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Effect on Polysaccharide Krestin from *Coriolus versicolor* Extract on Phagocytic Activity and Capacity of *Mus musculus* Exposed by *Pseudomonas aeruginosa*

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Abstract

Pseudomonas aeruginosa is an opportunistic bacterium that causes infections in human. The wall cell of its bacteria contains lipopolysaccharide as virulency factors to protect it from human immunity. Lipopolysaccharide can inhibit phagocytosis in the body. Polysaccharide krestin (PSK) from *Coriolus versicolor* extract contains β-glucan that can increase phagocytic activity and capacity. This research aimed to identify the effect on polysaccharide krestin from *C. versicolor* extract on phagocytic activity and capacity of mice exposed by *P. aeruginosa*. The design of this research was experimental design. There were six treatment groups. The phagocytic activity and capacity were counted on slide smears of mice peritoneal fluid. The data was analyzed by using one way ANOVA. The results of the phagocytic activity and capacity showed that PSK was added before exposure (P1) or after exposure (P2) or before-after exposure (P3) had potential to increase phagocytic activity and capacity. The conclusion of the research was that adding polysaccharide krestin either before exposure or after exposure or both of them could increase phagocytic activity and capacity. The benefits of this research to development of science are expected to reduce human infection and to utilize natural ingredients as immunomodulator.

How to Cite

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