

Secondary metabolite content and *in-vitro* antioxidant activities of various fractions of *Croton bonplandianum*

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ABSTRACT

The present study was aimed to determine the secondary metabolites and antioxidant activities in the different fractions of *Croton bonplandianum*. The crude methanolic leaf extract of *C. bonplandianum* was subjected to fractionation using different polarity based solvents like hexane, ethyl acetate and chloroform. The fractions were screened for secondary metabolites and *in-vitro* antioxidant activities. The secondary metabolite contents like flavonoid ($95.68 \pm 0.05 \mu\text{g/ml}$), Polyphenol ($114.28 \pm 0.06 \mu\text{g/ml}$) and tannin ($63.8 \pm 0.03 \mu\text{g/ml}$) were found to be high in the chloroform fraction and it showed potent anti-oxidant activities too. *In-vitro* antioxidant activities of the fraction were determined using DPPH, hydroxyl radical scavenging and reducing power activity assays. The Ic_{50} value for the antioxidant activity was found to be high in the chloroform fraction compared to other fractions. Ascorbic acid was taken as control.