ABSTRACT

THE EFFECT OF STORAGE TEMPERATURE ON PHYSICAL STABILITY OF GEL PREPARATIONS FROM AVOCADO LEAF EXTRAXT (*Persea americana Mill*)

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In this study, stability tests were carried out using the freeze thaw method. The freeze thaw test is storage which is carried out at two different temperatures, namely temperatures of 4oC and 40oC and is carried out in 6 cycles to see if there is an influence of temperature on the physical characteristics of the gel including organoleptics, homogeneity, pH, and dispersion. The purpose of this study was to conduct a study on the physical characteristics of gel preparations from avocado leaf extract (Persea americana Mill). The processing technique in the study was carried out with two analyzes, namely descriptive analysis and statistical analysis. The results showed that the storage temperature affects the physical characteristics of gel preparations from avocado leaf extract (Persea americana Mill). The results of organoleptic tests show that the gel preparations in formulas 1, 2 and 3 in all cycles (cycles 0 to 6) have a viscous semisolid shape or consistency, are clear green in color and have a characteristic odor. The results of the homogeneity test showed that the gel preparations in formulas 1, 2 and 3 in all cycles (cycles 0 to 6) obtained homogeneous results. The results of the pH test show that changes in storage temperature or freeze thaw test affect the pH of the gel preparation. The results of the dispersion test show that the change in temperature or freeze thaw test affects the distribution power test of formula 2 and 3 gel preparations.

Keywords : *Storage temperature, Physical stability, Gel preparations*