

ABSTRAK

PENGARUH VARIASI LAMA PENYIMPANAN LARUTAN TURK MODIFIKASI AIR PERASAN JERUK NIPIS (*Citrus aurantifolia Swingle*) TERHADAP HITUNG JUMLAH LEUKOSIT

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Stabilitas reagen merupakan ketahanan untuk menjaga sifat sehingga kekuatan, kualitas, dan kemurniannya tidak berubah selama masa penggunaan dan penyimpanan. Penelitian bertujuan untuk mengetahui efektivitas larutan Turk modifikasi air perasan jeruk nipis (*Citrus aurantifolia Swingle*) yang disimpan selama 0 hari, 5 hari, dan 10 hari pada suhu dingin. Penelitian ini menggunakan metode kuantitatif dengan jenis penelitian *desain pra eksperimen*. Jumlah pengulangan sebanyak 16 kali tiap perlakuan. Hasil uji kualitas fisik pada larutan Turk modifikasi yang disimpan selama 10 hari tidak mengalami perubahan. Hasil penelitian H0 (segera) pada larutan Turk kontrol didapatkan nilai rata-rata senilai 6.222 sel/mm³, sedangkan larutan Turk modifikasi didapatkan nilai rata-rata senilai 6.025 sel/mm³. Pada H5 larutan Turk kontrol didapatkan nilai rata-rata senilai 5.491 sel/mm³, sedangkan larutan Turk modifikasi didapatkan nilai rata-rata senilai 5.366 sel/mm³. Terakhir pada H10 larutan Turk kontrol didapatkan nilai rata-rata senilai 5.656 sel/mm³, dan larutan Turk modifikasi didapatkan nilai rata-rata senilai 5.703 sel/mm³. Pada hasil analisis statistik menggunakan uji *Paired Sample T-Test* didapatkan nilai signifikansi >0.05 yang artinya tidak ada perbedaan bermakna pada larutan Turk kontrol dengan larutan Turk modifikasi air perasan jeruk nipis setelah disimpan selama 10 hari terhadap hitung jumlah leukosit. Sehingga dapat disimpulkan bahwa larutan Turk modifikasi air perasan jeruk nipis masih layak digunakan untuk pemeriksaan hitung jumlah leukosit dengan masa simpan 10 hari pada suhu 4°C.

Kata kunci : Masa Penyimpanan, Efektivitas Reagen, Turk Modifikasi, Leukosit

ABSTRACT

THE EFFECT OF VARIATIONS IN THE LENGTH OF STORAGE THE TURK SOLUTION MODIFICATION OF LIME JUICE (*Citrus aurantifolia Swingle*) ON THE NUMBER OF LEUKOCYTES

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Stability of a reagent means maintaining of the properties of the reagent including the identification, concentration, quality and purity of the reagent during its use and storage. The research sought to compare the efficacy of a modified Turk solution with lime juice (*Citrus aurantifolia Swingle*) stored at cold temperature for 0,5, and 10 days. This research uses a quantitative methods and a pre-experimental research design. The number of repetitions was 16 times for treatment. The sample of the modified Turk with lime juice taken for the physical quality test after 10 days was same. The results for H0 were in the control Turk solution has a value of 6.222 cells/mm³, while the modified Turk solution has an average value of 6.025 cells/mm³. From H5 using the control Turk solution the average was 5.491 cells/mm³, for the modified Turk solution there was an average value of 5.366 cels/mm³. The control Turk solution higher with a mean value of 5.656 cells/mm³ in H10, elevation was the average number of cells when the proposed modified Turk solution with lime juice was used 5.703 cells/mm³. The results of using the Paired Sample T-Test a value of >0.05 was obtained, which means there was no significant difference between the control and modified Turk solution of lime juice stored for 10 days on the leukocyte count. Turk's solution modified from lime juice is suitable for use for checking leukocyte counts with a shelf life of 10 days at a temperature of 4°C.

Keywords : *Shelft life, Reagent Effectiveness, Turk Modified Solution, Leucocytes*