

Antidiabetic, Antioxidant and Anti-Inflammatory Activities of Residual Aqueous Fraction of *Ethulia conyzoides* in Induced Type 2 Diabetic Rats

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Submitted: 6 March 2022; Accepted: 11 August 2022; Published: 31 March 2023

To cite this article: Helen Omasan Okotie, Tayo Micheal Anjuwon, Okwubenata Lilian Okonkwo, Danladi Amodu Ameh and Dorcas Bolanle James (2023). Antidiabetic, antioxidant and anti-inflammatory activities of residual aqueous fraction of *Ethulia conyzoides* in induced type 2 diabetic rats. *Tropical Life Sciences Research* 34(1): 121–138. https://doi.org/10.21315/tlsr2023.34.1.8

To cite this article: https://doi.org/10.21315/tlsr2023.34.1.8

Highlights

- Sub-acute antidiabetic studies were done with varying doses (100, 200, and 400 mg/kg body weight). Treatment with the highest dose of residual aqueous fraction (RAF) of *Ethulia conyzoides* caused a 67.13% reduction in the blood glucose level of the diabetic rats.
- In-vivo antioxidant studies revealed that serum SOD and catalase levels in diabetes groups treated with the residual aqueous fraction of *Ethulia conyzoides* increased significantly (p < 0.05), while serum MDA levels decreased significantly (p < 0.05) when compared to the diabetic untreated group.
- The highest dose of 400 mg/kg b.w. was found to be the most effective, and treatment with 400 mg/kg b.w of *Ethulia conyzoides* residual aqueous fraction caused a 30.80% and 63% reduction in TNF-α and IL-1β, respectively.
- The RAF of *Ethulia conyzoides* has ameliorative effects for type 2 diabetes (T2D).

TLSR, 34(1), 2023

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