FORMULATION OF LOZENGES FROM TIN LEAVE EXTRACT (Ficus carica L.) WITH VARIATION OF LACTOSE AND MANNITOL AS FILLER

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ABSTRACT

The flavonoid content of tin leaves (Ficus carica L.) is believed to have antipyretic effects to decrease temperature of body. In general, the use of tin leaves on the market is in the form of instant tea preparations, so it needs a more practical preparation, effective and convenient preparation in use, therefore tin leaves are prepared in lozenges. This research aims to prepare lozenges tablet from tin leaf extract with variations in lactose and mannitol levels on the physical properties of tablets and respondents' acceptance. Extraction was carried out using infundation method with water solvent and continued with drying with rotary evaporator then in a water bath to obtain a crude extract. The lozenges prepared using wet granulation method with various levels of lactose and mannitol F1 = 60%: 15%, F2 = 64%: 11%, F3 = 68%: 7%. The analysis carried out in this study was the test of the physical properties of granules, the test of the physical properties of the tablets, and the profile analysis of TLC extract of tin leaves and lozenges. Tablet evaluation results obtained showed % of CV uniformity of weight F1 = 0.015%, F2 = 0.011%, F3 = 0.018%, friability F1 = 0.94%, F2 = 1.37%, F3 = 0.77%, hardness F1 = 8.03 kg, F2 = 11.68 kg, F3 = 13.60 kg, soluble time F1 = 5.48 minutes, F2 = 5.63 minutes, F3 = 6.18 minutes, the level of preference F1 = 65%, F2 = 45%, F3 = 35%. The TLC profile on wide extracts, F1, F2 and F3 showed the same Rf value as quercetin standard, ie Rf = 0.91. It can be concluded that formula 1 which produces the physical properties of the tablet is the best and has the most preferred taste of the respondents. While the results of the TLC profile showed that the lozenges formulation did not affect the compounds contained in the tin leaf extract made.

Keywords: Ficus carica, lozenges.