

## EFFECT OF BLACK POINTED SEED AND VERMICOMPOST ON LEAF BLIGHT SEVERITY CAUSED BY *Bipolaris sorokiniana*, YIELD ATTRIBUTES AND SEED HEALTH OF WHEAT

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### Extended Summary

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An experiment was conducted during the period from November 2013 to July 2014 to find out the effect of different levels of black pointed seed and vermicompost on leaf blight severity, yield attributes and seed health status of wheat, cv. Shatabdi. Field experiment was carried out in RCBD design with 18 treatments. In the field condition, significant variations were found considering number of seedlings/m<sup>2</sup>. The maximum (114.3 and 124.0) emergence of seedling was recorded in T<sub>7</sub> and the minimum (89.0 and 100.0) was in T<sub>6</sub> after 7 days and 15 days of sowing, respectively. Leaf blight severity (0-5 scale) on flag leaf and penultimate leaf in flag leaf stage, panicle initiation stage, flowering stage, milking stage and hard dough stage were recorded minimum while applied treatment T<sub>7</sub> (Vermicompost @ 1.5 ton/ha and apparently healthy seed treated with Provax 200@ 0.25%). The maximum leaf blight severity was recorded while applied treatment T<sub>6</sub> (without vermicompost and 25% black pointed seed in weight basis). The highest plant height (82.84 cm) and spike length (12.91 cm) were recorded in T<sub>7</sub>. The treatments showed significant variations on number and weight of grains/ear of different severity grades ((0-5) of harvested seeds. Significantly higher 1000 seeds weight (42.70g), grain yield (3.66 t/ha) and straw yield (4.33 t/ha) were recorded in T<sub>7</sub>. The lowest 1000 seeds weight (37.42g), grain yield (2.33 t/ha) and straw yield (3.05 t/ha) were recorded in T<sub>6</sub>. In respect of seed germination, significant variations were observed among the treatments. Remarkable reduction of the seed germination was recorded in seeds with the maximum black pointed seed in the treatment T<sub>6</sub> (without vermicompost and 25% black pointed seed in weight basis). Germination percentage, normal seedling percentage and vigor index were the highest in T<sub>7</sub> and the lowest in T<sub>6</sub>. The shoot length, root length, seedling weight and vigor index (VI) were decreased with the increasing levels of black pointed seed. The shoot length, root length, seedling weight were the highest in T<sub>7</sub> and the lowest in T<sub>6</sub>.

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## **MOU SIGNING CEREMONEY**

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