

Formulasi tablet salut lapis tipis yang mengandung ekstrak buah pare (momordica charantia) untuk menutupi rasa pahit = Formulation of film coated tablets containing bitter melon extract (momordica charantia) to cover the bitter taste

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Abstrak

Buah pare Momordica charantia Linn merupakan salah satu jenis tanaman obat yang mengandung charantin. Senyawa charantin dapat digunakan untuk menurunkan kadar glukosa dalam darah sehingga banyak digunakan sebagai obat antidiabetes. Buah pare memiliki rasa yang pahit sehingga dibuat menjadi tablet salut lapis tipis. Tablet inti ekstrak buah pare dibuat dengan metode granulasi basah dengan CMC Na 6 sebagai pengikat. Larutan penyalut dibuat dalam 3 formula dengan variasi konsentrasi PEG 400 sebagai plasticizer 16 , 20 , dan 24 terhadap bobot HPMC. Evaluasi sediaan tablet salut lapis tipis meliputi penampilan fisik, kenaikan bobot, morfologi permukaan, tebal lapisan, waktu hancur, dan uji rasa pahit. Uji rasa pahit dilakukan kepada 30 responden dengan memberikan kuesioner tingkat rasa pahit terhadap sampel.

Hasil kuesioner dianalisis menggunakan aplikasi SPSS dengan metode Kruskal Walis. Tablet salut lapis tipis yang telah disalut dengan PEG 400 20 mengalami kenaikan bobot 4,78 . Morfologi permukaan menggunakan SEM menunjukkan permukaan yang halus dengan ketebalan lapisan 34,67 m. Tablet salut lapis tipis dapat hancur dalam waktu 5,34 1,09 menit dan memiliki rata-rata nilai rasa pahit 1,10 yang termasuk dalam kategori tidak pahit. Hasil menunjukkan bahwa penggunaan PEG 400 20 sebagai plasticizer dapat memperbaiki penampilan dan menutupi rasa pahit dari ekstrak buah Pare.

.....*Momordica charantia* Linn fruit is one of medicinal plant that contained charantin. Charantin is useful to lower the blood glucose level so that it is used widely as anti diabetic medicine. *M.charantia* Linn fruit had the lacks of bitter taste so that it made into film coated tablets. The core tablets of *M.charantia* Linn were prepared by wet granulation method using CMC Na 6 as binder, then coated by HPMC 5 . Film coating formulation were made in 3 formulas using additional amount of PEG400 as plasticizer at 16 , 20 , and 24 concentration of HPMC weight. The obtained film coated tablet were evaluated including organoleptic, percentage weight increase, film coated tablets surface, coating thickness, disintegrating time, and bitter taste evaluation. Bitter taste evaluatin was performed on 30 respondents by giving the bitter taste level questionnaire of the three formulas film coated tablets, core, and extract powders.

The questionnaire results were analyzed using SPSS application with Kruskal Walis method. Film coated tablets that coated using 20 PEG400 as plasticizer had percentage weight increase 4,78 . The surface morphology using scanning electron microscope was smooth and showing 34,67 m coating thickness. Film coated tablets also disintegrated within 5,34 1,09 minutes and had bitter taste level about 1,10 .The results revealed that PEG400 20 as plasticizer is able to masking appearance and bitter taste of *M.charantia* Linn.