Pengaruh Jenis Medium Sumber Zn^{2+} Dan Lama *Blanching* Terhadap Aktivitas Antioksidan Bubuk Simplisia Sambiloto (*Andrographis paniculata*)

INTISARI

Perubahan pola hidup masyarakat untuk hidup sehat dilakuakan dengan mengonsumsi pangan yang kaya akan atioksidan. Salah satu seumber pangan kaya akan antioksidan yaitu simplisia yang banyak mengandung komponen fenolik dan flavonoid dalam daun sambiloto. Tujuan dari penelitian ini adalah untuk Mengevaluasi aktivitas antioksidan bubuk simplisia sambiloto (*Andrographis paniculata*) yang dibuat melalui proses blanching pada berbagai variasi jenis medium dan lama *blanching.*

Penelitian ini menggunakan rancangan acak lengkap pola faktorial dengan perlakuan dengan menggunakan faktor perlakukan variasi medium *blanching* dan variasi lama waktu *blanching*. Analisis yang dilakukan adalah analisis kadar air, kadar fenolik, kadar flavonoid, kadar klorofil total dan aktivitas antioksidan.

Hasil penelitian menunjukkan bahwa variasi medium *blancing* dan waktu *blanching* tidak memepengaruhi kadar air dari daun sambiloto tetapi pada sampel kontrol menunjukkkan beda nyata. Kadar air tertinggi pada kontrol yaitu 43,74%. Kadar klorofil total ada sambiloto berkisar antara 169,18-265,21. Untuk kadar fenolik diperoleh data tertinggi pada, medium *blanching* Zn Cl_2 yang di *blanching* pada waktu 10 menit yaitu 796,71. Pada hasil kadar flavonoid berkisar antara 1,71-5,35. Hasil aktivitas antioksidan menggunakan metode DPPH diperoleh hasil yaitu 90,97-98,00 %RSA dan untuk metode FTC diperoleh 61,24-76,85.

Kata kunci: Simplisia daun sambiloto, Medium *blanching*, Waktu *blanching*, Aktivitas antioksidan

Effect of Medium Type of Zn^{2+} Source and Blanching Time on Antioxidant Activity of Sambiloto Simplicia Powder (*Andrographis paniculata*)

ABSTRACT

Changes in people's lifestyles for a healthy life are carried out by consuming foods rich in antioxidants. One source of food rich in antioxidants is simplicia which contains many phenolic and flavonoid components in bitter leaves. The purpose of this study was to evaluate the antioxidant activity of the simplicia sambiloto (Andrographis paniculata) powder made by blanching in various types of medium and duration of blanching.

This study used a completely randomized design with a factorial pattern with treatment using a blanching medium variation treatment factor and blanching time variation. The analysis carried out was the analysis of water content, phenolic content, flavonoid content, total chlorophyll content and antioxidant activity.

The results showed that the variation of blanching medium and blanching time did not affect the moisture content of the bitter leaf but in the sample control showed a significant difference. The highest water content in the control was 43.74%. The total chlorophyll content of sambiloto ranged from 169.18-265.21. For phenolic content, the highest data was obtained in Zn acetate blanching medium which was blanched in 10 minutes, namely 533.81. In the results, flavonoid levels ranged from 1.37 to 3.93. The results of antioxidant activity using the DPPH method were obtained, namely 65.57-89.69 %RSA and for the FTC method, it was obtained 73.18-79.33.

Keywords: Simplicia bitter leaf, Medium blanching, blanching time, Antioxidant activity