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药对防风-羌活与其单味药挥发油共有组分的分析

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摘 要：利用气相色谱-质谱法分离检测药对防风-羌活、单味药防风和羌活的挥发油成分，采用交互移动窗口因子分析法对药对与单味药挥发油成分的共有组分进行分析，用质谱库结合保留指数进行定性，并采用总体积积分法定量。研究结果表明：防风、羌活和药对防风-羌活的挥发油分别定性79，70和74个成分，占总含量的85.81%，87.35%和86.76%；药对防风-羌活与防风、羌活的共有组分分别为44和53个；药对挥发油组分主要来自于单味药羌活。

关键字：防风；羌活；药对；气相色谱/质谱；交互移动窗口因子分析法

Comparison analysis of common volatile constituents in herbal pair radix saposhnikoviae-rhizoma seu radix notopterygii and its single herbs

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Abstract: Comparison analysis of common volatile constituents in herbal pair (HP) radix saposhnikoviae (RS)-rhizoma seu radix notopterygii (RSRN) and its single herbs was performed using two-dimensional gas chromatography-mass spectrometry (GC-MS) data coupled with alternative moving window factor analysis (AMWFA). In total, 79, 70 and 74 volatile chemical components in volatile oil of RS, RSRN and HP RS-RSRN were separately determined qualitatively and quantitatively, accounting for 85.81%, 87.35% and 86.76% of total contents of volatile oil in RS, RSRN and HP RS-RSRN respectively. The results show that there are 44 common volatile constituents in HP RS-RSRN and single herb RS, and 53 common volatile constituents in HP RS-RSRN and single herb RSRN. The experimental results also show that the volatile chemical components in HP RS-RSRN are mainly from single herb RSRN.

Key words:radix saposhnikoviae; rhizoma seu radix notopterygii; herbal pair; gas chromatography-mass spectrometry; alternative

moving window factor analysis

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