

ABSTRACT

THE EFFECT OF VARIATIONS POLYVINYLPIRROLIDONE (PVP) ON CHARACTERISTICS OF INSTANT GRANULES ETHANOL EXTRACT OF PURPLE SWEET (*Ipomoea batatas* L.) LEAVES VARIETY OF ANTIN-3

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Purple sweet potato leaves of Antin-3 variety are one of the medicinal plants that contain anthocyanins. The plant contains flavonoids which have higher antioxidant power than tocopherol or vitamin E. The use of Antin-3 leaves is formulated in the form of instant granules. The purpose of this study was to determine the physical characteristics of the instant granule preparation of ethanol extract of purple sweet potato (*Ipomoea batatas* L.) leaves of Antin-3 variety using various concentrations of PVP as a binder with Formula 1 (2.5%), Formula 2 (3%), Formula 3 (3.5%). This research is an experimental research conducted at the Pharmacy Laboratory of the Surabaya Pharmacy Academy. The stages of this research include the formulation of instant granules of Antin-3 extract using the wet granulation method and testing of physical characteristics which include: flow rate test, angle of repose test, and water content test. Based on the research results obtained, the evaluation data obtained that meet the requirements. The average results of the F1:F2:F3 flow rate test are 13.94g/s; 14.89g/s; 16.39g/sec with a good flow rate requirement of not less than 10gram/second. The average results of the F1:F2:F3 angle of repose test are 23.65°; 26.53°; 30.73°. With the requirements of a good angle of repose that is <40°. The average water content test results F1:F2:F3 are 3.64%; 3.02%; 4.13% with good water content test requirements, namely with a concentration range of 1% - 5%. In further research, stability testing can be carried out on the instant granule preparation of Antin-3 extract by using variations in the concentration of PVP as a binder in order to see the effect on the storage quality of the instant granule preparation of Antin-3 extract.

Keyword : Antin-3, PVP, instant granule