

ABSTRAK

Penelitian ini bertujuan untuk mengetahui formulasi yang tepat serta efektivitas dari deodoran *spray* berbahan tawas dan ekstrak nilam Aceh (*Pogostemon cablin* Benth.). Terdapat lima tahapan utama yaitu preparasi, maserasi, distilasi, formulasi dan uji sampel. Maserasi dilakukan dengan merendam simplisia dengan perbandingan daun dan batang 2:1 dalam pelarut etanol 70% selama 4 hari kemudian dilanjutkan dengan distilasi vakum. Persentase rendemen yang dihasilkan sebesar 15,17%. Formulasi deodoran *spray* dilakukan dengan mencampur larutan tawas 5% dengan variasi konsentrasi nilam 10%, 15% dan 20%. Pengujian sampel dilakukan melalui uji organoleptik, pH, daya tahan aroma, dan stabilitas. Pada uji organoleptik diperoleh formulasi deodoran yang optimal, yaitu pada konsentrasi 15%. Uji pH menunjukkan bahwa seluruh variasi deodoran memenuhi SNI yaitu pada pH 3. Pada uji daya tahan aroma, deodoran dengan konsentrasi 20% bertahan paling lama yaitu 14 menit. Uji stabilitas menunjukkan tidak terjadi perubahan yang signifikan pada daya tahan aroma. Sementara uji organoleptik dan pH tidak mengalami perubahan sama sekali. Dari hasil tersebut dapat disimpulkan bahwa deodoran *spray* yang optimal dari campuran tawas dan ekstrak nilam didapatkan melalui formula 15% ekstrak nilam. Efektivitas dari deodoran ini dapat dikatakan baik, sesuai dengan hasil uji sampel.

Kata kunci: deodoran, nilam, tawas

ABSTRACT

This research aims to determine the correct formulation and effectiveness of a deodorant spray made from alum and Aceh patchouli extract (*Pogostemon cablin* Benth.). There are five main stages, namely preparation, maceration, distillation, formulation and sample testing. Maceration was carried out by immersing simplicia with a ratio of leaves and stems 2:1 in 70% ethanol solvent for 4 days then followed by vacuum distillation. The percentage of yield produced is 15.17%. The formulation of deodorant spray was done by mixing 5% alum solution with varying concentrations of patchouli 10%, 15% and 20%. Sample testing was carried out through organoleptic, pH, scent staying power, and stability tests. In the organoleptic test, the optimal deodorant formulation was obtained, namely at a concentration of 15%. The pH test showed that all deodorant variations met SNI, namely at pH 3. In the scent staying power test, deodorant with a concentration of 20% lasted the longest, namely 14 minutes. The stability test showed that there was no significant change in the staying power of the scent. Meanwhile, the organoleptic and pH tests did not change at all. From these results, it can be concluded that the optimal deodorant spray from a mixture of alum and patchouli extract is obtained through the formula of 15% patchouli extract. The effectiveness of this deodorant can be said to be good, according to the results of sample tests.

Keywords: deodorant, patchouli, alum