

ABSTRACT

THE EFFECT OF VARIATIONS OF CARBOPOL 940 CONCENTRATION AS A GELLING AGENT ON PHYSICAL CHARACTERISTICS OF THE GEL EXTRACT OF AVOCADO LEAF (*Persea americana Mill.*)

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*Unhealthy lifestyle and air pollution causing the increasing of the amount of free radical in the body. Avocado leaf contained antioxidant that can neutralise free radical. This research objective was to found out the effect of the carbopol 940 different concentration variations to physical characteristic avocado leaf preparation (*Persea americana Mill.*). This research was applied experimental method. In this research the extract of avocado leaf was formulated as a gel preparation with carbopol 940 variations of 0.75%, 1.0% and 1.25%. The physical characteristic gel preparation test includes organoleptic test, homogeneity test, pH test, and distribution test. Obtained data then processing with SPSS 25. Research result was showed that all avocado leaf extract gel (*Persea americana Mill.*) with variation of carbopol 940 of 0.75%, 1.0% and 1.25 % meet three test parameters of gel preparation namely homogeneity, pH and distribution tests. While organoleptic test wasn't meet the criterion due to the color of gel preparation was little clear brown, different with the appropriate requirement that is clear green. Based on the avocado leaf extract gel preparation with carbopol 940 variation did not affect to organoleptic and homogeneity tests, but have effect to pH test and distribution test. Whereas the higher Carbopol 940 concentration the more acid pH preparation value vice versa. Also, the higher carbopol 940 concentration, the lower preparation distribution and vice versa.*

Keywords : avocado leaf extract, gelling agent, gell, physical characteristic