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摘要: 建立HPLC法测定苦参中苦参碱和氧化苦参碱含量。色谱柱采用Aichrom NH2 (250×4.6mm, 5μm), 流动相为乙腈-乙醇-3%磷酸溶液(80:10:10), 流速: 1.0 mL/min, 检测波长: 210nm, 进样量为10μL, 柱温: 30℃。苦参碱在0.5-10μg/mL范围内有良好的线性关系($r=0.9998$), 氧化苦参碱在0.5-10μg/mL范围内有良好的线性关系($r=0.9997$)。苦参碱平均加标回收率为100.42%($n=5$), RSD为1.91%; 氧化苦参碱平均加标回收率为100.26%($n=5$), RSD为2.03%。该方法操作简单、重现性好、检测灵敏度、准确度高, 且样品分离效果好。本方法适用于苦参药材中苦参碱和氧化苦参碱的含量测定。

关键词: 高效液相色谱法, 苦参, 苦参碱, 氧化苦参碱

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Determination of matrine and oxymatrine in sophora flavescens by HPLC

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Abstract: A high performance liquid chromatography (HPLC) method was established to determine the contents of matrine and oxymatrine in *Sophora flavescens* Ait. Aichrom NH2 (250 × 4.6 mm, 5 μm), acetonitrile-ethanol-3% phosphoric acid (80:10:10) as the mobile phase, with a detection wavelength at 210 nm. The flow rate was 1.0 mL/min. The injection volume was 10 μL, and the column temperature was set at 30 °C. The calibration curves of matrine and oxymatrine were in good linearity over the range of 0.5-10 μg/mL ($r=0.9998$) and 0.5-10 μg/mL ($r=0.9997$). The average recovery were 100.42%, 100.26%, and RSD were 1.91%, 2.03% ($n=5$) for matrine and oxymatrine. The method is simple, and accurate, and can be used for the determination of matrine and oxymatrine in *Sophora flavescens* Ait.

Key words: HPLC, *Sophora flavescens*, Ait matrine, oxymatrine

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