

ABSTRAK

Latar belakang : Diabetes melitus merupakan gangguan metabolik kronis yang ditandai dengan peningkatan kadar glukosa darah akibat gangguan sekresi atau resistensi terhadap insulin. Penggunaan tanaman obat sebagai alternatif terapi diabetes semakin diminati karena efek sampingnya yang minimal. Daun ekor naga (*Rhaphidophora pinnata*) dan daun kayu manis (*Cinnamomum burmannii*) diketahui memiliki senyawa bioaktif seperti flavonoid, alkaloid, dan saponin yang berpotensi menurunkan kadar glukosa darah.

Metode : Penelitian ini bersifat eksperimental menggunakan Rancangan Acak Lengkap (RAL) dengan 6 kelompok perlakuan mencit jantan putih yang diinduksi diabetes menggunakan aloksan, yaitu kelompok normal, kontrol negatif (Na-CMC), kontrol positif (glibenklamid), infusa daun ekor naga 10%, infusa daun kayu manis 10%, dan kombinasi keduanya (10%:10%). Infusa diberikan selama 21 hari, dan parameter yang diamati adalah kadar gula darah dan berat badan mencit. Data dianalisis menggunakan uji One Way ANOVA dan dilanjutkan dengan uji Gomes-Howel.

Hasil : Kelompok kombinasi infusa daun ekor naga dan kayu manis menunjukkan penurunan kadar gula darah yang paling signifikan pada hari ke-21, dengan nilai 117,00 mg/dL, mendekati kadar normal. Efektivitasnya hampir setara dengan glibenklamid, menunjukkan adanya efek sinergis dari kombinasi kedua tanaman.

Kesimpulan : Infusa kombinasi daun ekor naga dan daun kayu manis memiliki potensi sebagai agen antidiabetes alami dengan kemampuan menurunkan kadar glukosa darah secara signifikan. Kombinasi tersebut menunjukkan efektivitas yang lebih baik dibandingkan pemberian tunggal dan berpotensi dikembangkan sebagai fitofarmaka alternatif dalam pengelolaan diabetes.

Kata kunci: Diabetes mellitus, *Rhaphidophora pinnata*, *Cinnamomum burmannii*, Antidiabetes, Mencit.

ABSTRACT

Background : *Diabetes mellitus is a chronic metabolic disorder characterized by increased blood glucose levels due to impaired secretion or resistance to insulin. The use of medicinal plants as an alternative therapy for diabetes is increasingly in demand because of its minimal side effects. Dragon's tail leaves (Rhaphidophora pinnata) and cinnamon leaves (Cinnamomum burmannii) are known to have bioactive compounds such as flavonoids, alkaloids, and saponins that have the potential to lower blood glucose levels.*

Method : *This study was experimental using a Completely Randomized Design (CRD) with 6 treatment groups of white male mice induced with diabetes using alloxan, namely the normal group, negative control (Na-CMC), positive control (glibenclamide), 10% dragon's tail leaf infusion, 10% cinnamon leaf infusion, and a combination of both (10%:10%). The infusion was given for 21 days, and the parameters observed were blood sugar levels and body weight of the mice. Data were analyzed using the One Way ANOVA test and continued with the Gomes-Howel test.*

Results : *The combination group of dragon's tail leaf and cinnamon infusion showed the most significant decrease in blood sugar levels on day 21, with a value of 117.00 mg/dL, approaching normal levels. Its effectiveness is almost equivalent to glibenclamide, indicating a synergistic effect of the combination of the two plants.*

Conclusion : *The combination infusion of dragon's tail leaf and cinnamon leaf has the potential as a natural antidiabetic agent with the ability to significantly lower blood glucose levels. The combination shows better effectiveness than single administration and has the potential to be developed as an alternative phytopharmaceutical in the management of diabetes.*

Keywords: *Diabetes mellitus, Rhaphidophora pinnata, Cinnamomum burmannii, Antidiabetic, Mice.*