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Reaction of selected winter wheat varieties to autumnal infection with Wheat dwarf virus

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The response of 25 registered winter wheat varieties to autumnal infection with Wheat dwarf virus (WDV) was studied in small plot trials in two years. The materials were infected by vectors, leafhopper Psammotettix alienus Dahlbom, 1851 from three-leaf stage to tillering. The symptoms expression was monitored in spring and plant height, weight of above ground biomass and grain yield were observed in summer. All tested varieties were evaluated as susceptible and divided into three groups: varieties Banquet and Svitava with 87.3–93.1% grain yield reduction as moderately susceptible, varieties Clever, Drifter, Niagara and Rialto with 95.6–97.68% grain yield reduction as susceptible and varieties Apache, Batis, Bill, Complet, Contra, Corsaire, Ludwig, Mladka, Nela, Record, Rheia, Semper, Sepstra, Solara, Sulamit, Tower, Trend, Vlasta and Winsdor with 99.7–100% grain yield reduction as very susceptible. Statistically significant differences were observed between moderately susceptible and susceptible varieties as well as very susceptible ones in absorbency values by means of DAS-ELISA.

Keywords:

Wheat dwarf virus (WDV); winter wheat; resistance

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