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SHORT COMMUNICATION

The effect of PGRs on growth and yield attributes of sapota cv. Cricket Ball in Chhattisgarh Plains Zone

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ABSTRACT

The current study was conducted at the Horticulture Farm, Department of Fruit Science, CoA, IGKV, Raipur (C.G.) in the years 2020–21 and 2021–22.Twenty-year-old sapota cv. Cricket Ball trees were sprayed with varying PGRs doses during two stages, such as 50% flowering and the pea stage of fruit development. This investigation was arranged by utilizing Randomised Block Design, replicated thrice along with twenty five treatments. The findings revealed that plant growth parameters such as length (11.64 cm), girth of new shoots (1.13 cm) and number of leaves shoot^{-1} (28.33 cm), were highest in T_{12} (GA_3 @ 150 ppm at 50% flowering + pea stage *) among all treatments, while the maximum yield (qt-ha^{-1}) was recorded in T_6 (*NAA @ 200 ppm at 50% flowering + pea stage) *27.72 qt-ha^{-1}. The gross return and net return (in rupees ha^{-1}) of Sapota were also recorded highest in T_6 (*NAA @ 200 ppm at 50% flowering + pea stage*) Rs 159045.90 and Rs 114977.89 ha^{-1} but the benefit-cost ratio was highest in T_3 (*NAA @ 100 ppm at 50% flowering + pea stage*) 2.81.*

Keywords: Benefit: cost, CCC, GA_3, gross realisation, growth parameters**,** NAA.