

SHOFI AMALIA NIM. 15.03.3.1.1.00020. Pendugaan Umur Simpan Sanitizer Dari Ekstrak Daun Mimba (*Azadirachta Indica*) Dan Ekstrak Daun Kemangi (*Ocimum Basilicium L.*) Menggunakan Metode *Extended Storage Studies* (Ess) Dengan Accelerated Shelf Life Testing (Aslt). Dibawah bimbingan **Dr. Muhammad Fuad F.M., S. TP., M.Si. dan Ir. Muhammad Fakhry, M.P.**

ABSTRAK

*Hand sanitizer yang terbuat dari daun mimba dan daun kemangi sangat berpotensi dikembangkan. Daun mimba mengandung senyawa aktif jenis metabolit sekunder yang terletak di senyawa antimikroba. Daun kemangi banyak mengandung senyawa metabolit sekunder dan memiliki banyak kandungan flavonoid, minyak atsiri dan tanin dapat berperan aktif sebagai antibakteri terhadap E. coli dan S. aureus. Tujuan dalam penelitian ini adalah mengetahui umur simpan, factor dari pengujian warna, pH, daya hambat dan vitamin C hand sanitizer dari ekstrak daun mimba (*Azadirachta indica*) dan daun kemangi (*Ocimum basilicium L.*) dengan menggunakan metode accelerated shelf life testing (ASLT). Penelitian ini menggunakan rancangan acak lengkap dengan dua kali ulangan. Pengujian hand sanitizer ini yaitu uji warna, uji pH, uji daya hambat, uji vitamin C, penentuan umur simpan. Hasil penelitian ini yaitu Produk hand sanitizer dari ekstrak daun mimba dan ekstrak daun kemangi telah dilakukan penyimpanan selama 1 bulan. Umur simpan hand sanitizer telah didapatkan pada parameter vitamin C setiap perlakuan yaitu A1B1 62.25 hari, A1B2 64.86 hari, A1B3 0.339 hari, A2B1 73.91 hari, A2B2 78.64 hari, A2B3 72.9 hari, A3B1 0.38 hari, A3B2 68.12 hari dan A3B3 42.57 hari. Produk hand sanitizer dari ekstrak daun mimba dan ekstrak daun kemangi terjadi perubahan nyata selama penyimpanan dalam suhu normal 32°C.*

Kata Kunci: Daun Kemangi, Daun Mimba, Hand sanitizer

SHOFI AMALIYA NIM. 15.03.3.1.1.00020. Estimation of Sanitizer Shelf Life From Neem Leaf Extract (*Azadirachta Indica*) And Basil Leaf Extract (*Ocimum Basilicium L.*) Using Extended Storage Studies (Ess) Method With Accelerated Shelf Life Testing (Aslt). Under the guidance **Dr. Muhammad Fuad F.M., S. TP., M. Si. dan Ir. Muhammad Fakhry, M.P.**

ABSTRACT

Hand sanitizer made from neem and basil leaves is very possible to develop. Neem leaves contain active compounds of secondary metabolites located in antimicrobial compounds. Basil leaves contain a lot of secondary metabolites and contain lots of flavonoids, essential oils and tannins that can play an active role as antibacterial against E. coli and S. aureus. The purpose of this study was to determine the shelf life, factors of color testing, pH, inhibition and hand sanitizer vitamin C from neem (Azadirachta indica) and basil (Ocimum basilicium L.) leaf extract using the accelerated shelf life test (ASLT) method. This study used a completely randomized design with two repetitions. The tests for this hand sanitizer are color test, pH test, power test, vitamin C test, estimated shelf life. The results of this study are that hand sanitizer products from neem leaf extract and basil leaf extract have been stored for 1 month. The shelf life of hand sanitizer has been obtained on the vitamin C parameters for each treatment, namely A1B1 62.25 days, A1B2 64.86 days, A1B3 0.339 days, A2B1 73.91 days, A2B2 78.64 days, A2B3 72.9 days, A3B1 0.38 days, A3B2 68.12 days and A3B3 42.57 days. Hand sanitizer products from neem leaf extract and basil leaf extract showed significant changes during storage at a normal temperature of 32 °C.

Keywords: Basil Leaves, Neem Leaves, Handsanitizer