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Abstracts

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## Phytochemical analysis of *Ipomoea involucrate*

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We have recently reported that methanolic extracts from *Ipomoea involucreata* P. Beauv. (Convolvulaceae) exhibited particular antisickling properties coupled with the potential to reverse sickled blood and reduce stress in sickle cell patients [1]. In light of its possible medicinal benefits the MeOH plant extract was analysed for twenty bioactives by high performance liquid chromatographic (HPLC) equipped with UV-detector. Chlorogenic acid ( $33.72 \pm 0.24$  mg/g. dry wt. leaves), ferulic acid ( $15.60 \pm 3.46$  mg/g. dry wt. leaves), hesperidin ( $6.71 \pm 1.57$  mg/g. dry wt. leaves), lutein ( $2.55 \pm 0.09$  mg/g. dry wt. leaves), resveratrol ( $2.54 \pm 0.28$  mg/g. dry wt. leaves), coumaric acid ( $1.75 \pm 0.17$  mg/g. dry wt. leaves), myricetin ( $1.70 \pm 0.00$  mg/g. dry wt. leaves), kaempferol ( $0.93 \pm 0.71$  mg/g. dry wt. leaves) and rutin ( $0.80 \pm 0.43$  mg/g. dry wt. leaves) were the nine bioactives detected. The high levels of the major compounds (chlorogenic acid, ferulic acid and hesperidin) were similar to that of leaves of other *Ipomoea* sp [2 – 4]. Hesperidin was first reported in this study among the *Ipomoea* sp. The leaves have relatively higher levels of coumaric acid than *I. mauritiana*; ferulic acid, resveratrol and lutein than *I. batatas*; and similar levels of myricetin to that in *I. batatas* [2, 5 – 6]. Ferulic acid in *I. hederacea*, myricetin in *I. aquatica*, rutin in *I. batatas*; and coumarin in *I. cairica*, *Ipomoea digitata* L., *Ipomoea hederacea*, *I. pes-caprae*, *I. pes-tigridis*, *I. sepiaria* and *I. batatas* were also detected but not quantified [3]. The identified compounds could significantly contribute to the medicinal properties of the plant [3]. A future investigation will carry out to evaluate the antisickling properties coupled with the potential to reduce stress in sickle cell patients of the isolated constituents.

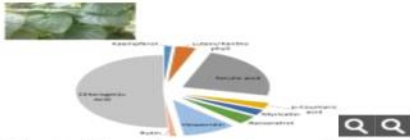


Fig. 1: Bioactive constituents in leaves of *Ipomoea involucreta*

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**Keywords:** *Ipomoea involucreta*, molecules, bioactive, therapeutic, health.

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