

Effect of weather parameters on yellow rust incidence of wheat under different growing environment

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ABSTRACT :

Yellow rust is the major wheat disease and is influenced by prevailing weather conditions. Field experiment was conducted to investigate the effect of weather parameters on yellow rust incidence under different growing environments. Wheat varieties HD 2967, PBW 550 and PBW 343 were sown under three row spacing viz., 15 cm, 22.5 cm and 30 cm. Yellow rust incidence was recorded at weekly intervals. Disease incidence was higher (100%) during *Rabi* 2012-13 as compared to 2013-14 (90%). Among different row spacing the disease incidence was maximum (100 %) in 15 cm row spacing followed by 22.5 cm and minimum in 30 cm spacing during both the years. Among three varieties HD 2967 was highly resistant to yellow rust. During both the years maximum temperature, minimum temperature and sunshine hours were positively correlated whereas morning and evening relative humidity were negatively correlated with yellow rust incidence. Highly significant value of R^2 (0.91 and 0.92) was found when maximum meteorological parameters were combined in PBW 550 and PBW 343, respectively.

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