

INFLUENCE OF *CASEARIA ESCULENTA* ROOT EXTRACT ON PROTEIN METABOLISM AND MARKER ENZYMES IN STREPTOZOTOCIN-INDUCED DIABETIC RATS

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The present study investigated the possible protective effects of *Casearia esculenta* root extract on certain biochemical markers in streptozotocin (STZ)-induced diabetes in rats. STZ treatment (50 mg/kg, *ip*) caused a hyperglycemic state, that led to various physiological and biochemical alterations. Blood levels of glucose, urea, uric acid and creatinine, plasma levels of albumin and albumin/globulin ratio and the activities of diagnostic marker enzymes aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP) and γ -glutamyltranspeptidase (γ -GT) in plasma, liver and kidney were markedly altered in STZ diabetic rats. Oral administration of *C. esculenta* (200 and 300 mg/kg) for 45 days restored all these biochemical parameters to near normal levels. Thus, the present results have shown that *C. esculenta* root extract has the antihyperglycemic effect and consequently may alleviate liver and renal damage associated with STZ-induced diabetes in rats.

Key words: *Casearia esculenta*, diabetes mellitus, protein metabolism, streptozotocin

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