

Analysis of Chemical Components and Biological Activity of *Fomitopsis pinicola*¹

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Abstract

The objective of this study was to develop high quality and yield medicinal fungi. *Fomitopsis pinicola* (Swartz. Fr.) Karst., were cultured for 35 days and the mycelia dry weight at the level of 6.55 g/l. The yield of polysaccharide of *Fomitopsis pinicola* was 0.38 g/l, and the ethanolic extraction was about 17 % (ethanolic extraction / mycelia dry weight).

The biological assay included polysaccharides, and ethanolic extract. The MTT test showed no toxicity to ECV (human vascular endothelial cell) cells up to a concentration of 1000 μ g/ml. Interferon- γ inducible protein 10 (IP-10) induced by interferon- γ plays an important role in cell inflammation. By the expression of IP-10, the present result showed no effect for the polysaccharides of *Fomitopsis pinicola*. Among the ethanolic extract of *Fomitopsis pinicola* inhibited IP-10 protein release by 58 % at concentration of 100 μ g/ml.

Key words: *Fomitopsis pinicola*, polysaccharides, anti-inflammation.

¹The research bulletin is part of master thesis of author.

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