

ABSTRACT

EFFECT OF CARBOPOL ON THE PHYSICAL CHARACTERISTICS OF GEL PREPARATIONS BASIL LEAF EXTRACT (*Ocimum americanum* L.) AND LEMONGRASS LEAVES (*Cymbopogon nardus* L.)

Ade Annisa Marwansyah

*Acne occurs as a result of blockage of the follicle caused by excess sebum production by the oil glands, accumulation of dead skin, or accumulation of bacteria. Lemongrass leaf extract and basil leaf extract contain essential oils that serve as antibacterial. The combination of the two ingredients has a synergistic effect and greater antibacterial inhibitory power compared to single plant extracts. This study aimed to determine the effect of carbopol concentration differences of 1.1%, 1.2%, and 1.3% on basil leaf extract gel (*Ocimum americanum* L.) and lemongrass leaves (*Cymbopogon nardus* L.) to its physical characteristics. This study uses experimental methods. Examination of physical characteristics of gel preparation includes organoleptic test, homogeneity test, pH test, and spreadability test. The data obtained were compared with the requirements in the library parameters and analyzed using SPSS 25. The results of the study of gel preparations with variations in carbopol concentration had no effect on organoleptic tests and homogeneity tests. But the effect on the pH test, the higher the concentration of carbopol the pH value of the preparation is more acidic, and the lower the concentration of carbopol the pH value of the preparation is more alkaline.. And the scatter power test, the higher the concentration of carbopol the distribution power value of the preparation is smaller, and the lower the concentration of carbopol the distribution power value of the preparation is greater.*

Keywords: acne, basil leaf extract, lemongrass Leaf Extract, Gelling agent, Carbopol.