

Influence of High Density Planting System (HDPS) on Occurrence of Fungal Foliar Diseases in Cotton

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ABSTRACT

Optimum plant density is one of the determining factors to reap potential yields in any crop. In cotton HDPS is advocated for varieties to realise maximum yields under rainfed conditions in light soils. Hence, a study was conducted to understand the impact of HDPS on fungal foliar diseases in cotton. Diseases were recorded at different stages of crop *viz.*, seedling, squaring, flowering, boll formation and boll development, boll maturity and bursting and boll bursting and picking stages. *Alternaria* leaf spot appeared at seedling stage and reached maximum during boll formation and boll development stage. The percent disease index (PDI) ranged from 10 to 21% in different compact genotypes during boll formation and boll development stage. *Corynespora* leaf spot was observed during boll maturity and boll bursting stage with 3.0 to 5.0 PDI; grey mildew and rust diseases were observed during boll bursting and picking stage with 4.0 to 7.0 and 5.0 to 13.0 PDI, respectively.

Key words: *Alternaria, Corynespora, Cotton, Grey mildew, High density planting system, Rust.*