



## Antihyperglycemic Effect of *Casearia sylvestris* Leaves Extract in Streptozotocin Induced Diabetic Rats

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**SUMMARY.** The antihyperglycaemic effect of *Casearia sylvestris* aqueous extract (CS) and its flavonoidic fraction using *in vivo* models in streptozotocin-induced diabetic rats was evaluated. CS (500 mg/kg) reduced blood glucose in rats three weeks after a single oral dose. The blood glucose significantly decreased in a test of tolerance to insulin. Phytochemical investigation on TLC, HPLC-DAD and NMR spectral analysis of extract and fractions confirmed the presence of flavonoids. These results direct the hypothesis that CS improves glucose metabolism by reducing insulin resistance, and it may be useful for the treatment of type 2 diabetes.

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**KEY WORDS:** Antihyperglycemic effect, *Casearia sylvestris*, Flavonoid.

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