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# THE RESEARCH ON *IN VITRO* PROPAGATION OF

## *Dendrobium nestor*

Vu Thi Phan<sup>1</sup>, Khuat Thi Hai Ninh<sup>2</sup>, Nguyen Thi Tho<sup>3</sup>

<sup>1,2,3</sup>*Vietnam National University of Forestry*

### SUMMARY

Propagation of *Dendrobium nestor* by *in vitro* culture has been studied successfully. The results showed that orchid decontamination was burned 3 times 96% ethanol was rate of 90.8% after 8 weeks of culture. Murashige and Skoog (MS) medium supplemented with growth regulator Benzylaminopurine (BAP) 0.4 mg/l;  $\alpha$ -naphthalene acetic acid (NAA) 0.2 mg/l; kinetin 0.2 mg/l; sucrose 30 g/l; agar 5.5 g/l suitable for rapid multiplication shoots with shoot multiplication of 6.33 times after 6 weeks of culture. Stimulation of shoot growth by medium of protocorm growth supplemented with 100 mg/l potato gave a shoot multiplication of 4.12 times, shoot height was 4.23 cm, leafy stems were long and green. The rooting shoots rate was 100%, the average number of root was 5.45 per individual and the average length of roots was 3.85 cm when cultured in medium MS supplemented with IBA 0.5 mg/l; NAA 0.1 mg/l; sucrose 20 g/l, agar 6.5 g/l. After the plants have been trained for two week, *Dendrobium nestor* were planted on the sphagnum moss immersed got the rate of living was 93.33%, healthy plants, stems, roots of the plant and new leaves after 8 weeks. This procedure can be applied for mass production of *Dendrobium nestor* to the commercial demand.

**Keywords:** Benzyl aminopurine, *Dendrobium nestor*, *in vitro*, propagation, rooting.

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