

INTISARI

WIDAYANTI, RT., 2014. PENGARUH PEMBERIAN EKSTRAK ETANOL 96% DAUN MATOA (*Pometia pinnata* J.R. & G. Forst) TERHADAP KADAR GLUKOSA DARAH MENCIT PUTIH JANTAN (*Mus musculus*) YANG DIBERI BEBAN GLUKOSA, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Penderita diabetes melitus terus meningkat dan pengobatannya pun beralih ke tradisional. Daun matoa telah banyak digunakan sebagai obat tradisional diantaranya obat demam, obat luka, antidiare, dan anti HIV. Tujuan dari penelitian ini adalah untuk mengetahui efek anti diabetes daun matoa dengan mencegah peningkatan kadar glukosa darah yang diberi beban glukosa lebih

Daun matoa diidentifikasi kandungan senyawanya terlebih dahulu sebelum dilakukan penelitian. Penelitian ini menggunakan beban glukosa pada mencit yang diberikan secara oral. Dengan kontrol positif Glibenklamid, kontrol negatif CMC, serta variasi dosis 2,8mg/20gbb mencit, 5,6mg/20gBB mencit, dan 8,4mg/20gBB mencit, kemudian diamati kadar glukosa darah pada menit ke-30, ke-60, ke-90, dan ke-120

Dari hasil rata-rata glukosa mencit setelah pemberian menunjukkan bahwa ekstrak daun matoa mempunyai efek antidiabetes namun tidak sekuat pencegahan peningkatan kadar glukosa darah pada pemberian glibenklamid.

Kata kunci : daun matoa (*Pometia pinnata* J.R & G Forst), ekstrak etanol, kadar glukosa darah

ABSTRACT

Widayanti, RT, 2014. EFFECT OF ETHANOL 96% LEAF EXTRACT MATOA (*Pometia pinnata* JR & G. Forst) TO DECREASE BLOOD GLUCOSE LEVELS AND WHITE MALE Mice (*Mus musculus*) BE THE COST OF GLUCOSE. FACULTY OF PHARMACY. UNIVERSITY of SURAKARTA.

Adult patients with diabetes mellitus continues to increase with increasing levels of affluence and changing lifestyles. Treatment of diabetes mellitus using conventional medicine, is relatively expensive and can cause undesirable side effects. Accordingly, treatment of diabetes switched to traditional medicine. One alternative medicine as an antidiabetic effect as the leaves mellitus is matoa

The purpose of this study was to determine the effect of ethanol extract of mangosteen rind to the decline in blood glucose levels. This research method using glucose tolerance by means of test animals fasted for 16 hours, the blood sugar levels checked early (T₀), after it is subjected to load glucose and treated with 5-minute intervals, namely group I was the control group (1% CMC) , second group is the comparison group (Glibenclamide), group III (ethanol extract of leaves matoa mg/20gBB 2.8), group IV (ethanol extract of leaves matoa mg/20gBB 5.6), and group V (ethanol extract of leaves matoa 8.4 mg / 20Gbb), and then examined blood glucose levels in minutes 30,60,90, and 120. Results Data were analyzed by one-way ANOVA test followed SNK test at 95% confidence level.

The results obtained from this study is that the ethanol extract of leaves matoa (*Pometia pinnata* JR Forst & G) to provide a blood glucose-lowering effect in Swiss strain male mice at doses of 5.6 mg/20Gbb effective.

Keywords: leaf matoa (*Pometia pinnata* JR Forst & G), ethanol extract, lowering blood glucose levels