

An Executive summary of the final report of the work done on the Minor Research Project of **Anupama R Mallya** entitled " **SEPARATION CHARACTERIZATION AND BIOLOGICAL STUDIES OF PHYTOCHEMICALS PRESENT IN MILLINGTONIA HORTENSIS** " sanctioned by UGC vide sanctioned letter no. **MRP (S) 0121/12-13/KAMA002/UGC –SWRO Dated 23 September, 2013**

The contribution of plant sources in the field of industries such as drugs, pharmaceutical industries, cosmetics, fine chemicals, industrial raw materials are many. The anticancer and anti infective drugs are commercially obtained from the plant sources. The research is continuous in the Natural product area, because of the presence of the secondary metabolites which are responsible for the respective activity. Some of the important drugs were isolated from common plants. For example, the most potent anti leukemia drugs vincristin and vinblastin were obtained from the plant *Catharanthus roseus*, which was previously used for diabetes.

The field of medicine and pharmacy slowly came into existence with the civilization .The different systems in medicines were evolved during development of pharmacy. The isolation of the pharmacologically active compounds, such as Cocaine, Ephedrine, emetine, Caffeine, Reserpine, Caffeine, Sennoside, Guggul sterols etc. are obtained from the traditional medicinal plants. Screening for the pharmacological activity or biological activity is the first step in the research of the new drug obtained from an herbal source. The success is directly dependant on the correctness of identification of the plant source. So, identification and authentication is important in research of the drugs. Various experiments and analysis are done to study the active compounds obtained from plant sources.

The plant species used was *Millingtonia hortensis*. The plant source used was leaves of the tree. The sample was thoroughly washed and dried. It was powdered well. It was subjected to extraction in Soxhlet apparatus. The residue was obtained from the extract was subjected to column chromatography. The phytochemicals were not suitably separated. The phytochemicals that were obtained were the discovered ones. The various

fractions were collected. The fractions collected were subjected to the study of activities related to microbes. An attempt was done to study its activity on bacteria species. The study was not that effective to find new advancement with respect to action of phytochemicals.

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