International
Pharma Conference and Expo

May 2-4, 2018   Rome, Italy

Isolation, Characterization and Estimation of Active Constituents of *Adenanthera pavonina*

Bhagyashri Fachara[1]* and **Mahesh T Chhabria[2]**

[1]Saurashtra University, India

[2]L.M.College of Pharmacy, India

A simple, sensitive, and selective validated HPTLC method was developed for the simultaneous quantification of the isolated major active secondary metabolites in the bark of the plant *Adenanthera pavonina* viz. stigmasterol and lupeol. The Phytochemical screening of the bark of *Adenanthera pavonina* revealed the presence of steroids, terpenoids, phenolic compounds, saponins, and flavonoids. Stigmasterol and Lupeol were isolated from the bark of *Adenanthera pavonina* and were characterized by physicochemical and spectrophotometric methods. Simple and validated HPTLC method was developed for the simultaneous estimation of Stigmasterol and Lupeol in bark of Adenanthera pavonina. The separation was performed on TLC aluminium plates pre-coated with silica G60 F_{254} followed by detection of Stigmasterol and Lupeol by derivatizing the plate with vanillin- phosphoric acid reagent. Camag TLC scanner 3 equipped with CATS4 software was used for densitometric scanning at 550 nm. The proposed method was validated in terms of linearity, precision, accuracy and sensitivity as per the International Conference on Harmonization guidelines. The mobile phase optimized was Toluene: methanol (92: 8 v/v) with saturation time of 15 min which give the good resolution for Stigmasterol and Lupeol at R_f 0.43 ± 0.02 and 0.55 ± 0.02 respectively. The linearity was found to be within range 100-500 ng/spot with average % recovery of 95.16% for Stigmasterol and 400-2000 ng/spot with average % recovery of 95.3% Lupeol. The amount of Stigmasterol and Lupeol in bark of the plant was found to be 0.0743 and 0.146 %w/w.

Biography:

Ms. Bhagyashri Fachara has completed her M. Pharm (Quality Assurance) at the age of 23 years from Gujarat Technological University. She is the recipient of M. L. Schroff Medal-2012 from Indian Pharmaceutical Association for securing highest grade in B. Pharm (All over India). She is the recipient of Gold medal for M. Pharm as well as B.Pharm. Currently she is pursuing Ph. D studies as UGC-BSR research fellow from Department of Pharmaceutical Sciences, Saurashtra University, Gujarat, India.

Madridge J Pharm Res. 2018

MJPR an open access journal

Pharma-2018

May 2-4, 2018

Conference Proceedings

Page 82