

STUDY ON EFFECT OF PLANT GROWTH REGULATORS IN VITRO PROPAGATION OF BINH VOI (*Stephania rotunda* Lour)

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Summary

The study on Binh Voi (*Stephania rotunda* Lour) in vitro propagation was carried out on MS (Murashige and Skoog) media, pH 5.8, sterilized at 121⁰C for 18 minutes, culture room temperature at 25⁰C, humidity 65%, daylight 2000 lux with the light time of 16 hrs/day. The results revealed that shoot tips and nodal segments increased the ability of the survival and non-contamination to 83.33% by HgCl₂ 0.1% for 7 minutes. At the buds regeneration stage, two plant growth regulators can be supplemented to the medium culture as BA và GA3. The most suitable concentration of BA supplemented to medium culture was 1 mg/l, this has obtained 55 buds with 1,83 times for the coefficient of bud regeneration. whereas the most suitable concentration of GA3 supplemented to medium culture was 1 mg/l, this has obtained 52 buds with 1.73 times for the coefficient of bud regeneration. At the protocorm stage, medium culture can be supplemented by BA (1 mg/l) combined with one of three plant growth regulators as GA3/IBA or NAA. Of which, suitable supported for bud growth was culture medium added by BA (1 mg/l) combined with NAA (0.5 mg/l), this has obtained total of 105 buds and coefficient of bud regeneration was 3.5 times.

Key words: Binh voi, culture medium, *in vitro*, propagation, plant growth regulators.