

INTERACTION EFFECT OF DIFFERENT GENOTYPES AND SPACING ON GROWTH AND YIELD OF ELEPHANT FOOT YAM (*AMORPHOPHALLUS COMPANULATUS DECNE.*) UNDER AGRO-CLIMATIC CONDITIONS OF 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 *kharif* season of year 2010-11. The experiment was laid out in factorial randomized block design with 18 treatment combinations which were replicated three times. The treatment consisted of six genotypes of elephant foot yam viz; IGAM-1, IGAM-2, IGAM-8, NDA-2, TRC- Badama and Sree Padma which were planted at different spacing of 50 x 50 cm, 60 x 50 cm and 60 x 60 cm. The results revealed that the combination G₄ x S₃ (NDA-2) x (50 x 50 cm) recorded maximum sprouting per cent, girth of stem, canopy spread, number of cormels/plant, weight of cormels/plant (kg), corm yield (kg/plant) and total corm yield (q/ha). The treatment combination G₄ x S₁ (NDA-2) x (60 x 60 cm) recorded maximum size of corm and dry matter per cent of corm. The treatment combination G₂ x S₃ (IGAM-2) x (50 x 50 cm) recorded maximum plant height. The maximum days to first emergence, days to 50% emergence and number of stems/plant was recorded under G₅ x S₁ combination (TRC-Badama) x (60 x 60 cm). The treatment combination G₂ x S₂ (IGAM-2) x (60 x 50 cm) recorded maximum average weight of corms and highest days to senescence was recorded under G₆ x S₁ combination (Sree Padma) x (60 x 60 cm).

Keywords: Genotype, elephant foot yam, spacing

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