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# Antioxidant Activity of Germinated African Yam Bean (Sphenostylis Stenocarpa) in Alloxan Diabetic Rats

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**Abstract :** This study was conducted to investigate the effect of the antioxidant activity of germinated African Yam Bean (AYB) on oxidative stress markers in alloxan-induced diabetic rat. Rats were randomized into three groups; control, diabetic and germinated AYB–treated diabetic rats. The Total phenol and flavonoid content and DPPH radical scavenging activity before and after germination were investigated. The glucose level, lipid peroxidation and reduced glutathione of the animals were also determined using the standard technique for four weeks. Germination increased the total phenol, flavonoid and antioxidant activity of AYB extract by 19.14%, 32.28%, and 57.25% respectively. The diabetic rats placed on germinated AYB diet had a significant decrease in the blood glucose and lipid peroxidation with a corresponding increase in glutathione ($p<0.05$). These results demonstrate that consumption of germinated AYB can be a good dietary supplement in inhibiting hyperglycemia/hyperlipidemia and the prevention of diabetic complication associated with oxidative stress.

**Keywords :** African yam bean, antioxidant, diabetes, total phenol
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