

ABSTRACT

This study was conducted to determine the presence of some groups of natural products in the plant, *Acalypha hispida* Burm. f. and to show its implication and relation to chemistry education.

The determination was done by subjecting the ethanolic extracts of the flowers and the leaves of the plant to phytochemical screening by thin-layer chromatographic technique (Method I) and precipitation and color reactions in test tube (Method II).

The results of the phytochemical screening showed that *Acalypha hispida* Burm. f. contain the following groups of natural products: flavonoids, tannins, coumarin, anthraquinones, steroids and saponins, triterpenoids, cardenolides and bufadienolides.

The concentrated extracts from the flowers were subjected to separation by quick column and ordinary column chromatography. Six isolates were obtained.

An attempt was made to characterize four isolates through qualitative tests, UV, IR, and NMR spectroscopy.

The spectral analysis showed that an isolate is an aliphatic ester and a second isolate is its impure



form. The two isolates have similar IR and NMR spectra but one has a wide range of melting point.

Conclusive characterization of the other isolates was not achieved because of their minimal quantities. However, results of preliminary analysis indicated that one is a flavonoid.

