



邵晶, 郭玫, 余晓晖, 赵磊, 段文达. 甘肃牛蒡不同部位总木脂素及牛蒡苷的含量测定[J]. 中国现代应用药学, 2012, 29(6): 506-508

甘肃牛蒡不同部位总木脂素及牛蒡苷的含量测定

Determination of Total Lignanoids and Arctinin in Different Parts of *Arctium Lappa* L

投稿时间: 2011-05-02 最后修改时间: 2011-11-01

DOI:

中文关键词: [牛蒡](#) [总木脂素](#) [牛蒡苷](#) [紫外分光光度法](#) [高效液相色谱法](#)

英文关键词: [Arctium lappa L](#) [total lignanoids](#) [arctiin](#) [UV](#) [HPLC](#)

基金项目: 甘肃省青年科技基金计划(1107RJYA019)

作者	单位	E-mail
邵晶^{1,2} , 郭玫¹ , 余晓晖^{1*} , 赵磊^{1,2} , 段文达¹	1. 甘肃中医学院, 兰州 730000 ; 2. 甘肃省高校中(藏)药化学与质量研究省级重点实验室, 兰州 730000	yxh123@sina.com

摘要点击次数: 151

全文下载次数: 179

中文摘要:

目的 对甘肃临洮产牛蒡不同部位所含总木脂素及牛蒡苷含量进行测定。方法 利用牛蒡子中总木脂素与牛蒡苷在同一峰位有吸收的特点,以牛蒡苷为对照品,以280 nm为测定波长,紫外分光光度法测定牛蒡不同部位总木脂素含量,同时采用HPLC测定其牛蒡苷含量。结果 牛蒡苷浓度在0.005 7~0.079 5 mg·mL⁻¹内,吸收度与浓度呈良好线性关系,线性方程为 $Y=9.244 9X+0.017 2$, $r=0.999 6$,平均回收率98.2%,RSD=1.61%。以牛蒡苷计,牛蒡子中总木脂素含量为12.27%,牛蒡根、牛蒡叶、牛蒡茎中总木脂素的含量均在6%左右。牛蒡子中牛蒡苷的含量为6.19%($n=3$),牛蒡根、牛蒡茎、牛蒡叶样品均未检测到牛蒡苷。结论 采用紫外分光光度法和HPLC分别测定牛蒡不同部位总木脂素和牛蒡苷含量的方法快速、简捷,可全面控制牛蒡的质量。

英文摘要:

OBJECTIVE To determine the total lignanoids and arctinin in different parts of *Arctium lappa* L harvested from Lintao, Gansu. METHODS According to total lignanoids and arctiin in the same peak absorption, the absorption value of the sample at 280 nm was measured to calculate content directly using arctiin as reference substance. And the content of arctiin was measured by HPLC. RESULTS The calibration curve had good linear relationship in the range of 0.005 7-0.079 5 mg·mL⁻¹, linear equation: $Y=9.244 9X+0.017 2$ ($r=0.999 6$). The average recovery of arctiin was 98.2%, and the RSD value was 1.61%. The content of total lignanoids(in the amount of arctiin) in seed was 12.27%, and other parts of *Arctium lappa* L were all around 6%. The content of arctin seed was 6.19%($n=3$), and the arctiin of root, leaf and stem were not found in the method. CONCLUSION The methods are simple, accurate and specific, can be used for determination of the total lignanoids and arctinin in different part of *Arctium lappa* L.

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

[关闭](#)