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Standardization of Nutrient Doses on Growth, Yield and Quality Parameters in Passion Fruit

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Abstract—The passion fruit (Passiflora edulis Sins.) is a high value and export oriented crop. It occupies an important place among fruits growing areas in India. Due to its pleasant aroma, rich flavour, prolific bearing habit and higher return even without much care it has greater potential for establishing popularity on commercial scale. Keeping in view of its nutritional, medicinal and commercial importance this experiment was conducted to standardize the nutrient doses on growth, yield and quality parameters in passion fruit during 2009-11at the experimental farm of Birsa Agricultural University, Kanke, Ranchi. In all the treatments 2 kg of vermi-compost and 0.5 kg of lime were applied as basal dose except absolute control. All the treatments exhibited better results over untreated control and absolute control. Highest yield (56.65 q/ha) was obtained by applying NPK (250: 125:125 gm/vine) + boron 1.2 gm/vine which was at par with, NPK (300: 150:150 gm/vine) + boron 1.2 gm/vine (49.15 q/ha) and NPK (250: 125:125 gm/vine) + sulphur 24 gm/vine (52.48 q/ha). Thus, NPK (250: 125:125 gm/ vine) + boron 1.2 gm/vine appeared to be the best treatment in respect to vegetative character, reproductive characters, fruit characters, yield and quality characters followed by NPK (250:125:125 gm/vine) + sulphur 24 gm/vine.

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