

## Comparative Antihyperglycemic Activity of *Serpentina (Andrographis paniculata)* and *Papait (Mollugo oppositifolia linn)* Aqueous Extracts in Alloxan-Induced Diabetic Mice

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**Abstract :** A comparative study on the antihyperglycemic activity of aqueous extracts of *Serpentina (Andrographis paniculata)* and *Papait (Mollugo oppositifolia linn)* administered at 400mg/kg body weight per ore twice daily for 14 days was investigated using 24 alloxan-induced diabetic male, 6-8 weeks old ICR mice and Metformin as standard control. The blood glucose levels of all the animals in the treatment groups were not reduced to < 200mg/dl so as to consider them as non-diabetic but *Papait* showed a consistent blood glucose lowering effect from day 0 to 14 causing 36.07% reduction as compared to *Serpentina* which was observed to cause a fluctuating effect on blood glucose levels and a reduction of only 22.53% while the Metformin treated animals exhibited the highest reduction at 45.29%. The blood glucose levels at day 14 of animals treated with *Papait* (322.93 mg/dl) had comparable blood glucose levels ( $p < 0.05$ ) with the Metformin treated groups (284.50 mg/dl). Also, all the animals in the three treatment groups were still hypercholesterolemic with an observed consistent weight loss and a decrease in feed intake except for *Serpentina* which recorded a slight increase. Results of the study showed a superior antihyperglycemic activity of *Papait* compared with *Serpentina*.

**Keywords :** antihyperglycemic, diabetes, hypercholesterolemic, papait, serpentina

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