

GROWTH AND YIELD OF TOMATO AS INFLUENCED BY SEEDLING AGE AND MULCHING

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Executive summary

Tomato is one of the most popular, important and nutritious vegetable grown in Bangladesh. The food value of tomato is very high because of higher contents of vitamins (A, B, C), minerals and carotene. In Bangladesh, majority of the growers do not get high quality vegetables and higher yield because of lack of knowledge about seedling age and mulching. A field experiment was conducted in the farm of Sher-e-Bangla Agricultural University, Dhaka -1207 during the period from November 2018 to April 2019 to find out the effect of seedling age and different mulches on the growth and yield of tomato. The experiment was laid out in Randomized Complete Block Design (RCBD) with three replications. and consisted of two factors, Factor A: seedling age such as S₁: 30 days old seedling, S₂: 35 days old seedling and S₃: 40 days old seedling, Factor B: M₀: No mulch; M₁: Saw dust; M₂: Black polythene and M₃: Straw. The maximum (89.85 g) weight of individual fruit was recorded from S₂, while the minimum (77.33 g) was obtained from S₃. The maximum (88.12 t/ha) yield was recorded from S₂, while the minimum (67.35 t/ha) was recorded from S₃. In case of mulching, the maximum (96.91 g) weight of individual fruit was recorded from M₂ and the minimum (63.91 g) weight of individual fruit was obtained from control. The maximum (100.37 t/ha) yield was recorded from M₂ and the minimum (44.17 t/ha) yield was found from control. The maximum (110.10 g) weight of individual fruit was recorded from treatment combination of S₂M₂, while the treatment combination S₁M₀ performed the minimum (59.09 g) weight of individual fruit. The maximum (117.60 t/ha) yield was recorded from treatment combination of S₂M₂, while the treatment combination S₁M₀ showed the minimum (38.83 t/ha) yield. Considering the use of seedling age and mulch materials, 35 days of old seedling with black polythene mulch is suitable for producing tomato.

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