Safety evaluation of sclerotium from a medicinal mushroom, Lignosus cameronensis (cultivar): Preclinical toxicology studies

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28-days subacute toxicity studies performed in rats using sclerotial powder of L. cameronensis cultivar was conducted to assess its safety for consumption prior to other scientific investigations on its medicinal benefits, nutraceutical or pharmaceutical application of the mushroom. The study was conducted at 250, 500 and 1000 mg/kg sclerotial powder of L. cameronensis cultivar (n=5 for each respective dose, on both male and female groups) while control groups received only distilled water. At the end of the study (29th day), the animals were sacrificed followed by blood and organs collection for analysis. Subacute toxicity studies done shows that sclerotial powder of L. cameronensis cultivar at 250, 500 and 1000 mg/kg did not induce treatment related changes on behavioral patterns, gross physical appearance, growth pattern, body weight gain, values of hematological and clinical biochemical panels as well as histopathological findings on kidney, spleen, heart, lung and liver of the experimental rats. The no-observed-adverse-effect level (NOAEL) dose for sclerotial powder of L. cameronensis cultivar in 28-days sub-acute toxicity study is determined to be 1000 mg/kg.

Keywords: Lignosus cameronensis, Sclerotium, Toxicity, Hematological, Histopathological

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