

ABSTRAK

Nama : Fiqi Fatimah
Program Studi : Farmasi
Judul : Formulasi *Patch Transdermal* Antiinflamasi Ekstrak Buah Pare (*Momordica charantia* L.) Dengan Basis Polivinil Alkohol Dan Etil Selulosa

Ekstrak etanol buah pare (*Momordica charantia* L.) mengandung flavonoid dan saponin yang memiliki aktivitas antiinflamasi. Tujuan penelitian ini, membuat *patch transdermal* antiinflamasi ekstrak etanol buah pare dengan dosis 150 mg/g BB mencit menggunakan basis matriks polivinil alkohol (PVA) dan etil selulosa (EC) dengan perbandingan (3:1)(4:1)(5:1), menggunakan metode *solvent casting* dan dievaluasi. *Patch transdermal* yang dihasilkan memiliki bentuk padat dan elastis; berbau terbakar; berwarna coklat; ketebalan 0,314-0,344 mm; bobot 0.424–0.464 g; ketahanan lipat >300 kali; pH 4,8 dan % higroskopis 6.50–6.99 %. *Patch transdermal* ekstrak buah pare memiliki daya antiinflamasi sebesar 50.24%; 81.03% dan 114.10% sedangkan kontrol positif sebesar 37.23%, menunjukkan *patch transdermal* buah pare memiliki potensi sebagai antiinflamasi. Berdasarkan data tersebut, PVA dapat meningkatkan pelepasan ekstrak buah pare dengan perbandingan PVA : EC (5:1) yang memberikan penurunan edema yang optimal sebesar 114,10%.

Kata kunci: *Patch*, Antiinflamasi, *Momordica charantia* L., PVA, EC.

ABSTRACT

Name : Fiqi Fatimah
Course : Pharmacy
Title : Formulation patch transdermal anti-inflammatory bitter mellon extract (*Momordica charantia* L.) with polyvinyl alcohol and ethyl cellulose base

Ethanol extract of bitter melon (*Momordica charantia* L.) contains flavonoids and saponins which have anti-inflammatory activity. The purpose of this study was to make a transdermal patch of anti-inflammatory ethanol extract of bitter melon with dose 150 mg using the basis of polyvinyl alcohol (PVA) and ethyl celulose (EC) by comparison (3: 1) (4: 1) (5: 1), using the solvent casting method and than evaluation. The transdermal patch produced has a solid and elastic shape; smells of bitter melon; brown; thickness 0,314-0,344 mm; weights 0.424–0.464 g; folding resistance > 300 times; pH 4.8 and % higrokopis 6.50–6.99%. The transdermal patch of bitter melon extract has anti-inflammatory power of 50.24%; 81.03% and 114.10% while positive control was 36.29%, indicating a transdermal patch of bitter melon had the potential to be anti-inflammatory. Based on these data, PVA can increase the release of bitter melon extract with a ratio of PVA: EC (5: 1) which provides from reduced edema optimal results 114,10%.

Keywords: Patch, Anti-inflammatory, *Momordica charantia* L., PVA, EC