ABSTRACT

The Effect of Jengkol’s Seed Ethanol Extract (*Pithecellobium lobatum* Benth.)
to Triglyceride Levels in Male Sprague Dawley Rats (*Rattus norvegicus*)
Induced by Alloxan

by

Herperian

**Background:** Diabetes mellitus is a chronic disease caused by the body's inability
to produce insulin or because insulin resistance. Diabetes mellitus can lead to a
state of dyslipidemia is characterized by increased levels of triglycerides. High
levels of triglycerides can lead to coronary heart disease. Seeds of jengkol contain
active compounds flavonoids that lower triglyceride levels. The purpose of this
research was to find out the effect of jengkol’s seed ethanol extract to trygliceride
levels in rats induced by alloxan.

**Methods:** 25 rats were randomly divided into 5 groups. Group 1 were given
standard diet for 14 days. Group 2 induced by alloxan and standart diet for 14
days. Group 3 induced by alloxan and given 600 mg/kgW/day of jengkol’s seed
ethanol extract for 14 days. Group 4 induced by alloxan and given 900
mg/kgW/day of jengkol’s seed ethanol extract for 14 days. Group 5 induced by
alloxan and given 1200 mg/kgW/day of jengkol’s seed ethanol extract for 14
days. Blood sample was taken from the heart in the fifteenth day.

**Results:** Based on the ANOVA test, there was not significant difference to
triglyceride levels in the all of group (p>0,05), although there was a decrease in
triglyceride levels compared to the positive control group.

**Conclusions:** The results show that jengkol’s seed extract has not an effect to
triglyceride levels in rats induced by alloxan (p>0,05).

**Key words:** alloxan, jengkol’s seed, triglyceride