Research Article

Impact of Weather Parameters on the Progression of White Rust, *Alternaria* blight and Powdery Mildew of Indian Mustard

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Abstract

Severity of white rust, *Alternaria* leaf blight and powdery mildew diseases is an important constraint in the production of Indian mustard. An experiment was conducted during *rabi* season of 2010-2011 at CCS, Haryana Agricultural University, Hisar to investigate the role of weather conditions like, humidity, temperature and rainfall in relation to sowing time and spacing on these diseases. Weather variable found to be greatly influenced the disease progression under field conditions. Temperature (max) and relative humidity (morning) contributes maximum in disease progression in all three diseases. Maximum growth of pustules, spots and specks size (mm) of white rust, *Alternaria* blight and powdery mildew respectively found in 1st date of sowing with narrow spacing (30x15 cm) in variety Varuna and RH-9801,which decreased with delay in dates of sowing. The maximum R² value in white rust and *Alternaria* blight was recorded in fourth dates of sowing in both the varieties but in powdery mildew maximum R² was found in third dates of sowing in variety Varuna. The equations developed based on data will be suitable for disease prediction in mustard growing area.

Key words: Alternaria blight, Indian mustard, powdery mildew, white rust, weather parameters

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