

Research Article

Fungicidal Management of Post Flowering Stalk Rot of Maize Caused by *Fusarium verticillioides*

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Abstract

Maize (*Zea mays* L.) is one of the most significant staple food grain crops worldwide. Bring down the crop performance, limited yield, and considerable production costs are provocation caused by soil borne pathogens in maize production around southern Rajasthan. *Fusarium verticillioides* is the utmost predominant fungal pathogen and it give rise to great concern from an intercontinental perspective. To mitigate the losses, two experiments were conducted, first *in vitro* then in field during *Kharif* 2020 and 2021 for evaluation of eight fungicides against the post flowering stalk rot of maize. Systemic fungicides Bavistin and SAAF were found most effective in inhibiting the complete mycelium growth of *F. verticillioides* *in vitro*. After artificial inoculations of pathogen under field conditions. Bavistin resulted into disease score of 3.05, 2.35 and 1.10 with 24, 21.30 and 11.65 per cent PDI at 0.2, 0.3 and 0.5 per cent concentrations, respectively in both seasons. Sedaxane + Fludioxonil 50 FS showed least effective with maximum disease rating 4.25, 3.90 and 1.60 at different concentrations *viz.*, 0.2, 0.3 and 0.5 per cent respectively with highest per cent disease index (PDI) 45.30, 41.90 and 20.30 with lowest grain yield 997.98, 1010 gm and 1020 gm per plot, respectively.

Key words: *Fusarium verticillioides*, fungicides, maize, post flowering stalk rot (PFSR)

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