

## ABSTRACT

**Ade Yusup Yuswandi. A. 1910098.** Effect of Cutting Materials and Auxin Plant Growth Regulators Concentration on Cuttings Growth of Lampeni (*Ardisia humilis* Vahl.). Supervised by Arifah Rahayu and Kartika Ning Tyas

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Lampeni (*Ardisia humilis* Vahl.) is a shrub that has many uses, including as a medicinal plant. Information on lampeni vegetative propagation is still limited. This study aims to determine the effect of cutting material and concentration of auxin paste on lampeni cuttings growth. The research was carried out in the nursery of the Bogor Botanical Gardens from August 28 to November 20, 2021. This study used a factorial Completely Randomized Design (CRD). The first factor is the source of cutting material, namely shoot tip cuttings and stem cuttings. The second factor was the concentration of auxin paste (0 ml/g talc; 0.55 ml/g talc; 0.8 ml/g talc; and 1.05 ml/g talc). Each treatment was repeated three times and each experimental unit consisted of 10 cuttings. The results showed that the concentration of auxin had no significant effect on all observed variables. Cutting material had a significant effect on root percentage, number of roots, root wet weight, root dry weight and had a very significant effect on shoot emergence time. The percentage of live cuttings in this study was still low, shoot tip cuttings were 15% and stem cuttings were 16.67%. The percentage of rooted shoot tip cuttings was 11.67% and rooted stem cuttings were 4.17%. The stem cuttings sprouted on the 16<sup>th</sup> day, while shoots appeared on the tip of the shoot cuttings on the 38<sup>th</sup> day.

*Keywords : cuttings, lampeni, plant growth regulator, roots, shoots*

## ABSTRAK

**Ade Yusup Yuswandi. A. 1910098.** Pengaruh Bahan Setek dan Konsentrasi Zat Pengatur Tumbuh Auksin terhadap Pertumbuhan Setek Tanaman Lampeni (*Ardisia humilis* Vahl.). Dibimbing oleh Arifah Rahayu dan Kartika Ning Tyas

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Lampeni (*Ardisia humilis* Vahl.) merupakan perdu yang memiliki beberapa manfaat, antara lain sebagai tanaman obat. Informasi perbanyak vegetatif lampeni masih terbatas. Penelitian ini bertujuan untuk mengetahui pengaruh bahan setek dan konsentrasi pasta auksin terhadap pertumbuhan setek lampeni. Penelitian dilaksanakan di pembibitan Kebun Raya Bogor pada tanggal 28 Agustus hingga 20 November 2021. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) faktorial. Faktor pertama adalah sumber bahan setek, yaitu setek ujung pucuk dan setek batang. Faktor kedua adalah konsentrasi pasta auksin (0 ml/g talk; 0,55 ml/g talk; 0,8 ml/g talk; dan 1,05 ml/g talk). Setiap perlakuan diulang tiga kali dan setiap satuan percobaan terdiri atas 10 setek. Hasil penelitian menunjukkan konsentrasi auksin tidak berpengaruh nyata pada semua peubah yang diamati. Bahan setek berpengaruh nyata pada persentase berakar, jumlah akar, bobot basah akar, bobot kering akar dan berpengaruh sangat nyata terhadap waktu muncul tunas. Persentase hidup setek dalam penelitian ini masih rendah, setek ujung pucuk 15% dan setek batang 16,67%. Persentase setek ujung pucuk yang berakar 11,67% dan setek batang yang berakar 4,17%. Tunas muncul pada hari ke 16 pada setek batang dan hari ke 38 pada setek ujung pucuk.

Kata kunci : *setek, lampeni, zat pengatur tumbuh, akar, tunas*