



## Phytochemical Screening and GC- MS Profiling on Flowers of *Crossandra nilotica* Oliv.

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### ABSTRACT

The present work aims to perform phytochemical screening and Gas Chromatography-Mass Spectrometry analysis of flower extracts of *Crossandra nilotica* Oliv. Phytochemical screening of methanolic flower extracts revealed the presence of alkaloids, proteins, carbohydrates, phenols, flavonoids, betacyanins, coumarins, emodins, glycosides, steroids, terpenoids, and quinones. Furthermore, GC-MS analysis of the extract identified 72 bioactive compounds, out of which 20 were major compounds based on high peak areas such as 1,3-Dioxolane, 2-phenyl-2-(phenylmethyl)- (9.81%), Propylthiouracil (9.42%), 1,2,5-Oxadiazol-3-amine, 4-(phenylmethoxy)- (9.41%), 2-Methylheptanoic acid (9.38%), Tricyclo[4.2.2.0(1,5)]decane (9.37%), 2-Undecanethiol, 2-methyl- (9.37%), 1,2,4,5-Tetrazin-3-amine, 6-methyl- (9.19%), etc. It is the first report on *Crossandra nilotica* screened for phytochemicals and GC-MS analysis. The identified bioactive compounds have a wide range of biological activities, which may help in the protection against various diseases.

**Keywords:** Extraction, Phytochemical screening, GC-MS analysis, Bioactive compounds, Biological activity

