Česká Přesívka. The most susceptible was Pyšelka. The cultivars Hanácká Bělka, Slovenská B, Pyšelka and Dobrovická 10 were completely resistant to BR-331. Nearly resistant were wheat wild relatives T. araraticum and T. boeticum. The most susceptible was Rokycanská Sametka and T. dicoccoides. The cultivars Hanácká Bělka, Slovenská B, Dobrovická 10 were completely resistant to UH-105 and BR-331. Clearly, different isolates of Mycosphaerella graminicola differ in virulence for individual wheat cultivars.