Potensi Ekstrak Etanol Coprinus comatus Terhadap Kadar SGOT dan SGPT Pada Tikus Putih Model Diabetes

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Abstract	Coprinus comatus mushroom is one of the mushrooms that can be efficacious as medicine. The fruiting body of the C. comatus mushroom contains antioxidants such as flavonoids, total phenols, tocopherols and polysaccharides, as well as several active compounds that have the potential as antioxidants, immunomodulators, anticancer, antitumor, hypolipidemic and hypoglycemic agents. Flavonoids as antioxidants can counteract free radicals by donating H+ and stopping lipid peroxidation, so as to reduce serum glutamate oxaloacetate transaminase (SGOT) and serum glutamate pyruvate transaminase (SGPT) levels in the blood. This is due to the increased production of free radicals such as reactive oxygen species (ROS) which is triggered by hyperglycemic conditions. This study aims to determine the effect of giving C. comatus ethanol extract on the blood levels of SGOT and SGPT in diabetic white rats and to determine the effective dose concentration of C. comatus ethanol extract on SGOT and SGPT levels in diabetic white rats. This research was conducted experimentally using a Completely Randomized Design (CRD) consisting of 6 treatments, namely Positive Control (K +), Negative Control (K-), Comparative Control (KP), Treatment 1 (P1), Treatment 2 (P2) and Treatment 3 (P3). This study used male white mice (Ratus norvegicus) aged 2-3 months with a bodyweight of $\bar{A}fA, \bar{A}, \bar{A}\pm 200$ grams. The data obtained were analyzed using Analysis of Variance (ANOVA) with an error rate of 5%, the treatment had a significant effect followed by the Duncan test. The results showed that the treatment group given the ethanolic extract of C. comatus showed lower levels of SGOT and SGPT compared to the negative control rats. These results indicate that the ethanolic extract of C. comatus is effective for the treatment of diabetes mellitus. The ethanol extract of C. comatus at a dose of 500 mg/kg BW is known to be the most effective dose to reduce SGOT and SGPT levels. Keyword: Coprinus comatus, diabetes mellitus, SGOT, SGPT, rats.
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