

ABSTRAK: Minuman herbal merupakan minuman yang terbuat dari bahan alami dengan kandungan bermanfaat bagi tubuh seperti antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh formulasi serbuk daun belimbing wuluh dan serai terhadap karakteristik mutu minuman herbal celup. Penelitian ini menggunakan rancangan acak lengkap (RAL) dengan satu faktor dan lima taraf serta tiga kali ulangan, di mana faktor perlakuannya adalah formulasi serbuk daun belimbing wuluh dan serai 60:40, 50:50, 40:60, 30:70, dan 20:80 (v/v). Bahan yang digunakan dalam pembuatan produk yaitu daun belimbing wuluh, serai, dan air. Analisis data dilakukan dengan uji statistik ANOVA pada taraf signifikansi 0,05. Hasil pengujian menunjukkan formulasi daun belimbing wuluh dan serai memberikan pengaruh nyata pada karakteristik minuman herbal celup, kecuali kadar abunya. Formulasi terbaik adalah 20:80 dengan perolehan intensitas warna berupa nilai kecerahan (L^*) 7,725, nilai kemerahan (a^*) 2,120, nilai kekuningan (b^*) 3,285; kadar air 9,79%, kadar abu 5,06%, nilai pH 6,45, dan kadar aktivitas antioksidan dengan nilai IC_{50} sebesar 793,55 ppm. Hasil organoleptik yang diperoleh adalah disukai dengan karakteristik mutu berupa warna oranye pucat, aroma tidak langu, dan rasa tidak sepat. Hasil kadar abu telah memenuhi standar SNI 3836:2013, yaitu tidak melebihi batas maksimum 8%.

Kata Kunci: Daun belimbing wuluh, Minuman herbal, Organoleptik, Serai, Antioksidan

ABSTRACT: Herbal drinks are beverages made from natural ingredients with components such as antioxidant which beneficial for the body. This research aimed to know the effect of bilimbi leave and lemongrass powder formulations on characteristics of dipped herbal drink. A complete randomized design (CDR) with one factor and five levels of three replications was used in this study, which the treatment factor is the formulation of bilimbi leaves and lemongrass (60:40, 50:50, 40:60, 30:70, and 20:80 (v/v)). The ingredients used to make the product are bilimbi leaves, lemongrass, and water. The obtained data was analyzed with ANOVA statistical test at significance level of 0,05. The results showed that formulations of bilimbi leaves and lemongrass powder had a significant effect on the characteristics of dipped herbal drink, except for its ash content. The best formulation is 20:80 with results obtained in color intensity: lightness (L^*) value of 7,725, redness (a^*) value of 2,120, yellowness (b^*) value of 4,285; moisture and ash content were consecutively 9,79% and 5,06%, pH value of 6,45, and antioxidant activity level in IC_{50} of 793,55 ppm. The organoleptic test with liked result is shown with characteristics such as pale orange color, no green note smell, and no bitter taste. The ash content results have met SNI 3836:2013 standards, which do not exceed the maximum limit of 8%.

Keywords: Bilimbi leave, Herbal drink, Organoleptic, Lemongrass, Antioxidant