

## INTISARI

**MAITANINGSIH, D, 2015, FORMULASI DAN UJI MUTU FISIK GEL EKSTRAK DAUN UBI JALAR (*Ipomoea batatas L.*) DENGAN VARIASI CMC Na DAN CARBOPOL 941, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.**

Daun ubi jalar (*Ipomoeae batatas L*) mempunyai kandungan saponin, flavonoid, polifenol yang berkhasiat untuk pengobatan luka bakar. Tujuan penelitian ini adalah untuk mengetahui ekstrak daun ubi jalar dapat dibuat gel dengan variasi CMC Na dan Carbopol 941 yang memenuhi uji mutu fisik dan mengetahui formula berapa yang mempunyai stabilitas dan uji mutu fisik paling baik.

Pembuatan ekstrak daun ubi jalar menggunakan metode maserasi dengan pelarut etanol 96%. Ekstrak daun ubi jalar dibuat dalam sediaan gel dengan variasi *gelling agent* CMC Na : Carbopol 941, formula 1 (2% :0%), formula 2 (0% : 2%), formula 3 (1% : 1%). Selanjutnya masing-masing formula diuji mutu fisik dengan perlakuan yang sama. Pengujian meliputi : uji viskositas, uji homogenitas, uji organoleptis, uji daya sebar, uji daya lekat, uji pH. Data dianalisis secara statistik ANAVA satu arah dengan menggunakan SPSS 18.

Hasil penelitian menunjukkan bahwa ekstrak daun ubi jalar dengan variasi *gelling agent* dapat dibuat gel yang memenuhi uji mutu fisik. Formula 2 (CMC Na 0% : Carbopol 941 2%) berdasarkan hasil pengujian mutu fisik gel mempunyai stabilitas terbaik.

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Kata kunci: gel, ekstrak daun ubi jalar, luka bakar

## ABSTRACT

**MAITANINGSIH D. 2015. THE FORMULATIONS AND PHYSICAL QUALITY TEST OF SWEET POTATO (*Ipomoea batatas L.*) LEAF EXTRACT GEL WITH VARIATION OF CMC Na AND CARBOPOL 941. SCIENTIFIC WRITINGS. PHARMACY FACULTY, SETIA BUDI UNIVERSITY. SURAKARTA.**

Sweet potato (*Ipomoeae batatas L*) leaves has containing of saponins, flavonoids, polyphenols are efficacious for the burns treatment. The study purposes were determined the sweet potato leaf extract gel can be made with a variety of CMC Na and Carbopol 941 which meets the physical quality test and known the formula with the best stability and the physical quality test.

The sweet potato leaf extracts are produced using maceration method with solvent of 96% ethanol. Sweet potato leaf extract made in the gel preparation with a gelling agent variation of CMC Na : Carbopol 941, Formula 1 (2% : 0%), Formula 2 (0% : 2%), Formula 3 (1% : 1%). Furthermore, each formulas done physical quality test with the same treatment. The tests are includes viscosity test, homogeneity, organoleptic test, dispersive power test, adhesion test, pH test. Data were statistically analyzed by one-way ANOVA using SPSS 18.

The study results were showed that the sweet potato leaf extract with variety of gelling agents can be made gel that meet the physical quality test. Formula 2 (CMC Na 0% : Carbopol 941 2%) based on the physical quality testing results has best stability.

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Keywords: gel, the sweet potato extracts, burns