ABSTRACT

THE EFFECT OF DRYING TIME ON THE CHEMICAL AND SENSORY CHARACTERISTICS OF CIPLUKAN PLANT SIMPLICIA (Physalis angulata L.) FOR FUNCIONAL DRIKS

BY

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Ciplukan simplex is processed through a drying process, the drying time can affect the quality of the resulting simplex. This study aims to determine the effect of drying time on the chemical and sensory characteristics of ciplukan simplex (Physalis angulata L.) The study was conducted using a Completely Randomized Design (CRD) with 6 (six) drying time treatments and 3 (three) repetitions. The design used was (P0) = 0 hours, (P1) = 6 hours, (P2) = 12 hours, (P3) = 18 hours, (P4) = 24 hours, and (P5) = 30 hours. The drying method used was indirect drying, which was dried in the sun and covered with black gauze. Ciplukan plants were washed and drained, then the size was reduced by chopping and weighing 500 g for each treatment and then dried. The resulting simplex was then tested for water content, antioxidant activity, and sensory testing. The data obtained were analyzed using the BNT test at a level of 5%. The results showed that the length of drying time affected the chemical and sensory characteristics of ciplukan simplicia. The treatment of 30 hours of drying time was the best treatment that produced the highest productivity value (NP) of 0.66, water content in accordance with SNI tea products of 8.7%, antioxidant activity of 48.26%, color score of 4.82 (dark brown), aroma score of 4.77 (very not unpleasant), and taste score of 4.91 (very bitter).

Keywords: Ciplukan (*Physalis angulata* L.), Simplicia, Drying, Water Content, Antioksidant, Sensory

ABSTRAK

PENGARUH LAMA PENGERINGAN TERHADAP KARAKTERISTIK KIMIA DAN SENSORI SIMPLISIA TUMBUHAN CIPLUKAN (*Physalis angulata* L.) UNTUK MINUMAN FUNGSIONAL

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Simplisia ciplukan diolah melalui proses pengeringan, lama pengeringan dapat mempengaruhi kualitas simplisia yang dihasilkan. Penelitian ini bertujuan untuk mengetahui pengaruh lama waktu pengeringan terhadap karakteristik kimia dan sensori simplisia ciplukan (*Physalis angulata* L.) Penelitian dilakukan dengan menggunakan Rancangan Acak Lengkap (RAL) dengan 6 (enam) perlakuan lama pengeringan dan 3 (tiga) kali pengulangan. Rancangan yang dilakukan adalah (P0) = 0 jam, (P1) = 6 jam, (P2) = 12 jam, (P3) = 18 jam, (P4) = 24 jam, dan (P5) = 30 jam. Metode pengeringan yang digunakan adalah pengeringan tidak langsung yaitu dijemur di bawah sinar matahari dan ditutup dengan kain kasa hitam. Tumbuhan ciplukan dicuci dan ditiriskan, kemudian dilakukan pengecilan ukuran dengan dirajang dan ditimbang 500 g untuk setiap perlakuan kemudian dikeringkan. Simplisia yang dihasilkan kemudian dilakukan uji kadar air, uji aktivitas antioksidan, dan uji sensori. Data yang diperoleh dianalisis menggunakan uji BNT pada taraf 5%. Hasil penelitian menunjukan bahwa lama waktu pengeringan berpengaruh terhadap karakteristik kimia dan sensori simplisia ciplukan. Perlakuan lama pengeringan 30 jam merupakan perlakuan terbaik yang menghasilkan nilai produktifitas (NP) tertinggi yaitu 0,66, kadar air sesuai dengan SNI produk teh yaitu sebesar 8,7%, aktivitas antioksidan 48,26%, skor warna 4,82 (coklat tua), skor aroma 4,77 (sangat tidak langu), dan skor rasa 4,91 (sangat pahit).

Kata kunci: Ciplukan (*Physalis angulata* L.), Simplisia, Pengeringan, Kadar Air, Antioksidan, Sensori