ABSTRAK

Hantoko, Sabrinadia Hanareta. 2015. Efek Paparan Subkronik Peptida Polisakarida (PsP) *Ganoderma lucidum* Terhadap Jumlah Leukosit Pada Tikus *Rattus norvegicus* strain Wistar. Tugas Akhir, Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) Dr. Titin Andri Wihastuti, S.Kp, M.Kes. (2) dr. Agustin Iskandar, M.Kes, Sp.PK.

Peptida Polisakarida (PsP) merupakan salah satu obat alternatif yang bisa didapatkan dari ekstrak jamur *Ganoderma lucidum.* PsP memiliki beragam zat bioaktif, seperti antioksidan, antitumor, anti-atherosklerosis, dan anti-diabetes, namun toksisitas PsP belum teruji secara klinis. Leukosit akan menurun jumlahnya apabila dipapar dengan zat toksik dalam jangka panjang. pada penelitian ini akan dinilai efek paparan subkronik Peptida Polisakarida (PsP) *Ganoderma lucidum* terhadap kadar leukosit pada tikus *Rattus norvegicus* strain wistar. Sebanyak 80 ekor tikus dibagi secara acak menjadi empat kelompok jantan dan empat kelompok betina (10 ekor tikus per kelompok): tiga kelompok perlakuan PsP dengan dosis: 300, 600, 1200 mg/KgBB per sonde, dan satu kelompok kontrol normal. Kadar leukosit diukur setelah paparan selama 90 hari. Hasil uji *One Way ANOVA* menunjukkan bahwa kadar leukosit kelompok perlakuan tidak memiliki perbedaan yang signifikan, baik pada kelompok jantan ($p = 0{,}329$; $\alpha > 0.05$) maupun kelompok betina ($p = 0{,}278$; $\alpha > 0.05$), dibandingkan dengan kelompok kontrol normal. Dapat disimpulkan bahwa PsP *Ganoderma lucidum* tidak mempengaruhi jumlah leukosit pada tikus.

Kata kunci: subkronik; PsP *Ganoderma lucidum*; profil hematologi; leukosit;

ABSTRACT

Hantoko, Sabrinadia Hanareta. 2015. *Subchronic Effects of Ganoderma Lucidum Polysaccharide Peptide on Leukocyte Levels of Wistar Rats*. Final Assignment, Medical Program, Medical Faculty of Brawijaya University. Supervisors: (1) Dr. Titin Andri Wihastuti, S.Kp, M.Kes. (2) dr. Agustin Iskandar, M.Kes, Sp.PK.

Polysaccharide Peptide (PsP) is one of the alternative medicine which can be obtain from *Ganoderma lucidum* extract. PsP has variety of bioactivities, such as antioxidant, antitumor, anti-atherosclerosis, and anti-diabetes. However, its toxicity has not been proven scientifically. Long term exposure of toxic substance may cause a decrease in the leukocyte count. This study evaluated the effect of subchronic toxicity of *Ganoderma lucidum* Polysaccharides peptide (PsP) to leukocyte count in rats. The rats were randomly divided into four groups male and four groups female (10 rats per group): Three PsP treated group: 300, 600, 1200 mg/KgBW via orogastric tube, and one normal control group. Leukocyte count of rats were measured after 90 days of treatment. The results was calculated by O*ne Way ANOVA* which showed the leukocyte count of the PsP treated group was not significantly different ($p = 0{,}329$ and $p = 0{,}278$; $\alpha > 0.05$; for male and female groups respectively) than the control group. In summary, *Ganoderma lucidum* PsP has no effect on the leukocyte counts of the rats.

Keywords: Subchronic; *Ganoderma lucidum* PsP; hematologic profile; leukocyte