

HPTLC Fingerprinting of steroidal glycoside of leaves and berries of *Solanum nigrum* L. (Inab-us-salab/makoh)

Authors : Karishma Chester, Sarvesh K. Paliwal, Sayeed Ahmad

Abstract : Inab-us-salab also known as *Solanum nigrum* L. (Family: Solanaceae), is an important Indian medicinal plant and have been used in various unani traditional formulations for hepato-protection. It has been reported to contain significant amount of steroidal glycosides such as solamargine and solasonine as well as their aglycone part solasodine. Being important pharmacologically active metabolites of several members of solanaceae, these markers have been attempted various times for their extraction and quantification but separately for glycoside and aglycone part because of their opposite polarity. Here, we propose for the first time its fractionation and fingerprinting of aglycone (solasodine) and glycosides (solamargine and solasonine) in leaves and berries of *S. nigrum* using solvent extraction and fractionation followed by HPTLC analysis. The fingerprinting was done using silica gel 60F254 HPTLC plates as stationary phase and chloroform: methanol: acetone: 0.5% ammonia (7: 2.5: 1: 0.4 v/v/v/v) as mobile phase at 400 nm, after derivatization with antimony tri chloride reagent for identification of steroidal glycoside. The statistical data obtained can further be validated and can be used routinely for quality control of various solanaceous drugs reported for these markers as well as traditional formulations containing those plants as an ingredient.

Keywords : solanum nigrum, solasodine, solamargine, solasonine, quantification

Conference Title : ICPPS 2015 : International Conference on Pharmacy and Pharmaceutical Sciences

Conference Location : Venice, Italy

Conference Dates : August 13-14, 2015