

Formulation and Antioxidant Activity Hard Candy Lozanges Extract Water Arbenan Leaves (*Duchesneaundica* (Jacks.) Focke)

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Abstract. Some research suggests that plants arbenan containing saponin, flavanoid and tannin. Flavanoid is a compound which have antioxidant activity is caused by the cluster hydroxy on its molecular structure. Using natural materials need processing first may be needed to research formulation that the use of more practical and easily. One of them is making a tablet suction print (hard candy lozanges) are practical, effective, efficient, cheap, received all age. Hard candy is a tablet lozanges suction made by the mixture of molding.

The aim of this research was to formulating hard candy lozanges ekstrak water arbenan leaves [*Duchesneaundica* (Jacks.) Focke]. The variation in the extract are based on IC50 (Formula 1), increased by 3x of IC50 (formula 2) increased by 5x of IC50 (Formula 3), and this formulation using glucose and sorbitol as a filler, sweetening and a binder.

The physical evaluation of hard candy lozanges was homogenous, hardness, friability, time soluble and antioxidant activity test by DPPH to calculate % inhibition. Data of evaluation results was homogenous test the average of the formula 1, formula 2 and formula 3 was 3,04; 3.28 and 3,09 grams where these formulas was they did not more than 2 tablet of each tablet deviating as many as 5% of average and none tablet deviating 10%. Results of friability test was the requirements percent friability at less than 1% with the results of 0,056% formula 1; 0,052% formula 2 and 0,064% formula 3. Results of hardness test was the average formula 1, 2 and 3 was 9.9; 9; 8.8 and time soluble test formula 1, 2 and 3 was 8,66, 8,16, and 10,16 minutes. As for percent inhibition formula 1, 2 and 3 was 75,06%; 84,57%; 92,60%. It can be concluded that hard candy lozanges arbenan stable in farmaseutical and have the antioxidant activity.

Keywords: Arbenan leave, Hard Candy Lozanges, Antioxidant.