PENGARUH FRAKSI NONPROTEIN KACANG KOMAK (*LABLAB PURPUREUS* (L.) SWEET) TERHADAP KADAR GLUKOSA DARAH DAN MALONALDEHIDA TIKUS DIABETES

[Effect of Nonprotein Fraction of Hyacinth Bean (*Lablab purpureus* (L.) Sweet) Diet on Glucose and Malonaldehyde Serum of Diabetic Rats]

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ABSTRACT

The hypoglycemic response to Lablab nonprotein fraction (NPK) was evaluated in alloxan-induced diabetic rats. The objectives of this research were to evaluate the effect of Lablab nonprotein fraction diet on the blood glucose concentration and the lipid peroxide level of alloxan-induced diabetic rats. Two months old male Sprague Dawley rats were divided into 4 groups, each group contained of 5 rats. Three groups were diabetic rats induced by alloxan injection (110 mg/kg of body weight by intra-pheritonial injection) while one group was a control,normal rat. The experiment groups were (1) normal (group I), (2) diabetic (group II), (3) diabetic+cholesteol 0.5% (control group, group III), and (4) diabetic+cholesterol 0.5% + lablab NPK (group IV). The concentration of rat's blood glucose were periodically measured during diet intervenion (day 0,14,27, and 42). The Lipid peroxide was evaluated as the concentration of malonaldehyde (MDA) both in serum and liver of the rats by Thiobarbituric Acid Reactivity Test methode. The result demonstrated that after 42 days of intervention, the Lablab nonprotein diet decreased the blood glucose concentrations from 444.00 + 143.00 mg/dl to 310.50 +111.40 mg/dl (30%), while control group has decreased the blood glucose concentration from 458.00 +164.99 mg/dl to 455.33 + 81.95 mg/dl (0.6%). Lablab nonprotein diet significantly (P