



Research article

Quantitative determination of phytochemical constituents of *Viola lutea* by HPLC

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Abstract

Phytochemical screening revealed the presence of various bioactive secondary metabolites as flavonoids, phenolics, saponins, glycosides, cardiac glycosides, tannins and alkaloids. Anthraquinones and sterols were not detected in the plant. The percentage of inorganic matter, organic matter, crude fibers content, total carbohydrates, total nitrogen, total proteins, total lipids, total tannins, total saponins, total alkaloids, total flavonoids, total phenolic of the plant were determined in this study. The flavonoid and phenolic contents of *Viola lutea* were analyzed by High performance liquid chromatography (HPLC). The quantification of each compound was done according to the peak area measurements which were reported in calibration curves of the corresponding standards. The result revealed that *Viola lutea* consists of flavonoid of, myricetin, luteolin and apigenin 8.44, 23.1 and 15.4 mg/ml, in corresponding to RT values 8.14, 9.23 and 11.78 min, respectively. On the other hand; protocatechuic acid, benzoic acid and Syringinic acid as phenolic compounds appeared with concentrations 5.66, 8.65, and 12.5 mg/ml in corresponding to RT values 8.07, 9.64 and 10.71nm, respectively.
