IMPACT OF DIFFERENT GENOTYPES ON GROWTH AND YIELD PARAMETERS OF ELEPHANT FOOT YAM (AMORPHOPHALLUS COMPANULATUS DECNE.) UNDER CHHATTISGARH PLAINS

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Abstract: The experiment was conducted at Research and Instructional Farm, Department of Horticulture, College of Agriculture, Indira Gandhi Krishi Vishwavidyalaya, Raipur (Chhattisgarh) during the year 2010-11 in factorial randomized block design with 6 treatments which were replicated three times with an objective to study the effect of different genotypes on growth and yield on elephant foot yam. The treatment consisted of six genotypes of elephant foot yam *viz;* IGAM-1, IGAM-2, IGAM-8, NDA-2, TRC-Badama and Sree Padma. Data revealed that genotype G_4 (NDA-2) proved its superiority followed by G_1 (IGAM-1), G_2 (IGAM-2), G_3 (IGAM-8), G_5 (TRC-Badama) and G_6 (Sree Padma) for sprouting per cent, number of stems/plant, canopy spread (E-W and N-S), size of corm (diameter), number of cormels/plant, weight of cormels/plant, corm yield (kg/plant), total corm yield (q/ha) and dry matter per cent of corm. Genotype G_2 (IGAM-2) superior for plant height and average weight of corm, genotype G_3 (IGAM-8) superior for girth of stem, genotype G_5 (TRC- Badama) superior for days to first emergence and genotype G_6 (Sree Padma) superior for days to senescence.

Keywords: Genotype, elephant foot yam, yield

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