

ABSTRAK

PENGARUH KOMPOSISI CAMPURAN SERBUK BATANG SINGKONG DAN SERAI WANGI TERHADAP KUALITAS OBAT NYAMUK BAKAR

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Obat nyamuk bakar merupakan obat yang digunakan untuk mengusir atau membunuh nyamuk. Obat nyamuk ramah lingkungan atau obat nyamuk nabati dapat dibuat dari berbagai jenis bahan baku nabati yang mengandung senyawa pembunuh/pengusir nyamuk seperti limbah serbuk batang singkong dan serai wangi. Limbah batang singkong ini sangat potensial digunakan karena merupakan salah satu permasalahan lingkungan di Indonesia. Penelitian ini bertujuan untuk mewujudkan terbentuknya obat nyamuk bakar yang berbahan baku serbuk batang singkong dan serai wangi, Mengetahui kesesuaian kualitas berdasarkan spesifikasi obat nyamuk bakar yang dihasilkan terhadap SII No. 1113-84 dan pengujian organoleptik obat nyamuk bakar.

Penelitian ini dilakukan menggunakan Rancangan Acak Lengkap (RAL) dengan lima perlakuan dan tiga kali ulangan. Percobaan terdiri dari 5 taraf campuran komposisi yaitu 30% batang singkong:70% serai wangi (P1), 40% batang

singkong:60% serai wangi (P2), 50% batang singkong: 50% serai wangi (P3), 60% batang singkong: 40% serai wangi (P4), dan 70% batang singkong: 30% serai wangi (P5).

Hasil penelitian menunjukkan bahwa Obat nyamuk bakar yang terbentuk memiliki dimensi panjang lingkaran 81 cm, diameter 12 cm, warna coklat muda, lebar 7mm, dan ketebalan 4 mm. Kualitas obat nyamuk bakar berdasarkan spesifikasinya adalah sebagai berikut: kadar air berkisar antara 5,36 - 9,41% yang sudah memenuhi standar mutu 80%, lama bakar berkisar antara 3 – 4 jam, dan berat per biji berkisar 9,35 – 9,77 gram. Dilihat dari Kualitas berdasarkan spesifikasi tersebut obat nyamuk yang dibuat belum memenuhi kualitas berdasarkan spesifikasi dan syarat mutu SII. Namun obat nyamuk yang dibuat layak dipergunakan sebagai obat nyamuk bakar alami karena sudah mendekati dengan SII. Sedangkan berdasarkan uji organoleptik dengan parameter aroma, obat nyamuk bakar alami yang paling bagus ada di perlakuan 1 yaitu campuran 30% batang singkong dan 70% serai wangi. Panelis memberikan nilai dengan rata-rata 4,7 dengan kriteria harum hingga sangat harum.

Kata Kunci : Serbuk batang singkong , Serbuk serai wangi, Obat nyamuk bakar

ABSTRACT

THE EFFECT OF THE COMPOSITION OF THE MIXTURE CASSAVA STEM POWDER AND CITRONELLA ON THE QUALITY OF THE MOSQUITO REPELLENT

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Mosquito repellent are drugs used to repel or kill mosquitoes. Eco-friendly mosquito repellent or vegetable mosquito repellent can be made from various types of vegetable raw materials that contain mosquito-killer / repellent compounds such as cassava stem powder waste and citronella . This cassava stem waste is very potential to be used because it is being one of the environmental problems in Indonesia. This research aims to establish the formation of mosquito repellent made from cassava stem powder and citronella, determine the suitability of quality based on the specifications of mosquito coils produced against SII No.1113-84 and organoleptic testing of mosquito coils.

This research was conducted using a completely randomized design (CRD) with five treatments and three replications. The experiment consisted of 5 levels of mixed composition, namely 30% cassava stalks: 70% citronella (P1), 40% cassava stalks 60% lemongrass fragrant (P2), 50% cassava stalks: 50% citronella (P3), 60% cassava stalks. : 40% citronella (P4), and 70% cassava stalks: 30% lemongrass (P5)

The results showed that the mosquito repellent formed had a circle dimension of 81 cm, a diameter of 12 cm, a light brown color, a width of 7 mm, and a thickness of 4 mm. The quality of mosquito repellent based on the specifications is as follows: the moisture content range from 5.36 - 9.41% which fulfill the 80% quality standard, the burning time range from 3 - 4 hours, and the weight per seed range from 9.35 - 9, 77 grams. Judging from the quality based on these specifications, the mosquito repellent that is made does not fulfill the quality based on the specifications and quality requirements of SII. However, the mosquito repellent made is suitable for use as natural mosquito repellent because it is close to SII. Meanwhile, based on the organoleptic test with aroma parameters, the best natural mosquito repellent are treatment 1, formed by a mixture of 30% cassava stalks and 70% citronella . Panelists gave an average score of 4.7 with the criteria being fragrant to very fragrant.

Keywords: cassava stem powder, citronella powder, mosquito repellent