

ABSTRACT

ANTIOXIDANT NUTRACEUTICAL FORMULATION PURPLE SWEET POTATO LEAF EXTRACT SUCTION TABLETS (*Ipomoea batatas L.*) ANTIN VARIETY 3

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Cancer is a serious health problem in Indonesia, with 2018 Globocan data showing cancer cases in Indonesia are in eighth position in Southeast Asia. Antin-3 leaf extract contains flavonoids and polyphenols which function as antioxidants. This research aims to develop a lozenge preparation from Antin-3 leaf extract as an alternative treatment to inhibit free radical oxidation, by varying the concentration of PVP-K30 F1 (5%) and FII (10%) binders using the wet granulation method. From the evaluation results, the two formulas meet the requirements F1 flow time test obtained an average of 7.56 seconds \pm 0.37, and F2 5.52 seconds \pm 0.10, F1 angle of repose test $30.51^\circ \pm 0.75$, and F2 $25.5^\circ \pm 0.90$, Hausner ratio test F1 1.13 ± 0.01 , and F2 1.12 ± 0.04 , F1 compressibility index test $12.39\% \pm 1.92$, and F2 $11\% \pm 3.17$, F1 water content test $2.6\% \pm 1.52$, and F2 $4\% \pm 1.02\%$. Weight uniformity test F1 $701.5 \text{ mg} \pm 0.01$, and F2 $699 \text{ mg} \pm 0.01$, F1 and F2 size uniformity test with tablet diameter 12.8 mm and tablet thickness 4 mm, F1 hardness test $7.2 \text{ kg/cm}^2 \pm 0.25$, and F2 $7.8 \text{ kg/cm}^2 \pm 0.75$, friability test F1 $0.77\% \pm 0.21$, and F2 $0.72\% \pm 0.25$, disintegration time test F1 5 minutes and F2 14 minutes

Keywords : *Cancer, Antin-3 Leaf Extract, Lozenges, PVP-K30, Formula Comparison, Physical Characteristics*