

Research Article

## Integrated Disease Management of Spot Blotch of Wheat

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### Abstract

Spot blotch of wheat caused by *Bipolaris sorokiniana* (Sacc.) Shoem. is widespread in hot and humid wheat growing areas of the world. Climate change has incited the disease scenario in India, leading to intensification in the incidence of wheat spot blotch. The area under North-eastern plains zones of India is highly affected by spot blotch disease. To find out the possibilities of integrated disease management (IDM) in spot blotch of wheat, a trial was conducted in *Rabi* 2017-18, using the two best effective fungicides (propiconazole and hexaconazole) and the two most effective plant extracts (garlic cloves and eucalyptus leaf extracts) collaborated with two dates of sowing (November 25 and December 26, 2017) in field conditions to manage wheat spot blotch. Two sprays of propiconazole (0.1%) resulted in the lowest PDI, best disease control, highest yield and 1000-grain weight at both timely and late sowing conditions (November 25 and December 26). Two sprays of propiconazole (0.1%) 15 days apart at timely sowing were most effective in controlling wheat spot blotch disease with a significant increase in yield ( $42.33 \text{ q ha}^{-1}$ ) over the unsprayed crop ( $30.33 \text{ q ha}^{-1}$ ) and also in disease control (66.15%). Late sowing (December 26) showed a significant decline in disease control (59.81%) with significantly lower yield ( $34 \text{ q ha}^{-1}$ ).

**Key words:** *Bipolaris sorokiniana*, hexaconazole, IDM, plant extracts, propiconazole

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