

Preliminary investigations on phytochemicals present in *Bauhinia racemosa* leaves and test for their anti-bacterial activity

Vajira P. Bulugahapitiya¹ And S. D. T. M. Samaraweera

Department of Chemistry, Faculty of Science, University of Ruhuna, Sri Lanka ¹vajira@chem.ruh.ac.lk

The herbs are rich with vast number of phytochemicals which are potentially useful in drug discovery. B. racemosa (Family: Caesalpiniaceae) grows in dry zones in Sri Lanka and has been used in folk medicine for hundreds of years. Objective of the present study was to reveal the phytochemical composition and the anti-bacterial activity of B. racemosa leaves. The leaves of B.racemosa were collected, identified and authenticated. The constituents of the leaves were extracted by gradient extraction using soxhlet apparatus. After evaporation of the solvent under reduced pressure, the crude extracts were analyzed by TLC method and by carrying out chemical screening tests for the phytochemicals. The crude aqueous extract of the leaves obtained after freeze drying was tested for the anti-bacterial activity against Xanthomonas campestris pv. campestris using well-diffusion method. This investigation revealed that the leaves of B. racemosa contain phenolic compounds, flavonoids, tannins, saponins and glycosides as the phytochemicals and no anti-bacterial activity was shown against X. campestris pv. campestris by aqueous extract of the leaves.

Keywords: B. racemosa, Phytochemicals, antibacterial activity