

THE EFFECT ORAL ADMINISTRATION OF L-ARGININE ON SPERMATOGENESIS AND SERTOLI CELLS OF RABBITS TESTES (*Oryctolagus cuniculus*)

Hening Tyas Pitaloka

ABSTRACT

L-Arginine is the precursor of nitric oxide (NO). The aim of this research was to know the effect oral administration of L-arginine on spermatogenesis and the number of Sertoli cell of seminiferous tubules of rabbit (*Oryctolagus cuniculus*). This research used sixteen rabbits (6 months old and ± 3 kg of body weight) were divided into two groups, P0 and P1. P0 is a control group and P1 was given L-arginine 6g/300ml/day for 30 consecutive days. After 30 days treatment, their testicles were collected and processed for histological examination. The data were analyzed by Kruskal Wallis Test for Johnsen's Score and ANOVA for Sertoli cells counting at the significancy level of 5%. The result from statistical analysis showed that treatment with L-arginine did not increase spermatogenesis compared with control group, while the Sertoli cells of rabbit testicular showed that L-arginine increased the number of Sertoli cells.

Keywords : spermatogenesis, Sertoli cells, L-Arginine, nitric oxide, testis