

CORRELATION OF BANANA CV GRAND NAINA WITH GROWTH AND YIELD ASPECT

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Abstract: The experiment was laid out in a non replicated trial for metric and non metric variables. A wide range of variation was observed for vegetative growth parameters of banana at various growth periods viz., leaf length (39.42 - 157.52 cm), leaf width (19.17 - 41.09 cm), variation in functional leaf area (0.43 - 6.06 m²), petiole length (10.28 - 34.61 cm), variation in functional leaf (6.99 - 13.27), height of pseudo stem (19.08 - 198.37 cm), girth of pseudo stem (16.77 - 59.01 cm), PCA (23.41 - 277.55 cm²), peduncle length (43.67 cm), peduncle width (14.49 cm), male bud size (31.18 cm length and 30.70 cm girth) showed continuously increased during crop cycle of banana and bunch position was slightly angled. The number of days taken from planting to inflorescence emergence (272.4), days taken from inflorescence emergence to harvesting (101.65) and total crop duration (374.05 days) was recorded during crop cycle of banana plant. The yield attributing characters viz. weight of bunch (21.88 kg), hands per bunch (11.43), fruits on 2nd hand (17.80), hand weight per bunch (1827.45 g), fruits per bunch (202.88), length and girth of fruit (17.61 cm and 10.81 cm, respectively), fruit pedicel length (2.25 cm), fruit pedicel width (1.62 cm), fruit weight (102.58 g) and non metric characters like fruit shape was observed curved (sharp curved) and fruit apex was observed blunt tipped. Coefficient of correlation was estimated for 23 characters of banana cv. Grand Naine. Among these fruit yield exhibited strong positive correlation with leaf area at harvesting time (0.459) and shooting time (0.418), pseudo stem girth at shooting time (0.523) followed by 8th and half MAP (0.476) and harvesting time (0.401), PCA at shooting time (0.521) followed by 8th and half MAP (0.469) and harvesting time (0.398), number of functional leaves at harvesting time (0.402) and shooting time (0.382) and yield attributing characters such as fruits per 2nd hand (0.362), hands per bunch (0.611), fruits per bunch (0.693), fruit weight (0.792), hand weight (0.691), plant crop cycle (0.340) and days taken from flowering to harvesting (0.381).

Keywords: Banana, Phenological characters, Correlation, Yield

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