

ABSTRACT

THE EFFECT OF CETYL ALCOHOL CONCENTRATION TO PHYSICAL CHARACTERISTIC OF LOTION SUPPLY EXTRACT OF BASIL (*Ocimum americanum L.*) AND EXTRACT OF LEMONGRASS (*Cymbopogon nardus L.*)

(Study conducted at Academy Pharmacy of Surabaya)

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In this scientific study using a combination of 2 kinds of extracts containing natural antioxidants, namely: basil extract and lemongrass extract with variations in cetyl alcohol concentration of 2%, 3% and 4%. To meet good characteristics of lotion physical it will conducted test with observation parameter such as: organoleptic test, homogeneity test, pH test and spreading force test. Based on the result of the lotion characteristic test, it can be concluded that variations cetyl alcohol concentration have a large effect on pH and spreading force. In the pH test of basil extract lotion preparations and lemongrass extract, the average results for F1 have a pH of 6, F2 has a pH of 6.06 and F3 has a pH of 6.42. Where these results have met the pH requirements of good lotion preparations, namely: 4.5 – 6.5. While in the dispersion test, the results of dispersion power were obtained with a load range of 50 grams – 200 grams for F1 on average 5.37 cm – 6.4 cm, F2 on average 5.27 cm – 5.93 cm and F3 on average 5 cm – 5.7 cm. Where these results have met the requirements for the spreadability of good lotion preparations, namely: 5–7 cm. The higher the concentration of cetyl alcohol in the lotion preparation, the higher the pH of the preparation and the lower the spreadability value of the lotion preparation. From the results of the research above it can be interpreted that formula 2 is the best formulation, because lotion preparations have excellent viscosity so it is very easy and comfortable to use

Keywords: *antioxidant, lotion, extract basil, extract lemongrass, and physical lotion characteristic*