

Effect of VAM Consortia and Mineral Fertilization on Growth Promotion and Foliar Nutrient Content of *Dracaena*

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Abstract—The present research was designed to study the effect of media (soil + FYM (3: 1 v/v), VAM and mineral NPK (19: 19: 19) at 5.0, 10.0, 15.0 g / pot and their combined effect on growth promotion and nutrient uptake of *Dracaena* (*Dracaena marginata*) plant during 2018 and 2019 at Ornamental Horticulture and Landscaping Unit, Indian Agricultural Research Institute, Pusa Campus, New Delhi. The experiment was laid out in a Randomized Block Design with seven treatments combination, replicated thrice with five pots per replication. Mycorrhizal inoculation combined with balanced application of organic and inorganic fertilizers reinforced growth performance, plant biomass weight and nutrient uptake. The biological approaches provides its reliability and efficiency in the promotion of plant growth and quality of dracaena. Balanced fertilization resulted in increased SOC (Soil Organic Carbon) which resulted in improved soil physical properties such as pH, CEC etc. This consequently increases growth, yield and nutrient uptake significantly for all treatments against control. Treatment combination of Soil + FYM (3:1) + 3g Urea + 10g VAM consortia + 5g NPK (19:19:19) was found best for growth promotion and nutrient uptake of *Dracaena marginata*.