

Response of different levels of NPK on growth, flowering and yield of tuberose (*Polianthes tuberosa* L.) cv. Shringar

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ABSTRACT : The experiment was conducted at the Department of Horticulture, Sam Higginbottom Institute of Agriculture Technology & Sciences, Allahabad, (U.P.) during the period from March to October (2012) to investigate the response of different levels of NPK on growth, flowering and yield of tuberose (*Polianthes tuberosa* L.) cv. Shringar. 12 treatments were included in the trial viz; T₀ (Control), T₁ (20:40:20), T₂ (40:80:40), T₃ (60:120:60), T₄ (80:160:80), T₅ (100:200:100), T₆ (120:240:120), T₇ (140:280:140), T₈ (160:320:160), T₉ (180:360:180), T₁₀ (200:400:200) and T₁₁ (220:440:220) N,P,K kg/ha were tested in three replication. The experiment of design was randomized block design. The results reveal that fertilizer treatments had significant response on all parameters. The maximum number of leaves/plant (33.73), number of tillers/clump (3.52), number of spike/clump (5.56), yield of spike/ha (749.98), diameter of largest bulb (5.47 cm), number of bulbs/clump (17.83 g), weight of larger bulb (82.96 g), diameter of largest bulb (5.47 cm) were produced by the treatment (T₉) of N:P:K in a ratio of 180:360:180 kg/ha. It was the best treatment for good vegetative as well as reproductive growth. Application of N, P₂O₅ and K₂O at 180:360:180 kg/ha may be applied.

Key Words: NPK, rachis, spike and bulb yield.