



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 54 卷 第 3 期 (总第 734 期)

2023 年 2 月 12 日出版

半月刊

1970 年 1 月创刊

主 管

天津药物研究院

主 办

天津药物研究院 (www.tjipr.com)

中 国 药 学 会 (www.cpa.org.cn)

编辑出版

《中草药》杂志编辑部

地址: 天津市滨海新区滨海科技园

惠仁道 306 号

邮编: 300462

电话: 022-27474913 23006821

网址: www.中草药杂志社.中国

www.tiprpress.com

E-mail: zcy@tiprpress.com

国际标准连续出版物号

ISSN 0253-2670

国内统一连续出版物号

CN 12-1108/R

主 编 刘昌孝 汤立达

执行主编 陈常青

目 次

· 专 论 ·

- 677 从市场抽检角度探讨中药配方颗粒质量标准相关问题

王 赵, 金红宇, 马双成

· 化学成分 ·

- 688 没药中 2 个新倍半萜类化合物

梁乃允, 黄惠铭, 王超超, 裴钰洁, 王勃开, 杜 梦, 霍会霞
宋月林, 郑 姣, 赵云芳, 李 军

- 695 栽培奇楠沉香化学成分及其抗炎活性研究

张 琳, 王 昊, 董文化, 李 薇, 云翠鸿, 袁靖喆, 蔡彩虹
吴 妃, 梅文莉, 戴好富, 李震宇

- 704 茶藤生物碱成分的分离鉴定及抗肿瘤活性研究

何琴慧, 姜雨辰, 王文玲, 李丽梅

- 711 基于 HPLC 指纹图谱和 LC-Q-TOF/MS 的加味黄芪桂枝五物汤化学成分研究

汤书婉, 李新亮, 马 莉, 郑云枫, 李存玉, 成小兰
曹 鹏, 彭国平

· 药剂与工艺 ·

- 722 甘草酸替代胆固醇构建载雷公藤甲素的脂质纳米粒的适宜性研究

徐资怡, 陈佳美, 钟雪梅, 吴亿晗, 章津铭

- 734 大孔吸附树脂结合斑马鱼评价富集纯化补骨脂总黄酮的工艺研究

罗利霞, 葛 静, 李佳妍, 李彦东, 宋 捷, 石子琪
宁 青, 韦英杰

- 746 经典名方当归四逆汤物质基准指纹图谱及关键质量属性量值传递规律研究

储烟阁, 匡艳辉, 严曾豪, 王德勤, 郭海彪, 张偲偲, 刘晓秋

- 756 经典名方阳和汤基准样品量值传递分析

张泽康, 王昌海, 赵玥琪, 张 晴, 席 钺, 张馨雨, 孙 萌
董 爽, 杜守颖, 白 洁, 陆 洋

- 768 基于熵权法评价干燥方法对经典名方华盖散基准样品质量属性的影响

王 冉, 杨凌宇, 吴志峰, 杨 婧, 张爱玲, 罗晓健
刘 微, 饶小勇

- 779 根皮素聚乙二醇-聚乳酸纳米胶束的制备、表征及口服药动学研究

董丹丹, 焦红军, 郝海军

- 789 基于水-醇双提方式下中药复方粉末影响颗粒流动性的关键物性参数辨识研究

安双凤, 闫 明, 王团结, 张 欣, 王振中, 肖 伟

· 药理与临床 ·

- 798 醋制商陆正丁醇部位降低肝肾毒性作用机制研究

丁 锐, 王奎龙, 沈梦丹, 吴 鑫, 吴国清, 曹 岗

- 808 基于网络药理学和动物实验探究荆防颗粒对高尿酸血症的治疗作用及机制

尉雅洁, 刘明飞, 孙成宏, 王 伟, 肖 贺, 程国良, 陈 颖
田 瑞, 王峰涛, 谢 燕

- 817 生物活性导向分离山楂炭止血活性成分及其作用机制研究
- 825 基于 SNAIL 信号通路及肠道菌群研究密点麻蜥抑制胃癌肝转移的作用机制

白 星, 程翻娥, 杨长沅, 李 铮, 李卫强



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 54 卷 第 3 期 (总第 734 期)

2023 年 2 月 12 日出版

广告合作

中草药杂志社媒体运营部

电话: 022-23006868 23006895

印 刷

天津市恒远印刷有限公司

国内发行

天津市邮政局

订 阅

全国各地邮政局

国外发行

中国国际图书贸易集团有限公司

(100044 北京 399 信箱)

国内邮发代号

6-77

国外邮发代号

M221

定价

每期 60.00 元 全年 1440.00 元

广告发布登记号

BH 2020-01

英文责任编辑

王祎然

本期责任编辑

郑礼胜

- 834 基于 16S rRNA 测序技术研究染料木素和大豆苷元对大鼠肠道菌群的影响 高葱葱, 葛 稳, 方怡超, 刘筱婧, 陈卫东, 周婷婷
- 841 人参皂苷 Rg₁通过调控 AMPK/NLRP3 通路介导的细胞焦亡抑制大鼠肺纤维化研究 邓宏哲, 陈 昆, 李 鹏, 朱清海
- 849 基于甜味受体整合中药“效味”和“滋味”探索玉竹甘味药性物质基础 李 婷, 邓碧莲, 欧阳征海, 柳 婷, 吴 璐, 杨华生

• 数据挖掘与循证医学 •

- 859 儿童中成药在呼吸和消化系统疾病中的用药特点与成分特征 李 玲, 曾敬其, 杨艳君, 朱毛毛, 杨 冰, 贾晓斌, 封 亮
- 868 基于 Apriori 算法的含丹参-当归药对的方剂用药特点与规律分析 陈 范, 宿树兰, 郭 龙, 郑玉光, 朱 悦, 尚尔鑫, 段金殿, 刘 峰
- 877 基于拓扑指数的 QSAR 法探讨脑泰方中抗脑血栓关键活性成分簇 张玉超, 钟鹏英, 夏 凡, 李世雄, 李璎峪, 葛金文, 刘文龙, 张喜利

• 药材与资源 •

- 886 汉麻聚酮合酶基因家族成员鉴定与表达分析 朱雪雯, 米要磊, 孟祥霄, 陈伟强, 王思凡, 曹 雪, 陈士林, 徐志超, 苏 畅, 孙 伟, 万会花
- 898 基于转录组信息的甘松 MADS-box 转录因子家族分析 崔 琪, 俸明康, 丰日落, 王 涛, 张绍山, 李 莹, 陈 晨, 刘 圆
- 907 川芎基因组 survey 测序及其特征分析 毛常清, 沙秀芬, 黄 静, 陶 珊, 彭 芳, 李 群, 张 超, 袁 灿
- 915 不同生长年限蒙古黄芪转录组学分析及三萜皂苷合成关键基因挖掘 王 祥, 王育朋, 安 佳, 王七龙, 井亚江, 黄建萍, 张 岗, 彭 亮, 颜永刚
- 926 滇龙胆居群遗传多样性和遗传结构分析 沈 涛, 虞 泓, 王元忠

• 综 述 •

- 939 高品质道地药材的科学内涵 孟祥才, 邓代千, 杜虹韦, 关 瑜
- 948 中药抑制结肠癌血管生成的作用机制研究进展 张转红, 刘 婷, 高飞云, 王彦钧, 张育贵, 孙宇靖, 李越峰
- 956 植物精油及其活性成分防治结直肠癌作用机制的研究进展 刘 宏, 李 佳, 林俊芝, 张定堃, 杨 明, 郑 川
- 966 姜黄素治疗肾间质纤维化分子机制研究进展 陈欠欠, 朱凤阁, 陈香美
- 976 毛诃子化学成分和药理作用的研究进展及其质量标志物 (Q-Marker) 预测分析 李雪冬, 罗晓敏, 马 箴, 吴 炎, 龚普阳
- 991 当归四逆汤化学成分、药理作用和临床应用的研究进展及质量标志物 (Q-Marker) 的预测分析 王明慧, 马 飞, 田崇娅, 丁语晨, 徐园园, 王加锋, 魏永利, 辛义周
- 1002 黄芪甲苷抗肿瘤作用机制研究进展 孟丹丹, 李宗新, 贾瑞雪, 包兴勋, 王万涛, 宋素花
- 1010 牛蒡多糖调控糖脂代谢的研究进展 曾 凤, 尹震花, 申 丽, 黄午阳

本刊投稿须知见《中草药》2023, 54(1): 346-348.

期刊基本参数: CN 12-1108 R * 1970 * sm * A4 * 240 * zh * P * ¥ 60.00 * 3000 * 35 * 2023 - 03

CHINESE TRADITIONAL AND HERBAL DRUGS

Vol. 54 No. 3 Feb. 2023

Chinese Traditional and Herbal Drugs

(Semimonthly)

Founded in January, 1970

Supervised by

Tianjin Institute of Pharmaceutical Research

Sponsored by

Tianjin Institute of Pharmaceutical Research

(www.tjipr.com)

Chinese Pharmaceutical Association

(www.cpa.org.cn)

Edited and Published by

Editorial Office of Chinese Traditional

and Herbal Drugs

Address: 306# Huiyendao, Binhai District,
Tianjin, China

Post Code: 300462

Tel: +86-22-27474913

Fax: +86-22-23006821

http: // www.中草药杂志社.中国

www.tiprpress.com

E-mail: zcy@tiprpress.com

Standard Number

ISSN 0253-2670

CN 12-1108/R

CODEN CTYAD8

Editor-in-chief

LIU Chang-xiao TANG Li-da

Executive Editor-in-chief

CHEN Chang-qing

Contents

• Special Topic •

- 677 Discussion on quality standard of traditional Chinese medicine formula granules from perspective of sampling inspection
WANG Zhao, JIN Hong-yu, MA Shuang-cheng

• Chemical Constituents •

- 688 Two new sesquiterpenoids from resin of *Commiphora myrrha*
LIANG Nai-yun, HUANG Hui-ming, WANG Chao-chao, PEI Yu-jie, WANG Bo-kai, DU Meng, HUO Hui-xia, SONG Yue-lin, ZHENG Jiao, ZHAO Yun-fang, LI Jun
- 695 Chemical constituents of cultivated “Qi-Nan” agarwood and their anti-inflammatory activity
ZHANG Lin, WANG Hao, DONG Wen-hua, LI Wei, YUN Cui-hong, YUAN Jing-zhe, CAI Cai-hong, WU Fei, MEI Wen-li, DAI Hao-fu, LI Zhen-yu
- 704 Isolation and identification of alkaloids from *Melodinus magnificus* and their antitumor activity
HE Qin-hui, JIANG Yu-chen, WANG Wen-ling, LI Li-mei
- 711 Research on chemical composition of Jiawei Huangqi Guizhi Wuwu Decoction based on HPLC fingerprint and LC-Q-TOF/MS
TANG Shu-wan, LI Xin-liang, MA Li, ZHENG Yun-feng, LI Cun-yu, CHENG Xiao-lan, CAO Peng, PENG Guo-ping

• Pharmaceutics and Technology •

- 722 Study on suitability to construct lipid nanoparticles loaded with triptolide using glycyrrhizic acid as alternative of cholesterol
XU Zi-yi, CHEN Jia-mei, ZHONG Xue-mei, WU Yi-han, ZHANG Jin-ming
- 734 Enrichment and purification process of total flavonoids from *Psoraleae Fructus* by macroporous adsorptive resin combined with zebrafish evaluation
LUO Li-xia, GE Jing, LI Jia-yan, LI Yan-dong, SONG Jie, SHI Zi-qi, NING Qing, WEI Ying-jie
- 746 HPLC fingerprint of classic prescription Danggui Sini Decoction and quantity transfer law of key quality attributes
CHU Yan-tian, KUANG Yan-hui, YAN Zeng-hao, WANG De-qin, GUO Hai-biao, ZHANG Si-si, LIU Xiao-qiu
- 756 Analysis on quality value transfer of benchmark sample of classical prescription Yanghe Decoction
ZHANG Ze-kang, WANG Chang-hai, ZHAO Yue-ying, ZHANG Qing, XI Cheng, ZHANG Xin-yu, SUN Meng, DONG Shuang, DU Shou-ying, BAI Jie, LU Yang
- 768 Effect of drying method on quality attribute of benchmark samples of Huagai Powder Powder based on entropy weight method
WANG Ran, YANG Ling-yu, WU Zhi-feng, YANG Jing, ZHANG Ai-ling, LUO Xiao-jian, LIU Wei, RAO Xiao-yong
- 779 Preparation and characterization of phloretin-mPEG-PLA nanomicelles and oral pharmacokinetic study
DONG Dan-dan, JIAO Hong-jun, HAO Hai-jun
- 789 Study on identification of key physical parameters of traditional Chinese medicine compound powder affecting particle fluidity based on water alcohol double extraction method
AN Shuang-feng, YAN Ming, WANG Tuan-jie, ZHANG Xin, WANG Zhen-zhong, XIAO Wei

• Pharmacological Studies and Clinical Observations •

- 798 Mechanism of *n*-butanol position of vinegar-processed *Phytolacca acinosa* on reducing hepatorenal toxicity
DING Rui, WANG Kui-long, SHEN Meng-dan, WU Xin, WU Guo-qing, CAO Gang
- 808 Therapeutic effect and mechanism of Jingfang Granules on hyperuricemia based on network pharmacology and animal experiments validation
YU Ya-jie, LIU Ming-fei, SUN Cheng-hong, WANG Wei, XIAO He, CHENG Guo-liang, CHEN Ying
- 817 Bioactivity-guided isolation of hemostatic active component in hawthorn charcoal and its mechanism
TIAN Rui, WANG Zheng-tao, XIE Yan
- 825 Mechanism of *Eremias multiocellata* on inhibiting gastric cancer with liver metastasis based on SNAIL signaling pathway and gut microbiota
BAI Xing, CHENG Fan-e, YANG Chang-yuan, LI Zheng, LI Wei-qiang

Chinese Traditional and Herbal Drugs

(Semimonthly)

Founded in January, 1970

Advertising cooperation

Department of Media Operations, Tianjin

Press of Chinese Herbal Medicines

Tel: (022)23006868 23006895

Printed by

Tianjin Hengyuan Printing Co., Ltd.

Distribution

Tianjin Post Office

Subscription Domestic

Local Post Office

Subscription Overseas

China International Book Trading Corporation,

PO Box 399, Beijing 100044, China

Advertising Registration Number

BH 2020-01

Publication Date

Feb. 12, 2023

Editor in Charge of English

WANG Yi-ran

Editor in Charge of This Issue

ZHENG Li-sheng

- 834 Effect of genistein and daidzein on gut microbiota in rats based on 16S rRNA sequencing
GAO Cong-cong, GE Wen, FANG Yi-chao, LIU Xiao-jing, CHEN Wei-dong, ZHOU Ting-ting
- 841 Ginsenoside Rg₁ inhibits pulmonary fibrosis in rats by regulating AMPK/NLRP3 pathway-mediated pyroptosis
DENG Hong-zhe, CHEN Kun, LI Peng, ZHU Qing-hai
- 849 Exploration on material basis of sweet medicinal properties of *Polygonatum odoratum* by integrating “effective taste” and “taste” of traditional Chinese medicine based on sweet receptors
LI Ting, DENG Bi-lian, OUYANG Zheng-hai, LIU Ting, WU Lu, YANG Hua-sheng
- Data Mining and Evidence-Based Medicine •
- 859 Medication and component characteristics of Chinese patent medicines in children with respiratory and digestive system diseases
LI Ling, ZENG Jing-qi, YANG Yan-jun, ZHU Mao-mao, YANG Bing, JIA Xiao-bin, FENG Liang
- 868 Analysis on characteristics and regularity of formulas containing *Salviae Miltiorrhizae Radix* et *Rhizoma-Angelicae Sinensis Radix* herb pairs based on Apriori algorithm
CHEN Fan, SU Shu-lan, GUO Long, ZHENG Yu-guang, ZHU Yue, SHANG Er-xin, DUAN Jin-ao, LIU Feng
- 877 Exploration of key active component clusters in Naotaifang for anticerebral thrombosis by QSAR method based on topological index
ZHANG Yu-chao, ZHONG Peng-ying, XIA Fan, LI Shi-xiong, LI Ying-yu, GE Jin-wen, LIU Wen-long, ZHANG Xi-li
- Medicinal Materials •
- 886 Identification and expression analysis of polyketide synthase gene family in *Cannabis sativa*
ZHU Xue-wen, MI Yao-lei, MENG Xiang-xiao, CHEN Wei-qiang, WANG Si-fan, CAO Xue, CHEN Shi-lin, XU Zhi-chao, SU Chang, SUN Wei, WAN Hui-hua
- 898 Analysis of MADS-box transcription factor family based on transcriptome sequencing in *Nardostachys jatamansi*
CUI Qi, FENG Ming-kang, FENG Ri-luo, WANG Tao, ZHANG Shao-shan, LI Ying, CHEN Chen, LIU Yuan
- 907 Genome survey and characteristic analysis of *Ligusticum chuanxiong*
MAO Chang-qing, SHA Xiu-fen, HUANG Jing, TAO Shan, PENG Fang, LI Qun, ZHANG Chao, YUAN Can
- 915 Transcriptomic analysis of *Astragalus mongolicum* from different years and mining of key genes for synthesis of active components
WANG Xiang, WANG Yu-peng, AN Jia, WANG Qi-long, JIN Ya-jiang, HUANG Jian-ping, ZHANG Gang, PENG Liang, YAN Yong-gang
- 926 Population genetic diversity and genetic structure of *Gentiana rigescens*
SHEN Tao, YU Hong, WANG Yuan-zhong
- Reviews •
- 939 Scientific connotation of high-quality genuine medicinal materials
MENG Xiang-Cai, DENG Dai-qian, DU Hong-wei, GUAN Yu
- 948 Research progress on mechanism of traditional Chinese medicine inhibiting colon cancer angiogenesis
ZHANG Zhuang-hong, LIU Ting, GAO Fei-yun, WANG Yan-jun, ZHANG Yu-gui, SUN Yu-jing, LI Yue-feng
- 956 Research progress on mechanism of plant essential oils and their active components against colorectal cancer
LIU Hong, LI Jia, LIN Jun-zhi, ZHANG Ding-kun, YANG Ming, ZHENG Chuan
- 966 Research progress on molecular mechanism of curcumin in treatment of renal interstitial fibrosis
CHEN Qian-qian, ZHU Feng-ge, CHEN Xiang-mei
- 976 Research progress on chemical constructions and pharmacological effects of *Terminaliae Belliricae Fructus* and predictive analysis of its quality markers
LI Xue-dong, LUO Xiao-min, MA Zheng, WU Yan, GONG Pu-yang
- 991 Research progress on chemical constituents, pharmacological effects and clinical applications of Danggui Sini Decoction and predictive analysis of its quality marker (Q-Marker)
WANG Ming-hui, MA Fei, TIAN Chong-ya, DING Yu-chen, XU Yuan-yuan, WANG Jia-feng, WEI Yong-li, XIN Yi-zhou
- 1002 Research progress on antitumor mechanism of astragaloside IV
MENG Dan-dan, LI Zong-xin, JIA Rui-xue, BAO Xing-xun, WANG Wan-tao, SONG Su-hua
- 1010 Research progress of *Arctium lappa* polysaccharide on regulation of glycolipid metabolism
ZENG Feng, YIN Zhen-hua, SHEN Li, HUANG Wu-yang