

ABSTRACT

PHYSICAL CHARACTERISTICS TEST SUNSCREEN CREAM OF NANOENCAPSULATION SWEET POTATOES LEAVES EXTRACT

(*Ipomoea batatas L.*) ANTIN-3 VARIETY

Alycia Eka Putri Apriyana

*Sunscreen cream are used to protect the skin from excessive sun UV exposure. Nanoencapsulated purple sweet potato leaf extract (*Ipomoea batatas L.*) varieties of Antin-3 (Nanoencapsulated Antin-3 leaf extract) containing polyphenols and flavonoids have the ability as antioxidants. For the evaluation of the characteristics of the sunscreen cream test includes organoleptic test, homogeneity test, pH Test, Test spreadability, and type of cream. This study aims to determine the effect of concentration variation of Antin-3 leaf extract Nanoencapsulation on physical characteristics test of sunscreen cream preparation. The design of the research that will be conducted, namely: formulation and characteristics test of sunscreen cream with Nanoencapsulation of Antin-3 leaf extract with variations of FI concentration (0.3%), FII (0.6%), FIII (0.9%). Evaluation of physical characteristics test of sunscreen cream preparation is organoleptic test, homogeneity test, pH test, dispersibility, and type of cream. The results of the physical characteristics test of sunscreen cream preparations with Nanoencapsulated Antin-3 leaf extract concentration variations FI (0.3%), FII (0.6%), FIII (0.9%) meet the requirements. The three formulas are not only physically homogeneous but also creamy thick, brownish white, and have a characteristic odor. The preparation of the third formula sunscreen cream includes the M/A cream type. The spread capacity of FI;FII;FIII = 6.8 cm;7 cm;6.86 cm while the pH value of sunscreen cream with nanoencapsulation of Antin-3 leaf extract is FI;FII;FIII = 5.87;5.78;5.73.*

Keywords: *Nanoencapsulation Antin-3 leaf extract, sunscreen, cream.*
36666.