Dynamics of white rust disease in mustard (Brassica juncea) in relation to date of sowing and weather parameters.

Abstract:

Field trials were conducted (2003-06) on Indian mustard (cv. Pusa Bold) to study the correlation of white rust in relation to sowing date (10, 17, 24 October, 1, 8 and 15 November) and weather parameters. Data revealed higher severity of white rust in delayed sowing after 17 October. The disease severity showed negative correlation with minimum temperature under all the sowing dates, however it was significant only in case of 10 October (r=-0.62), 17 October (r=-0.59) and 1 November (r=-0.60) sowing. The PDI showed non-significant negative correlation with maximum temperature and mean temperature as well. Although rainfall showed significantly positive correlation with the disease severity under all the sowing dates(r=0.76-0.82) relative humidity did not show any consistent correlation. Pooled data of two years experimentation revealed that maximum seed yield of 2.28 tonnes/ha was obtained in 10 October sown crop and it gradually declined with delay in sowing with lowest yield of 1.07 tonnes/ha recorded in 15 November-sown crop.

Keywords: weather, parameters, Data revealed higher.