

**PENGARUH CARA PENDINGINAN DAUN COCOR BEBEK
(*Kalanchoe pinnata* (Lam.) Pers. TERHADAP AKTIVITAS
PEREDAMAN RADIKAL BEBAS DPPH (2,2-dipheyl-1-
pikrilhidrazil)**

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INTISARI

Latar Belakang: Cocor bebek merupakan tanaman herba yang memiliki daun tebal karena mengandung banyak air. Tanaman ini tumbuh liar di pinggir jalan atau sengaja ditanam masyarakat sebagai tanaman penghias rumah. Cocor bebek banyak digunakan sebagai obat tradisional karena diketahui memiliki aktivitas antioksidan. Tinggi rendahnya aktivitas antioksidan dalam suatu tanaman dapat dipengaruhi oleh proses penanganan simplisia seperti proses pendinginan.

Tujuan Penelitian: Mengetahui pengaruh metode pendinginan daun cocor bebek menggunakan metode SML, SMTL, dan Oven terhadap aktivitas peredaman radikal bebas DPPH yang dinyatakan dengan nilai IC₅₀.

Metode Penelitian: Daun cocor bebek dikeringkan menggunakan tiga metode yang berbeda yaitu pendinginan SML, SMTL, dan Oven. Daun cocor bebek yang sudah kering diserbuk, kemudian diekstraksi menggunakan metode maserasi dengan pelarut etanol 70%. Ekstrak yang diperoleh diuji aktivitas peredaman radikal bebas DPPH menggunakan spektrofotometri UV-Vis.

Hasil Penelitian: Aktivitas peredaman radikal bebas DPPH pada sampel daun cocor bebek dengan pendinginan SML diperoleh nilai IC₅₀ sebesar 219,024 ppm, SMTL sebesar 82,324 ppm, dan Oven sebesar 182,265 ppm. Secara statistik, terdapat perbedaan yang signifikan dari ketiga pendinginan tersebut.

Kesimpulan: Metode pendinginan daun cocor bebek mempengaruhi aktivitas peredaman radikal bebas DPPH, dimana metode SMTL merupakan metode yang paling optimal.

Kata Kunci: Antioksidan, DPPH, etanol 70%, pendinginan, daun cocor bebek (*Kalanchoe pinnata* (Lam.) Pers).

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THE EFFECT OF DRYING METHODS ON THE FREE RADICAL SCAVERING DPPH ACTIVITY OF *Kalanchoe pinnata* Lam. Pers.

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ABSTRACT

Background: *Kalanchoe pinnata* is a herbaceous plant that has thick leaves because it contains a lot of water. This plant grows wild on the side road, or is deliberately planted by the community as a house decoration plant. *Kalanchoe pinnata* widely used as a tradisional medicine because it is known for its antioxidant activity. The level of antioxidant activity in a plant can be influenced by the simplicia handling process, such as the drying process.

Research Objectives: Knowing the effect of drying method of *Kalanchoe pinnata* using the SML, SMTL, and Oven methods on the DPPH free radical scavenging activity expressed by the IC₅₀.

Research Methods: *Kalanchoe pinnata* leaf were dried using three different methods, namely SML, SMTL, and Oven drying. *Kalanchoe pinnata* leaves were powdered, then extracted using the maceration method with 70% ethanol solvent. The extract DPPH obtained was tested for DPPH free radikal scavenging activity using UV-Vis spectrophotometry.

Results: The DPPH free radical scavenging activity in *Kalanchoe pinnata* leaf samples by drying SML obtained IC₅₀ value of 219,024 ppm, SMTL 82,324 ppm, and Oven value 182,265 ppm. Statistically, there is a significant difference from those three method.

Conclusion: The drying method of *Kalanchoe pinnata* leaves affect the DPPH free radical scavenging activity DPPH, where the SMTL is the best method.

Keywords: Antioxidant, DPPH, ethanol 70%, drying, *Kalanchoe pinnata* (Lam.) Pers.

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