

 中文标题 检索 跨刊检索

## 高效液相色谱多级质谱联用法同时鉴定苦参中的两大类活性成分

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中文摘要: 目的: 同时定性分析苦参中两大类理化性质差异巨大的活性成分(生物碱和异戊烯黄酮)。方法: 采用高效液相色谱-多级质谱联用技术, 根据正、负离子模式下的准分子离子峰及其多级碎片信息, 与文献数据或部分对照品对照。结果: 同时鉴定了42个化合物, 包含16个生物碱和26个黄酮, 并对苦参中金雀花碱型和无叶豆碱型生物碱的质谱裂解规律进行了总结和归纳。结论: 此结果为苦参活性成分的快速鉴定奠定了基础。

中文关键词: 苦参 生物碱 黄酮 高效液相色谱多级质谱联用(HPLC-MS<sup>2</sup>) 结构鉴定

### Simultaneous characterization of two types of major active components in Kushen by high performance liquid chromatography coupled to multi-stage mass spectrometry

**Abstract:** In this study, a high performance liquid chromatography coupled with multi-stage mass spectrometry method was developed for simultaneous characterization of alkaloids and flavonoids, the main active components, in Kushen with diverse physical and chemical properties. Forty-two major constituents, including sixteen Kushen alkaloids and twenty-six Kushen flavonoids were tentatively identified. Additionally, useful and characteristic fragmentation pathways of two types of Kushen alkaloids, namely cytosine-type and sparteine-type, in positive ions mode were proposed and summarized, which would lay a foundation for the rapid identification of the active ingredients in traditional Chinese medicine Kushen.

**keywords:** Kushen alkaloids flavonoids high performance liquid chromatography coupled with multi-stage mass spectrometry Structural identification

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