PENGARUH VARIASI PERLAKUAN PENDAHULUAN DAUN DAN KONSENTRASI Zn ASETAT PADA MEDIUM *BLANCHING* TERHADAP STABILITAS KLOROFIL DAN WARNA BUBUK SIMPLISIA SAMBILOTO (*Andrographis paniculata)*

INTISARI

Daun sambiloto mempunyai manfaat yang baik bagi kesehatan manusia karena mengandung senyawa utama berupa *andrographolide*. Namun pemanasan selama pembuatan simplisia akan mengurangi kandungan senyawa pada sambiloto. Sehingga diperlukan penambahan Zn asetat pada medium *blanching* untuk mengurangi kerusakan tersebut. Tujuan penelitian ini untuk mengetahui dan menentukan pengaruh variasi perlakuan pendahuluan daun dan konsentrasi Zn asetat yang tepat sebagai medium *blanching* yang dapat menghasilkan bubuk simplisia sambiloto yang mempunyai kadar klorofil dan warna yang tinggi. Penelitian ini dilakukan dengan menggunakan bahan utama daun sambiloto kering dan segar. Daun sambiloto kering dan segar disortasi, ditimbang, di*blanching* dalam larutan Zn asetat (0, 300, 400, dan 500 ppm) selama 15 menit dikeringkan dan dihaluskan. Rancangan percobaan yang digunakan adalah RAL data dianalisis dengan ANOVA dan jika signifikan dilanjutkan uji DMRT. Bubuk simplisia sambiloto dianalisis kadar air, kadar klorofil, kadar karotenoid, kadar abu, dan intensitas warnanya. Hasil penelitian menunjukkan bahwa perlakuan pendahuluan daun dan variasi konsentrasi Zn asetat memberikan pengaruh nyata terhadap kadar klorofil dan warna bubuk simplisia sambiloto daun segar semakin besar konsentrasi Zn asetat maka semakin tinggi kadar klorofil, semakin rendah intensitas warna hijau, namun pada simplisia kering semakin besar konsentrasi Zn asetat maka semakin rendah kadar klorofil dan semakin tinggi intensitas warna hijau. Bubuk simplisia sambiloto terbaik dihasilkan dengan bahan daun segar, *blanching* dengan konsentrasi Zn asetat 500 ppm yang mempunyai kadar air 9,23% b/b, kadar klorofil total 437,63 mg/100g, kadar karotenoid total 27,63 mg/100g, kadar abu 10,29 mg/100g, serta intensitas warna *redness* -3,45.

Kata kunci : Sambiloto, Zn asetat, klorofil, warna hijau

THE EFFECT OF PRETREATMENT OF LEAF AND ZN ACETATE CONCENTRATION IN BLANCHING MEDIUM ON CHLOROPHYLL STABILITY AND COLOUR OF SIMPLICIA SAMBILOTO (Andrographis paniculata) POWDER

ABSTRACT

Sambiloto leaf has good benefits for human health because it contains the main compound in the form of andrographolide. However, heating during the process of simplicia will reduce the content of compounds in sambiloto. It is necessary to add Zn acetate to the blanching medium to reduce the damage. The purpose of this study was to determine the effect of variations in leaf pretreatment and the appropriate concentration of Zn acetate as a blanching medium that can produce sambiloto simplicia powder which has high chlorophyll content and colour. This research was conducted using the main ingredients of dried and fresh sambiloto leaves. The dried and fresh sambiloto leaves were sorted, weighed, and blanched in Zn acetate solution (0, 300, 400, and 500 ppm) for 15 minutes, dried and crushed. The experimental design used RAL, the data were analyzed by ANOVA and if significant, the DMRT test was continued. Sambiloto simplicia powder was analyzed for water content, chlorophyll content, carotenoid content, ash content, and colour intensity. The results showed that the leaf pretreatment and variations in the concentration of Zn acetate had a significant effect on the chlorophyll content and colour of the simplicia sambiloto powder of fresh leaves, the higher concentration of Zn acetate, increase the chlorophyll content and decrease the green colour intensity. the lower the chlorophyll content and the higher the green colour intensity. The best simplicia sambiloto powder was produced with fresh leaves, blanching with a concentration of 500 ppm Zn acetate which had a total a moisture content of 9.23% w/w, chlorophyll content of 437.63 mg/100g, a total carotenoid content of 27.63 mg/100g, and ash content is 10.29 mg/100g, and the intensity of redness is -3.45.

Key word: Sambiloto, Zn acetate, chlorophyll, green colour