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Research Article

Effect of inorganic and bio-fertilizers on growth and yield of strawberry [*Fragaria x ananassa* L. Duch.] cv. CHANDLER in Central Uttar Pradesh

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SUMMARY

A field experiment was conducted during 2014-15 to study the performance of different levels of inorganic fertilizers with combination of bio-fertilizers at Babasaheb Bhimrao Ambedkar University, Lucknow. It comprised application of different level of inorganic and bio-fertilizers in Randomized Block Design with thirteen treatments *i.e.* T₁- Control (No inorganic and no bio-fertilizer), T₂- (100 kg N ha⁻¹ + *Azotobacter*), T₃ - (100 kg N ha⁻¹ + PSB), T₄ - (75 kg N ha⁻¹ + *Azotobacter*), T₅- (75 kg N ha⁻¹ + *Azotobacter*), T₇ - (60 kg P ha⁻¹ + *Azotobacter*), T₈ - (45 kg P ha⁻¹ + *Azotobacter*), T₉ - (45 kg P ha⁻¹ + *Azotobacter*), T₉ - (45 kg P ha⁻¹ + *Azotobacter*), T₁₁ - (60 kg K ha⁻¹ + PSB), T₁₂ - (45 kg K ha⁻¹ + *Azotobacter*), and T₁₃ - (45 kg K ha⁻¹ + PSB). It was observed that overall minimum plant height was obtained (14.18 cm) at 90 days after transplanting in T₁ - Control and maximum plant height (18.67 cm) in T₂ - (100 kg N ha⁻¹ + *Azotobacter*). The maximum number of leaves was recorded highest (18.67) in T₂ - (100 kg N ha⁻¹ + *Azotobacter*) with followed by (17.67) in T₄ - (75 kg N ha⁻¹ + Azotobacter). The minimum spreading of plant in North- South direction (15.63 cm) was recorded in case of control. The highest yield per plant observed in T₂ (173.42g). Among the thirteen treatments T₂ - (100 Kg N ha⁻¹ + *Azotobacter*) showed best performance in terms of maximum fruit yield of strawberry.

Key Words : Bio-fertilizers, Inorganic fertilizer, Growth, Yield

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