

## Detoxification of Cadmium on Albino Rats (*Rattus norvegicus*) with Natural Chelator of Fruiting Body Extract of *Ganoderma lucidum*

<b>Title</b>	Detoxification of Cadmium on Albino Rats ( <i>Rattus norvegicus</i> ) with Natural Chelator of Fruiting Body Extract of <i>Ganoderma lucidum</i>
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<b>Accreditation</b>	
<b>Abstract</b>	<p>Cadmium is a heavy metal pollutant sourced from various industries and toxic to the kidneys. Cadmium exposure can be used natural chelator of ethanol extract of the fruiting body of <i>Ganoderma lucidum</i>. The aim of the study was to determine the effect and effective dose of the ethanolic extract of the fruiting body of <i>G. lucidum</i> on reducing the toxicity effect of cadmium in male albino rats (<i>Rattus norvegicus</i>) Wistar strain. The research design was experimental research, which consisted of 5 treatment levels. The research parameters were blood cadmium, <math>\text{AST}</math>-microglobulin, malondialdehyde, and superoxide dismutase levels. The ethanolic extract of fruiting body of <i>G. lucidum</i> was tested by gas chromatography-mass spectrometry (GCMS) to determine linalool as active compounds. The results of each parameter had a significant effect, which decreased blood cadmium, <math>\text{AST}</math> and MDA levels, and increased SOD level that linear according to the addition of the dose of ethanol extract of the fruiting body of <i>G. lucidum</i>. Blood cadmium levels with <math>\text{AST}</math> and MDA levels had a positive correlation, while blood cadmium levels with SOD levels had a negative correlation. The dominant compound detected was linalool which has potential as a radical scavenger. The dose of 750 mg.kgBW-1 is the effective dose of the ethanolic extract of fruiting body of <i>G. lucidum</i> based on a decrease in blood cadmium levels (54.10%), <math>\text{AST}</math> (63.94%) and MDA (20.31%), as well as an increase in SOD levels (14.20%) compared to sick control.</p>
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