

实验研究

生长年限对窝儿七药材中主要成分的影响^{*}

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摘要: **目的** 通过检测窝儿七中槲皮素、4'-去甲基鬼臼毒素、鬼臼毒素、山柰酚4个活性成分的含量来观察不同年限窝儿七中主要成分变化。 **方法** 采用高效液相色谱法对窝儿七中槲皮素、4'-去甲基鬼臼毒素、鬼臼毒素、山柰酚四种化学成分的含量进行测定。 **结果** 1年至8年生窝儿七药材中, 鬼臼毒素在不同年限窝儿七药材中含量均最高, 六年生的药材中槲皮素、4'-去甲基鬼臼毒素、鬼臼毒素、山柰酚四种化学成分的综合含量最高。 **结论** 通过实验研究, 六年生的窝儿七主要成分含量高较高, 质量最佳, 为药材的栽培与应用以及质量规范的制订, 提供理论和试验依据。

关键词: 窝儿七; 高效液相色谱法; 含量测定

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Effect of Growth Years on the Main Components of Chinese Umbrellaleaf Rhizome and Root

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Abstract: **Objective** To observe changes of the main components at different ages in umbrellaleaf rhizome and root by measuring the contents of four active ingredients of quercetin, 4'-demethylpodophyllotoxin, podophyllotoxin and kaempferol. **Methods** Determination of four chemical constituents: quercetin, 4'-demethylpodophyllotoxin, podophyllotoxin and kaempferol was carried out by using High Performance Liquid Chromatography (HPLC). **Results** Podophyllotoxin was the most abundant in the 1-to-8-year-old umbrellaleaf rhizome and root. Quercetin, 4'-demethylpodophyllotoxin, podophyllotoxin and kaempferol were the most abundant in the 6-year-old umbrellaleaf rhizome and root. **Conclusion** Through experimental research, the six-year-old umbrellaleaf rhizome and root have the higher major contents and best quality, providing theoretical and experimental basis for the cultivation and application of medicinal materials and the formulation of quality specifications.

Keywords umbrellaleaf rhizome and root; HPLC; content determination

窝儿七为小檗科植物中华山荷叶 *Diphylla* *sinensis* Li 的根茎, 主产于陕西、四川、湖北等

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