

# **Effect of Auxins and Type of Cutting on Propagation of Phalsa (*Grewia subinaequalis* DC.) Under Local Agro-Climatic Conditions**

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## **ABSTRACT**

The investigation was carried out to study the effect of auxins and type of cutting on propagation of phalsa at Horticultural College and Research Institute, Dr.Y.S.R. Horticultural University, Venkataramannagudem. The experiment consists of fourteen treatment combinations *i.e.*, hardwood and semi hardwood cuttings treated with IBA and NAA each at the rate of 100 ppm, 200 ppm and 300 ppm along with control (water) and replicated thrice in factorial randomized block design. The cuttings were dipped for 24 hours in solutions of IBA and NAA. The hardwood cuttings treated with IBA at 200 ppm concentration recorded the highest for root and shoot parameters, viz., minimum number of days taken for sprouting (12.48), maximum number of sprouts per cutting (5.70), number of leaves per cutting (6.13), leaf area per cutting (15.61cm<sup>2</sup>), leaf chlorophyll content per cutting (44.96 mg), fresh and dry weight of the shoot (22.07 g and 11.24 g), percentage of rooted cuttings (45.68), number of roots per rooted cutting (38.00), length of the longest root per rooted cutting (20.89 cm), survival percentage of rooted cuttings (28.21), fresh and dry weight of the root (3.10 g and 0.94 g) and percentage of establishment of rooted cuttings in the main field (25.21). The result revealed that hardwood cuttings treated with IBA at 200 ppm concentration followed by NAA at 100 ppm concentration were most effective for obtaining maximum shoot growth, root growth, survival percentage and for its large scale multiplication.

**Key words :** Hardwood, IBA, NAA, Phalsa, and Semi hardwood cuttings.