ABSTRACT

Formulation of *Nutraceutical Effervescent* Granules with Purple Sweet Potato

Leaf Extract (*Ipomoea batatas* L.) Variety Antin-3 Using Various

Combinations of PVP K30 and CMC Na

Vania

Antioxidants can be found in several secondary metabolites such as the phenolic group. One of the plants that contains antioxidants is Antin-3 leaves. Antin-3 leaves have antioxidants because they contain secondary metabolite compounds, polyphenols and flavonoids. The 70% ethanol extract of Antin-3 leaves has great potential to have strong antioxidants that can be consumed as a natural antioxidant. This research is a type of experimental research, which aims to determine whether variations in levels of PVP K30 and CMC Na as binders can influence the physical characteristics of effervescent granule preparations using Antin-3 leaf extract. In this study, the concentration of the binding agent PVP K30 and CMC Na was determined on the physical characteristics of an *effervescent* granule preparation of Antin-3 leaf extract with a ratio of F1 (3:2); F2 (3.5:1.5); F3 (4:1). The characteristic test results were obtained which included organoleptic test, flow rate test, Hausner ratio test, compressibility index test, water content test, foam height test, dispersibility time test and hedonic test which met the requirements of the third formula, except for the pH test of formula 1 and formula 3 does not meet the requirements with values of 4.98 and 5.33, so it can be concluded that variations in the levels of PVP K30 and CMC Na as a binder can affect the physical characteristics of effervescent granule preparations using Antin-3 leaf extract. It is hoped that future researchers can carry out stability tests using the freeze thaw method on the *nutraceutical* preparation formula of Antin-3 leaf extract *effervescent* granules with various combinations of PVP K30 and CMC Na with the aim of evaluating the *effervescent* granule preparation of Antin-3 leaf extract which plays an antioxidant role.

Keywords : *Nutraceutical Effervescent* Granules, Antin-3 leaf extract, PVP and CMC-Na