

ABSTRACT

Diabetes Mellitus (DM), a lifestyle disorder that its prevalence keeps increasing globally, can cause disability and mortality. The rising of DM incidence and poor effective control of it in Indonesia, cause it needs to be controlled. Banana peels which used to be just wasted apparently contain some active beneficial substances. There are pectin (10-21%), lignin (6-12%), cellulose (7,6-9,6%), and hemicellulose (6,4-9,4%). Some recent researches show that pectin has antidiabetic activity. The aim of this research is to know the usage of kepok banana peels waste to decrease blood glucose of Rattus norvegicus induced streptozotocin. This experimental research is done to 25 rats which are divided into 5 groups with pre and post test control group design. Procedures of this research are making of kepok banana peels (Musa paradisiaca) extract, grouping the rats, inducting streptozotocin, giving intervention, taking blood sample dan examining blood glucose. Data is analyzed by Wilcoxon Signed Ranked Test and Kruskal Wallis. Analysis of blood glucose level of Rattus novergicus induced streptozotocin result value=0,043 on 400mg/kgBB, 200mg/kgBB, 100mg/kgBB intervention group of kepok banana peels extract doses. This result shows that decreasing of blood glucose is statistically significant ($p < 0,05$) after intervention of kepok banana peels extract in 400mg/kgBB, 200mg/kgBB, 100mg/kgBB intervention group.

Key Word: *Musa paradisiaca, pectin, diabetes mellitus.*