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DAFTAR ISI

EFFECT OF ISOLATE QUERCETIN-3-O-GLUCOSIDE (Q3G) FROM NEEM LEAF (*AZADIRACHTA INDICA* A. JUSS) IN DIABETIC RATS MODEL (*RATTUS RATTUS NOVERGICUS*)

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Abstract

Diabetes mellitus is a chronic disease marked in increased concentration of blood glucose. For decreasing blood glucose, hypoglycaemic drugs could be used. Quercetin-3-O-Glucoside (Q3G) was isolated from neem leaves (*Azadirachta indica* A. Juss) acts as antidiabetic. The aim of this research wants to find out the effect of isolate Q3G for decreasing blood glucose of diabetic rat models. We randomized 24 white-male Wistar rats, weight 150-250 gr, into 4 group, negative control, positive control and two conduction group, was given Q3G 1 mg/kgBW, and Q3G 2 mg/kgBW. The rats had treated after one-week adaptation at Animal Laboratory. After conduction, all rats were given glucose 6,25 mg/kgBW orally. Blood glucose level were taken from rat's tail and measured by glucometer at before the conduction, 1, 2 and 4 hour after the glucose. Repeated One Way ANOVA were used to analyse the data with p = 0,05. Rat's Blood Glucose level decreased 143,11 (-34,72-320,95) mg/dl and 71,22 (-106,61-249,06) mg/dl after had given orally Q3G 1 mg/kg and Q3G 2 mg/kg vs. aquades. The glucose level more clinical significant while compared with acarbose, 47,24 (-141,11-235,59) and -24,65 (-213-163,7) mg/dl, p>0,05.The statistics results showed decreasing of blood glucose level by Q3G 1 mg/kgBW and 2 mg/kgBW is not significant difference with group which given aquades and acarbose.

Keywords: *Azadirachta indica* A. Juss, Diabetes Mellitus, Quercetin-3-O-Glucoside, Rat

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