<u>ISSN (ONLINE) : 2395-695X</u> <u>ISSN (PRINT) : 2395-695X</u> Available online at <u>www.ijarbest.com</u>



International Journal of Advanced Research in Biology, Engineering, Science and Technology (IJARBEST) Vol. 2, Special Issue 8, February 2016 in association with KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, VIRUDHUNAGAR DEPARTMENT OF BIOTECHNOLOGY ORGANIZES DBT, NEW DELHI SPONSORED NATIONAL LEVEL CONFERENCE ON CONTEMPORARY TRENDS IN BIOENERGY AND GREEN TECHNOLOGY: CHALLENGES AND OPPORTUNITIES [ORA-2016] (25-26TH FEBRUARY 2016)

STUDY ON PHYTOCHEMISTRY OF 100 PLANTS IN CHENNAI

N.Sharmila Devi¹, R.Vigneshwari¹, N Kanimozhi², Anu Ann Mathew² Assistant Professor, Department of Biotechnology Selvam College of Technology, Namakkal-637003

ABSTRACT

Knowledge on the plant phytochemistry provides a fundamental use of plants as a reservoir of chemical agents. Hence, the study on the presence of in the aqueous extract of 100 different plant species belonging to 44 families in Chennai, India were detected.Leaves of around 100 plant species belonging to different habit like trees, shrubs, herbs and creepers or climbers from Chennai and its surround districts of India were collected. The aqueous extract of air dried, pulverized leaf samples of collected plants were examined for the presence of Tannins, Phlobatannins, Saponins, Flavanoids, Terpenoids, Cardiac glycosides and Steroids using the standard techniques Evans (1996). The presence of individual secondary metabolite was calculated in percentage and their prevalence in different plant habit was studied. Around 29 %, 20 %, 23 %, 48 %, 22 %, 30 % and 44 % of plants showed the presence of Tannins, Phlobatannins, Saponins, Flavanoids, Terpenoids, Cardiac glycosides and Steroids and Steroids in that order. Further, the presence of secondary metabolites according to the plant habit like, tree, shrub, herb and creeper or climber was detected. It was evident that the presence of Tannin, Phlobatannin, Flavanoids and Cardiac glycosides are found prevalent in trees, Steroids in herbs and Terpenoids in shrubs. However, further study on this aspect is recommended.

Keywords: Phytochemistry, Flavanoids, Terpenoids, Tannins, Steroids, Plant Habit