

# HPLC 法同时测定宽筋藤中盐酸药根碱、 盐酸假巴马汀和盐酸巴马汀的含量

郑嘉琦<sup>1,2</sup> 黄丹莹<sup>2</sup> 程轩轩<sup>1</sup> 丁扬洲<sup>3</sup> 张清民<sup>3</sup> 邱文炜<sup>2\*</sup> 杨全<sup>1\*</sup>

(1. 广东药科大学, 广东 广州 510006 ;2. 惠州市食品药品检验所, 广东 惠州 516001;

3. 广东罗浮山国药股份有限公司, 广东 惠州 516133)

**摘要:**目的 采用高效液相色谱法(HPLC)同时测定宽筋藤药材中盐酸药根碱、盐酸假巴马汀和盐酸巴马汀三种成分的含量。方法 使用 OMNI C18 色谱柱(4.6 mm×250 mm, 5 μm);流动相为乙腈-2.5 mmol/L 庚烷磺酸钠和 50 mmol/L 磷酸二氢钾(含三乙胺 0.14 %)(22:78);检测波长 345 nm;柱温 40 ℃;流速 1.0 mL/min。结果 盐酸药根碱、盐酸假巴马汀和盐酸巴马汀分别在 1.872 ~ 56.16 μg/mL、8.37 ~ 167.4 μg/mL、2.014 ~ 60.42 μg/mL 浓度范围内具有良好的线性;平均加样回收率依次为:102.19 % (RSD = 1.70 %)、102.89 % (RSD = 1.09 %)、102.38 % (RSD = 1.17 %)。结论 建立的分析方法准确、可靠,重复性好,可用于宽筋藤药材的质量控制。

**关键词:**宽筋藤;HPLC;盐酸药根碱;盐酸假巴马汀;盐酸巴马汀;含量测定

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## Simultaneous determination of jatrorrhizine , pseudopalmantine and palmatine chloride in *Tinospora sinensis* by high performance liquid chromatography

Zheng Jiaqi, Huang Danying, Cheng Xuanxuan, Ding Yangzhou,

Zhang Qingmin, Qiu Wenwei, Yang Quan

(1. Pharmaceutical University of Guang dong province, GuangZhou 510006, China;

2. Huizhou Institute for food and drug control, HuiZhou 516001, China;

3. Guangdong Luofushan Chinese medicine incorporated company, HuiZhou 516133, China)

**Abstract Objective** A high performance liquid chromatography (HPLC) method was developed to determine jatrorrhizine, pseudopalmantine and palmatine chloride in *Tinospora sinensis*. **Methods** The chromatographic separation was performed on OMNI C18 column (4.6 mm × 250 mm, 5 μm) with the gradient elution by acetonitrile -2.5 mmol/L sodium heptane and 50 mmol/L potassium dihydrogen phosphate (containing 0.14 % triethylamine) (22:78) at a flow rate of 1.0 mL/min. The detection wavelength was set at 345 nm, column temperature was maintained at 40 ℃. **Results** The linear ranges of jatrorrhizine, pseudopalmantine and palmatine chloride were 1.872 ~ 56.16 μg/mL, 8.37 ~ 167.4 μg/mL, 2.014 ~ 60.42 μg/mL respectively. The average recovery were 102.07 % (RSD = 0.02 %); 99.91 %

\* 通讯作者:邱文炜(1963-),男,主任药师,主要从事药品检验研究。E-mail:2262520694@qq.com

杨全(1972-),男,博士,教授,主要从事中药资源研究。E-mail:yangquan7208@vip.163.com