

论文

中药大黄的綜合研究 II. 蒽醌衍生物的紙上层析

苏学夏;陈琼华

天津医学院生物化学教研组

摘要:

本文研究了中药大黄中蒽醌衍生物紙上层析的扩展剂体系和其他条件. 实验试用了33种扩展剂体系, 我们选择了8种效果较好者, 其中以四氯化碳-苯-水体系为最好. 以此改进的紙上层析法进行了不同品种大黄中蒽醌衍生物含量的测定, 实验结果表明, 不同品种及同品种不同部位的大黄中各种蒽醌衍生物的含量差异很大. 蒽醌衍生物总量及致泻与抗菌有效成分, 都以西宁大黄为最高.

关键词:

STUDIES OF CHINESE RHUBARB II. PAPER CHROMATOGRAPHY OF ANTHRAQUINONE DERIVATIVES

SU HSUEH-LIANG AND CHEN CHIUNG-HUA

Abstract:

Paper chromatography of anthraquinone derivatives in Chinese rhubarb was investigated. It was observed that: 1. Carl Schleicher & Schule No. 2043b filter paper was shown to be superior to other grades used; 2. Of the 33 different solvent-systems tested, 8 were confirmed to be adaptable, of which a new one, carbon tetraehloride: benzene: water was found best; 3. The temperature effects on paper chromatography of anthraquinone derivatives were of little significance. Only R_f values of emodin and aloee-modin slightly altered as temperature changed; 4. Horizontal technique with circular filter paper of 30 cm in diameter was considered to be more convenient than the ascending technique. The contents of anthraquinone derivatives in different species of Chinese rhubarb were determined quantitatively by the improved paper chromatography method. The results were as follows: 1. All the specimens of the same species examined exhibited approximately equal contents of anthraquinone derivatives, but those from different parts of the same species differed greatly. Duration of storage seemed to have no effect on the contents. 2. The anthraquinone derivatives varied greatly in quantity with each species: (i) Shih-Ning rhubarb (*Rheum palmatum*) had a higher content with a total value of 3.44—3.47%, while the Liang-Chou species (probably *Rheum Tanguticum*) contained only 1.24%. (ii) Shih-Ning rhubarb had more emodin but less aloee-modin, while the Liang-Chou species possessed a considerable amount of combined rhein but was devoid of aloee-modin and free rhein. (iii) Shih-Ning rhubarb showed a higher content of active principles of purgative and antibacterial action. It was, therefore, concluded that the Shih-Ning rhubarb was the best grade among those studied.

Keywords:

收稿日期 1962-02-02 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

参考文献:

本刊中的类似文章

文章评论 (请注意: 本站实行文责自负, 请不要发表与学术无关的内容! 评论内容不代表本站观点.)

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF (397KB)
- ▶ [HTML全文]
- ▶ 参考文献

服务与反馈

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

本文关键词相关文章

本文作者相关文章

- ▶ 苏学夏
- ▶ 陈琼华

PubMed

- ▶ Article by
- ▶ Article by

反馈人	<input type="text"/>	邮箱地址	<input type="text"/>
反馈标题	<input type="text"/>	验证码	<input type="text" value="1148"/>