

## EFFECT OF SEED TREATMENT AND GROWING CONDITIONS ON GERMINATION, GROWTH AND SURVIVAL OF INDIAN GOOSEBERRY SEEDLINGS (*EMBLICA OFFICINALIS GAERTN*)

**Rinku Verma\*, C.S.Pandey, S.K.Pandey and Kumudani Sahu**

*Department of Horticulture, College of Agriculture JNKVV, Jabalpur, MP*

*Email: [vrinku793@gmail.com](mailto:vrinku793@gmail.com)*

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**Abstract:** The study was carried out at Fruit Research Station, Imaliya, Department of Horticulture, college of Agriculture, JNKVV, Jabalpur, (M.P.) during January 2018 to May 2018. The experiment consist of three growing conditions viz. (C<sub>1</sub>) Open condition, (C<sub>2</sub>) net house, (C<sub>3</sub>) poly house condition and six treatments of seed i.e. (S<sub>1</sub>) water soaking, (S<sub>2</sub>) GA<sub>3</sub> 200 ppm, (S<sub>3</sub>) GA<sub>3</sub> 400ppm, (S<sub>4</sub>) GA<sub>3</sub> 600ppm, (S<sub>5</sub>) Thiourea 0.5%, and (S<sub>6</sub>) Thiourea 1% having 18 treatment combinations. Among the growing conditions poly house and among the seed treatment, GA<sub>3</sub> (600ppm) were proved most promising as compare to others. Among the various treatment combination, the C<sub>3</sub>S<sub>4</sub> treatment combination (poly house and 600 ppm GA<sub>3</sub>) was proved most superior over rest of the treatment combinations with respect to germination parameters, growth parameters and survival parameter like days taken to start 1<sup>st</sup> germination (4.00), days taken to 50% germination (21.67), percentage of seeds germination (53.33%), (73.33%) and (73.33%) were noted at 20, 30, 40 days after sowing, height of shoots (4.38, 8.38, 29.05 and 35.14 cm), number of leaves per seedling (5.64, 33.33, 81.73 and 103.73), girth of stem (1.42, 1.53, 1.63 and 1.80 mm) at 30, 60, 90 and 120 DAS respectively and survival percentage 73.33 at 120 DAS.

**Keywords:** Indian gooseberry (*Emblca officinalis*), GA<sub>3</sub>, Thiourea, Growing, Poly house condition

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\*Corresponding Author