

ABSTRACT

The work embodied in this thesis is composed of four parts. The first part (Part A) includes the isolation and characterization of some coumarins, terpenes and an alkaloid from Triphasia trifoliata, Citrus medica, Citrus hystrix and Evodia roxburghiana which belong to the plant family Rutaceae. One of the coumarins (triphasiol) isolated is reported for the first time as a natural product.

Terpenes and sitosterol were isolated from Elephantopus scaber, Vernonia zeylanica and Vernonia cinerea which belong to the family Compositae and are described under Part B. The sesquiterpene lactone isolated from Elephantopus scaber is reported for the first time.

Part C includes the isolation of an iridoid glycoside from Stereospermum personatum which belongs to the family Bignonaceae.

Part D describes the chemical investigation of Saraca indica, Solanum verbascifolium, Capparis moonii and Citrus megaloxylocarpa. These plants belong to the families Leguminosae, Solanaceae, Capparidaceae and Rutaceae respectively. This part describes continuing work.