

The Effect of Alley Croppings on the Varieties of Elephant Foot (*Amorphophallus konjac* C. Koch)

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Abstract

Two-year old corms of four *A. konjac* varieties were intercropped with plum and betel-palm respectively, plots under full light in the vicinity was the CK 62.8% and 88.2% shading under orchards of plum and betel-palm. RCBD at a spacing of 25cm between plants in rows 60cm apart, was adopted to each environment and compared by combined analysis. As the result, corms grown under plum and betel-palm had higher yield than the CK by 2.85 and 1.57 times respectively. Among all varieties, "China" which had highest corm yield, gave 27,296 kg/ha, was 2.63 and 5.33 times significantly more than Harunakuro and Nippon-sairai, in the mean time 46% more than Akakiodama. The 62.8% shading under plum trees can induce variety "China" to justified yield potential.

Key words: *Amorphophallus konjac* , Variety, Alley cropping.

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