Phytochemical analysis of selected crude extracts

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The current study focuses on the phytochemical analysis of the selected eight crude extracts (*Apis mellifica*, *Arnica montana*, *Cicuta virosa*, *Digitalis purpurea*, *Sambucus nigra*, *Thuja occidentalis*, *Urtica urens* and *Arctostaphylos uva-ursi*) for determination of active constituent for better understanding of their therapeutic efficacy. The phytochemical analysis includes microscopic study, powder drug examination, color reaction tests, thin-layer chromatography and Fourier transform infra-red spectroscopy. Microscopic and histological examination revealed the presence and absence of different cells or tissues. Chemical identification tests included detection of carbohydrates, proteins, steroids, saponins, tannins, alkaloids and triterpenes. In all the eight extracts, the presence or absence of these chemical constituents was found. Thin-layer chromatography was performed using two solvent systems; ethyl acetate: methanol: water (100:16:5:13.5) and chloroform: methanol: water (80:20:2) and Rf value was determined for the identification of compounds in chromatogram of each drug extract respectively. Fourier transform infra-red spectroscopy exhibited the presence of major functional groups in each extract. This research work is related to the standardization of crude drugs and their pharmacological efficacy because these drugs are used frequently in complementary and alternative systems of medicine.

Biography

Farah Saeed is a research scientist from Department of Pharmacognosy of Dow College of Pharmacy, Dow University of Health Sciences, Pakistan.

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