

POLITEKNIK KESEHATAN TANJUNGPURUSAN FARMASI

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Fitri Oktavia

Formulasi Dan Uji Sediaan Sabun Cair Minyak Atsiri Daun Jeruk Purut (*Citrus hystrix*) dan Minyak Atsiri Daun Kemangi (*Ocimum basilicum*)

xix+ 73 halaman, 12 tabel, 9 gambar, 6 lampiran

ABSTRAK

Upaya untuk menjaga kulit terutama kulit wajah tetap bersih dan sehat dengan membersihkan seluruh tubuh secara teratur. Kulit wajah berbeda dengan kulit tubuh bagian lain, kulit wajah lebih rentan terhadap gangguan kesehatan yang disebabkan oleh produksi minyak yang berlebihan dari kelenjar minyak, faktor hormonal, atau aktivitas sehari-hari di dalam maupun di luar. Sabun wajah sering digunakan sebagai alternatif pencegahan dan pengobatan dalam kasus jerawat karena keberadaannya sudah beredar luas di masyarakat dan dianggap lebih praktis penggunaannya dan harganya ekonomis. Minyak atsiri daun jeruk purut telah diketahui memiliki kemampuan antibakteri karena kandungan senyawa yang dimilikinya. Minyak atsiri daun kemangi telah menunjukkan aktivitas antibakteri terhadap beberapa bakteri seperti *Staphylococcus aureus*.

Tujuan dari penelitian ini untuk mendapatkan formula sabun cair wajah minyak atsiri daun jeruk purut (*Citrus hystrix*) dan minyak atsiri daun kemangi (*Ocimum basilicum*) konsentrasi 8% dan sebagai pembanding F0 (0:0), F1 (4:0), F2 (3:1) F3 (2:2), F4 (1:3), F5 (0:4) apakah memenuhi persyaratan mutu sediaan sabun cair atau tidak. Penelitian ini merupakan penelitian pembuatan sediaan sabun cair eksperimental dengan variasi minyak atsiri daun jeruk purut dan minyak atsiri daun kemangi. Penelitian dilakukan dengan 3 kali pengulangan dan selanjutnya dilakukan uji sediaan. Hasil formula F0, F1, F2, F3, F4, dan F5 yang diperoleh memiliki warna merah muda, formula F0 agak bau tengik dan F1, F2, F3, F4, dan F5 bau khas, formula F0, F1, F2, F3, F4, dan F5 memiliki tekstur yang homogen. Formula dengan rata-rata pH F0 (9,0), F1 (8,9), F2 (8,7), F3 (9,0), F4 (9,1), F5 (9,0) dan hasil pengujian memenuhi syarat sediaan sabun cair. Formula F0, F1, F2, F3, F4, dan F5 tidak terdapat alkali bebas dalam sediaan dikarenakan tidak adanya perubahan warna setelah pemanasan 30 menit dan hasil pengujian memenuhi syarat sediaan sabun cair. Formula dengan rata-rata daya busa F0 (47%), F1 (38%), F2 (61%), F3 (34%), F4 (23%), F5 (60%) dan hasil pengujian hanya F2 dan F5 yang memenuhi syarat sediaan sabun cair. Formula F0, F1, F2, F3, F4, dan F5 dengan rata-rata bobot jenis 1,01 g/mL dan hasil pengujian memenuhi syarat sediaan sabun cair.

Kata kunci : Sabun cair, minyak atsiri daun jeruk purut, minyak atsiri daun kemangi.
Daftar bacaan : 39 (1979-2020)

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Fitri Oktavia

Formulation and Test Preparation of Liquid Soap Essential Oil of Kaffir lime (Citrus hystrix) Leaf and Basil (Ocimum basilicum) Leaf Essential Oil

xviii+ 73 pages, 12 tables, 9 pictures, 6 attachments

ABSTRACT

Efforts to keep the skin, especially facial skin clean and healthy by cleaning the whole body regularly. Facial skin is different from the skin of other parts of the body, facial skin is more susceptible to health problems caused by excessive oil production from the oil glands, hormonal factors, or daily activities inside or outside. Facial soap is often used as an alternative for prevention and treatment in cases of acne because its presence is widely circulated in the community and is considered more practical to use and has an economical price. Kaffir lime leaf essential oil has been known to have antibacterial properties because of the compounds it contains. Basil essential oil has shown antibacterial activity against several bacteria such as Staphylococcus aureus.

The purpose of this study was to obtain a facial liquid soap formula of kaffir lime leaf essential oil (Citrus hystrix) and basil leaf essential oil (Ocimum basilicum) with a concentration of 8% and as a comparison F0 (0:0), F1 (4:0), F2 (3:1), F3 (2:2), F4 (1:3), F5 (0:4) whether it meets the quality requirements of liquid soap preparations or not. This research is a research on making experimental liquid soap with variations of kaffir lime leaf essential oil and basil leaf essential oil. The study was carried out with 3 repetitions and then the preparation test was carried out. The results of the formulas F0, F1, F2, F3, F4, and F5 obtained have a pink color, formula F0 has a slightly rancid smell and F1, F2, F3, F4, and F5 have a distinctive odor, formula F0, F1, F2, F3, F4, and F5 have a homogeneous texture. Formula with an average pH of F0 (9.0), F1 (8.9), F2 (8.7), F3 (9.0), F4 (9.1), F5 (9.0) and test results meet the requirements for liquid soap preparations. Formula F0, F1, F2, F3, F4, and F5 contained no free alkali in the preparation because there was no color change after heating for 30 minutes and the test results met the requirements for liquid soap preparations. The formula with an average foam power of F0 (47%), F1 (38%), F2 (61%), F3 (34%), F4 (23%), F5 (60%) and the test results only F2 and F5 were meet the requirements for liquid soap preparations. Formulas F0, F1, F2, F3, F4, and F5 with an average specific gravity of 1.01 g/mL and the test results met the requirements for liquid soap preparations.

Key words : Liquid soap, kaffir lime leaf essential oil, basil leaf essential oil.
Reading list : 39 (1979-2020)