



RESEARCH PAPER

Effect of variety and different levels of nitrogen and potassium on growth, yield and soil nutrient status on rose (*Rosa hybrida* L.) through fertigation Cv. Gladiator and divine

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Abstract : The present investigation was conducted at Lal Baugh Farm, College of Horticulture, Junagadh Agricultural University, Junagadh (Gujarat). During *Rabi* season in 2023, in Randomized Block Design with the factorial concept having twelve treatments. The result of the experiment revealed that individual effect of variety Divine recorded maximum incremental plant height (30.45 cm), incremental plant spread (N-S) (19.18 cm), incremental plant spread (E-W) (22.75 cm), number of branches per plant (6.50), leaf area (16.97 cm²), stem diameter (20.03 mm), number of flowers per plant (34.00), number of flowers per plot (680.01) and number of flowers per hectare (15.11 Lakh). Mean while, a variety gladiator recorded a maximum stalk length (17.62 cm). In the case of nitrogen 60 g/plant recorded maximum incremental plant height (29.24 cm), incremental plant spread (N-S) (16.96 cm), incremental plant spread (E-W) (19.23 cm), number of branches per plant (6.49), leaf area (16.76 cm²), stem diameter (20.17 mm), stalk length (14.71 cm), number of flowers per plot (595.01), number of flowers per hectare (13.22 Lakh) and soil available nitrogen (286.01 kg ha⁻¹). Similarly, it was recorded that 40 g/plant of potassium gave maximum stalk length (15.74 cm), number of flowers per plant (29.78), number of flowers per plot (595.56), number of flowers per hectare (13.23 lakh), soil available potassium (191.92 kg ha⁻¹).

Key Words : Growth, Nitrogen, Potassium, Soil, Rose, Variety, Yield

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