SKRIPSI

FANNY

PENGARUH KADAR PEG 8000 TERHADAP LAJU DISOLUSI ANDROGRAFOLIDA DALAM DISPERSI PADAT ANDROGRAFOLIDA-PEG 8000 YANG DIADSORPSIKAN PADA PEMBAWA LAKTOSA SEMBUR KERING

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN FARMASETIKA
SURABAYA
2004

Lembar Pengesahan

PENGARUH KADAR PEG 8000 TERHADAP LAJU DISOLUSI ANDROGRAFOLIDA DALAM DISPERSI PADAT ANDROGRAFOLIDA-PEG 8000 YANG DIADSORPSIKAN PADA PEMBAWA LAKTOSA SEMBUR KERING

SKRIPSI

DIBUAT UNTUK MEMENUHI SYARAT MENCAPAI GELAR SARJANA FARMASI PADA FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
2004

Oleh :

FANNY
050012275

Disetujui oleh :

Drs. H. Achmad Radjaram
Pembimbing Utama

Drs. Bambang Widjaja, M.Si.
Pembimbing Serta I

Dra. Aty Widyawaruyanti, M.Si.
Pembimbing Serta II

ABSTRACT

The aim of this study was to know the influence of Polyethylene glycol (PEG) 8000 increased the dissolution rate of andrographolide in solid dispersion system of andrographolide-PEG 8000 adsorbed to spray dried lactose.

Solid dispersions of andrographolide-PEG 8000 were prepared by melting-solvent method, then adsorbed to spray dried lactose. Dissolution tests were applied to solid dispersions of andrographolide-PEG 8000-spray dried lactose with ratio 1:1:5, 1:3:5, 1:5:5, physical mixtures of andrographolide-PEG 8000-spray dried lactose with the same ratio and pure andrographolide in water media.

The solid dispersions were found to have higher dissolution rates compared to pure andrographolide and physical mixtures of andrographolide-PEG 8000-spray dried lactose. It was caused by the wettability and solubility properties of PEG 8000 and also by the reduction of andrographolide's particle size in solid dispersions system.

The dissolution of andrographolide increased as a function of increased PEG 8000. Solid dispersion of andrographolide-PEG 8000-spray dried lactose with ratio 1:5:5 gave the highest dissolution rates.

Keywords : Andrographolide, PEG 8000, Spray dried lactose, Solid dispersion, Dissolution.