

Extraction of Quercetin and Myricetin from *Chamaecyparis Obtusa* using Ionic Liquids-Based Monolithic Column

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Ionic liquids (ILs)-based monolithic cartridge was prepared and used as the selective extraction sorbent. After the material was evaluated by field emission-scanning electron microscopy, a new approach for the extraction and determination of quercetin and myricetin from *Chamaecyparis Obtusa* by using ILs-based, monolithic cartridge system was developed. Chromatographic analysis was conducted on a C18 column with UV detection at 372 nm, an eluting solution consisting of acetonitrile-water (25/75, v/v) as the mobile phase. A good linear relationship was demonstrated when the concentrations of quercetin and myricetin were in the range of 0.50 ~ 100.00 $\mu\text{g mL}^{-1}$. The recoveries ranged from 101.58 % to 104.60 % and the inter- and intra-day relative standard deviations (RSD) were less than 5 %. This method effectively removed the impurities and avoided tedious pretreatment.