

Research Article

## Relooking Yield Losses Caused by Maydis Leaf Blight, and Banded Leaf and Sheath Blight in Maize

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### Abstract

Investigation on yield loss assessment in maize due to maydis leaf blight (MLB) and banded leaf and sheath blight (BLSB) were conducted during *Kharif* 2010-2014 under multi-locational fields of Northern India conditions. Result of field experiments revealed 12.69 per cent yield loss for MLB at Delhi while the yield loss was 42.66 per cent at Dhaulakuan during the years of 2010-2012. The yield loss for MLB was 19.71 per cent at Ludhiana during 2013-14. BLSB disease caused 13.66 per cent loss at Delhi during 2012-2013 whereas 20.62 per cent yield loss was recorded at Pantnagar during 2011-2013. Significant loss in grain yield ( $q\ ha^{-1}$ ) was observed due to BLSB in unprotected plots as compared to protected treatments at across different locations. Present study revealed a positive correlation for both diseases with weather parameters like Tmax, Tmin, relative humidity and rainfall. These results suggested that locations strongly influence disease incidence and grain yield probably due to environmental factors. The analysis of weather parameters with the incidence of MLB and BLSB disease of maize could be used by plant pathologists to develop or redesign management strategies for the maize growers.

**Key words:** Banded leaf and sheath blight, maize, maydis leaf blight, protected, unprotected, yield loss

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