

INTISARI

SEPUTRI, I., 2022, LITERATUR REVIEW TANAMAN OBAT DENGAN EFEK HEPATOPROTEKTOR PADA HEWAN UJI YANG DIINDUKSI DIABETES, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Diabetes mellitus merupakan penyakit kronik yang umumnya terjadi karena adanya peningkatan kadar glukosa darah dan menggambarkan sebuah penyakit metabolik, dikenal sebagai hiperglikemia. Pada kondisi hiperglikemia dianggap berpotensi meningkatkan kadar ROS serta mengurangi pertahanan antioksidan sel enzimatis dan non enzimatis. Peningkatan ROS menyebabkan stres oksidatif yang berakibat dalam disfungsi sel beta, kerusakan hati, dan resistensi insulin. Tujuan penelitian ini adalah untuk mengetahui potensi dan hasil efek hepatoprotektor tanaman obat pada hewan uji yang diinduksi diabetes.

Penelitian ini menggunakan studi literatur. Data yang didapatkan berasal dari jurnal nasional maupun internasional dan dicari melalui database seperti, *Google Scholar*, *Science Direct* serta *PubMed*. Literatur yang diperoleh kemudian dilakukan skrining dan direduksi sesuai kriteria inklusi sebanyak 16 artikel dan di eksklusi sebanyak 100 artikel.

Tanaman yang paling berpotensi untuk dikembangkan adalah *Stereospermum suaveolens* dengan dosis ekstrak 400 mg/kgBB didapatkan penurunan peroksidasi lipid ($p < 0,001$), peningkatan enzim antioksidan ($p < 0,001$), penurunan kadar ALT, AST dan ALP, serta perbaikan struktur lobular, degenerasi ringan dan sedikit infiltrasi neutrofil hampir normal.

Kata kunci: Hepatoprotektor, Diabetes, Stress Oksidatif, In Vivo

ABSTRACT

SEPUTRI, I., 2022, LITERATURE REVIEW OF MEDICINE PLANTS WITH HEPATOPROTECTOR EFFECTS IN DIABETES-INDUCED TEST ANIMALS, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Diabetes mellitus is a chronic disease that generally occurs due to an increase in blood glucose levels and describes a metabolic disease, known as hyperglycemia. Under conditions of hyperglycemia, it is considered that it has the potential to increase ROS levels and reduce the antioxidant defenses of enzymatic and non-enzymatic cells. Increased ROS causes oxidative stress which results in beta cell dysfunction, liver damage, and insulin resistance. The purpose of this study was to determine the potential and outcome of the hepatoprotective effect of medicinal plants in test animals induced by diabetes.

This research uses literature study. The data obtained comes from national and international journals and is searched through databases such as Google Scholar, Science Direct and PubMed. The literature obtained was then screened and reduced according to the inclusion criteria of 16 articles and 100 articles were excluded.

The most potential plant to be developed was *Stereospermum suaveolens* with an extract dose of 400 mg/kgBW, it was found a decrease in lipid peroxidation ($p < 0.001$), an increase in antioxidant enzymes ($p < 0.001$), a decrease in ALT, AST and ALP levels, as well as improvements in lobular structure, mild degeneration. and slight neutrophil infiltration is almost normal.

Keywords: Hepatoprotectors, Diabetes, Oxidative Stress, In Vivo