Preparative Separation and Determination Flavone from Chamaecyparis Obtusa by Molecularly Imprinted Solid-Phase Extraction

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Method of molecularly imprinted solid phase extraction flavone from Chamaecyparis Obtusa has been developed in the research. The molecularly imprinted polymer with specific recognition ability for flavone was prepared by polymer with quercitrin as the template, acrylamide as the functional monomer and ethylene glycol dimethacrylate as the cross-linker in the porogen of tetrahydrofuran. The preparation procedure was optimized and the retention behavior and selectivity of this molecularly imprinted SPE were evaluated by chromatographic analysis. Crude extract of flavone from Chamaecyparis Obtusa was purified by using this polymer as the separation medium. The mean recoveries of quercitrin, myricetin and amentoflavone were 78.0, 88.0, 72.0% and the detection limits for quercitrin, myricetin and amentoflavone were 0.05, 0.02 and 0.7 μg mL−1, respectively.