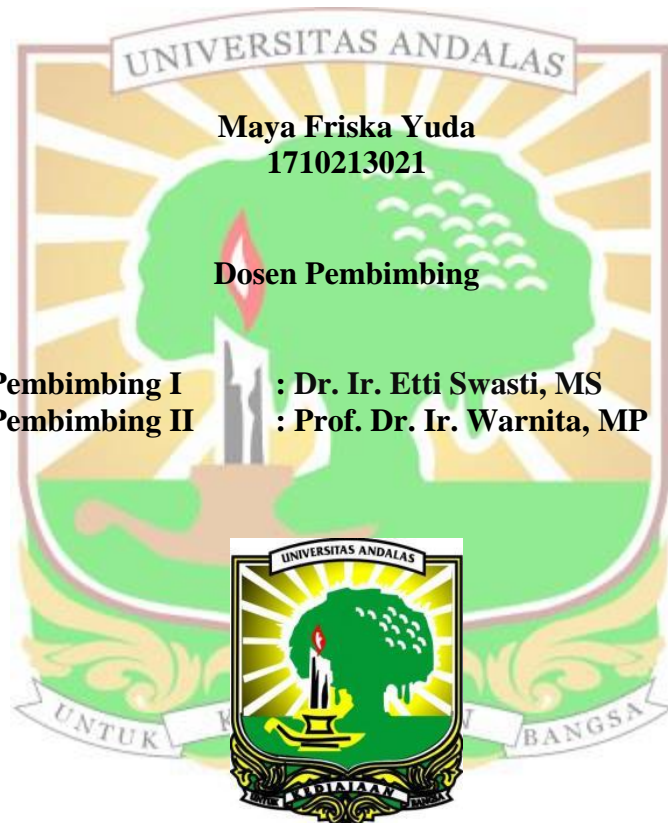


**INDUKSI KALUS DAUN KENANGA (*Cananga odorata* (Lam.))
DENGAN PEMBERIAN BERBAGAI KOMBINASI NAA DAN
BAP SECARA KULTUR *IN VITRO***

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**FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2022**

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ABSTRAK

Tanaman kenanga merupakan salah satu tanaman penghasil minyak atsiri yang memiliki nilai ekonomi yang tinggi. Namun, dalam pengembangannya masih mengalami kendala dalam hal ketersediaan bibit. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian kombinasi NAA dan BAP terhadap pertumbuhan kalus eksplan daun kenanga secara kultur *in vitro*, dan mengetahui berapa kombinasi NAA dan BAP terbaik terhadap pertumbuhan kalus eksplan daun kenanga secara kultur *in vitro*. Penelitian ini dilaksanakan di Laboratorium Kultur Jaringan Fakultas Pertanian Universitas Andalas Padang. Metode penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan, yaitu 0 ppm NAA + 0 ppm BAP, 0.75 ppm NAA + 4.0 ppm BAP, 1.50 ppm NAA + 3.0 ppm BAP, 2.25 ppm NAA + 2.0 ppm BAP, dan 3.00 ppm NAA + 1.0 ppm BAP. Data hasil penelitian dianalisis dengan menggunakan uji F pada taraf nyata 5% dan apabila berbeda nyata dilanjutkan dengan uji Duncan's New Multiple Range Test (DNMRT) pada taraf 5%. Hasil penelitian diperoleh pemberian berbagai kombinasi NAA dan BAP berpengaruh terhadap pertumbuhan kalus eksplan daun kenanga, kecuali pada waktu mulai berkalus. Pemberian kombinasi NAA dan BAP mampu meningkatkan persentase eksplan membentuk kalus eksplan daun kenanga. Kemudian, kombinasi 3.00 ppm NAA dan 1.0 ppm BAP mampu meningkatkan diameter kalus dan bobot kalus eksplan daun kenanga dengan warna kalus yang dihasilkan warna hijau tua dan tekstur kalus kompak.

Kata kunci : BAP, induksi kalus, kenanga, kombinasi, NAA

CALLUS INDUCTION OF YLANG-YLANG (*Cananga odorata* (Lam.)) LEAVES WITH VARIOUS COMBINATIONS OF NAA AND BAP BY IN VITRO CULTURE

ABSTRACT

Ylang plant is one of the essential oil-producing plants that have high economic value. However, in its development there are still obstacles in terms of the availability of seeds. This study aimed to determine the effect of the combination of NAA and BAP on callus growth of ylang leaf explants by in vitro culture, and to find out what the best combination of NAA and BAP was on callus growth of ylang leaf explants by in vitro culture. This research was conducted at the Tissue Culture Laboratory, Faculty of Agriculture, Andalas University, Padang. This research method uses a completely randomized design (CRD) with 5 treatments, namely 0 ppm NAA + 0 ppm BAP, 0.75 ppm NAA + 4.0 ppm BAP, 1.50 ppm NAA + 3.0 ppm BAP, 2.25 ppm NAA + 2.0 ppm BAP, and 3.00 ppm NAA + 1.0 ppm BAP. The research data were analyzed using the F test at a 5% level of significance and if it was significantly different, it was continued with the *Duncan's New Multiple Range Test* (DNMRT) test at a 5% level. The results showed that the administration of various combinations of NAA and BAP affected the callus growth of ylang leaf explants, except at the time of callus initiation. The combination of NAA and BAP was able to increase the percentage of explants forming callus of ylang leaf explants. Then, the combination of 3.00 ppm NAA and 1.0 ppm BAP was able to increase callus diameter and callus weight of ylang leaf explants with callus color produced dark green and compact callus texture.

Keywords : BAP, callus induction, combination, NAA, ylang