Effects of Ganoderma lucidum Extract on Diabetic Rats

Title	Effects of Ganoderma lucidum Extract on Diabetic Rats
Author Order	of
Accreditation	2
Abstract	Diabetes mellitus (DM) is a metabolic syndrome which occurs when insulin is insufficiently produced or insulin cannot well serve its function. Diabetes is marked with increase in blood glucose level followed by increase in glycosylated hemoglobin level and decrease in insulin level. This research aims to examining the effect of Ganoderma lucidum extract on the blood glucose, insulin and glycosylated hemoglobin (HbA1c) level of diabetic white rat and determining the most effective dose of extract to be a diabetic agent. This research was experimentally conducted by employing Completely Randomized Design (CRD) with 6 treatments and 4 repetitions. The treatment groups consisted of healthy rats group (K1), rats with diabetes as negative control (K2), diabetic rats with the administration of metformin 45 mg/kg BW as the comparison (K3) and diabetic rats with the administration of G. lucidum extract with dose of 250, 500 and 1000 mg /kg BW (K4, K5 and K6 respectively). Blood glucose level examination was conducted after the alloxan induction with single dose of 125 mg/kg BW by intraperitoneal injection. The results show that mushroom G. lucidum extract administration with dose of 1000 mg/kg BW (K6) is the best dose to be an anti-diabetic agent. The benefit of the research is developing anti-diabetic agent from herbal resources.
Publisher Name	Department of Biology, Faculty of Mathematics and Sciences, Semarang State University . Ro
Publish Date	2018-12-07
Publish Year	2018
Doi	DOI: 10.15294/biosaintifika.v10i3.15356
Citation	2
Source	Biosaintifika: Journal of Biology & Biology Education
Source Issue	Vol 10, No 3 (2018): December 2018
Source Page	642-647
Url	https://journal.unnes.ac.id/nju/index.php/biosaintifika/article/view/15356
Author	Dr Dra NUNIEK INA RATNANINGTYAS, M.S