

**MORPHOGENETIC EFFECTS OF SEVERAL PLANT GROWTH REGULATORS (PGR) ON *IN VITRO* DEVELOPMENT OF BINAHONG (*Anredera cordifolia* L.) LEAF**

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**Abstract**

The aim of this study was to observe the effects of several plant growth regulator on the development of Binahong (*Anredera cordifolia* L.) leaf *in vitro*. Binahong is a potential medicinal plant widely used in Indonesia. The leaves used in this research were young leaves collected from the tips of the Binahong vine. The media used was MS medium with several treatments of various plant growth regulators in different concentrations. Both auxins IBA (indole butyric acid) and 2,4-D (2,4-dichlorophenoxyacetic acid) and also cytokinin BAP (benzyl amino purine) were used with concentrations of 0.5-3 ppm added to basic MS media. Fifteen repetitions were done for each treatment. White callus was obtained from MS media added with 1-3 ppm Of 2,4-D and green callus was obtained from combination of 0.5ppm IBA+0.5ppm BAP, 0.5ppm IBA+1ppm BAP and 1ppm IBA+0.5ppm BAP. A shoot-like callus was induced from the addition of 1 ppm BAP + 0.5 IBA. The growth of roots also occurred on several explants planted on media MS containing both 2,4- and a combination of BAP and IBA. The different result on binahong leaf grown on different treatments of PGR is due to many factors affecting plant morphogenesis *in vitro*. This in effect can be continued for further research as it can lead to the potential of Binahong as an alternative model plant in tissue culture experiments.

Key words : morphogenesis, plant growth regulators, *in vitro*, binahong leaf

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