

ABSTRAK

Nama : Chaerani Latifah

Program Studi : Farmasi

Judul : Uji Aktivitas Penghambatan Tirosinase Ekstrak Etanol Daun Mangkogan (*Nothopanax scutellarium* Merr.)

Pengujian ini bertujuan untuk menentukan bioaktivitas daun mangkogan (*Nothopanax scutellarium* Merr.) sebagai penghambat tirosinase. Daun mangkogan (*Nothopanax scutellarium* Merr.) mengandung senyawa flavonoid yang memiliki aktivitas sebagai penghambat tirosinase. Senyawa ini dapat menghambat reaksi oksidasi pada melanogenesis. Proses penyiapan ekstrak dilakukan dengan metode maserasi dengan pelarut etanol 96%. Ekstrak yang dihasilkan diuji skrining fitokimia, total flavonoid, dan penghambatan tirosinase. Hasil dari penelitian menunjukkan bahwa ekstrak etanol daun mangkogan (*Nothopanax scutellarium* Merr.) berpotensi rendah untuk menjadi penghambat tirosinase karena memiliki IC_{50} sebesar 20,63 mg/mL (monofenolasi) dan 16,10 mg/mL (difenolasi). IC_{50} dari asam kojat adalah sebesar 0,0338 mg/mL (monofenolasi) dan 0,1426 mg/mL (difenolasi). Daun mangkogan (*Nothopanax scutellarium* Merr.) memiliki total flavonoid sebesar 1,2934 % b/b.

Kata kunci : etanol, IC_{50} , inhibitor, mangkogan, tirosinase

ABSTRACT

Tyrosinase Inhibitor Activity of Ethanol Extracts of Mangkokan Leaves (*Nothopanax scutellarium* Merr)

This test aims to determine the bioactivity of mangkokan leaves (*Nothopanax scutellarium* Merr.) as tyrosinase inhibitors. Mangkokan leaves (*Nothopanax scutellarium* Merr.) contains flavonoid compounds which have activity as tyrosinase inhibitors. This compound can inhibit oxidation reactions in melanogenesis. The process of preparing the extract was carried out by maceration method with 96% ethanol solvent. The extract which has been produced was tested for phytochemical screening, total flavonoids, and tyrosinase inhibition. The results of the study showed that the ethanol extract of mangkokan leaves (*Nothopanax scutellarium* Merr.) has a low potential to be a tyrosinase inhibitor because it has an IC_{50} of 20.63 mg / mL (monophenolation) and 16.10 mg / mL (isolated). IC_{50} of kojic acid is 0.0338 mg / mL (monophenolation) and 0.1426 mg / mL (diphenolation). Mangkokan leaves (*Nothopanax scutellarium* Merr.) has total flavonoids of 1.2934% b / b.

Keyword : *ethanol, IC_{50} , inhibitor, mangkokan tirosinase*