

研究简报

黄芪中黄酮类组分的高效液相色谱分离条件的快速优化

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摘要 以黄芪为研究对象,对黄芪中乙酸乙酯部位的化学成分进行了高效液相色谱分析并对其色谱操作条件进行了快速优化。根据几个线性梯度下的保留时间来计算各组分的保留参数,然后利用重叠分辨图法确定其最佳分析条件。在选定的最佳条件下各组分分离情况良好。利用梯度保留时间计算保留参数比较方便快捷,并可以有效地避免以往等度线性回归法遇到的峰识别问题。该方法更适用于实际复杂样品色谱分析条件的优化。

关键词 [高效液相色谱法](#) [色谱条件的优化](#) [重叠分辨图](#) [黄酮类组分](#) [黄芪](#)

分类号

Quick Optimization of High Performance Liquid Chromatographic Conditions for Separation of Flavones of Astragalus

Abstract

An analytical method for flavones of Astragalus has been developed and a process of high performance liquid chromatographic (HPLC) condition optimization has been elaborated. The LC retention parameters of 34 components were obtained quickly by using three linear gradient elutions. Overlapping separation range map (OSRM), which is related to the separation quality and the analysis time, was utilized to search the optimised stepwise gradient method for HPLC analysis of flavones of Astragalus. Finally, the optimised stepwise gradient elution conditions were set up with the help of this map. Under the optimised conditions, the sample of flavones of Astragalus was well separated in reasonable time. The method is more convenient than that using a series of isocratic elutions.

Key words [high performance liquid chromatography](#) [chromatographic condition optimization](#) [overlapping separation range map](#) [flavones](#) [Astragalus](#)

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