



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 55 卷 第 20 期 (总第 775 期)

2024 年 10 月 28 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.tjpr.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.tiprpress.com

www.中草药杂志社.中国

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

执行主编 陈常青

目 次

• 化学成分 •

- 6831 马鞭草中三萜类成分的研究
谢安琦, 李 洁, 梁永红, 刘建群, 彭财英, 舒积成
- 6838 河口五层龙石油醚部分的化学成分研究
许浩楠, 王浩鑫, 陈 林, 谢红茜, 郝俊杰, 丁祖霄
罗艳秋, 江志勇
- 6845 瓜蒌、瓜蒌皮、瓜蒌子的体内代谢产物鉴定比较分析
张潇予, 夏凯柔, 宋雪瑜, 刘 培, 刘玉萍, 刘谊民
陈 彦, 张黄琴
- 6862 基于生物合成途径结合 LC-MS 技术快速发现近缘稀少植物星毛冠盖
藤中化学成分 陆国寿, 胡筱希, 黄周锋, 张赞赞, 黄建歆

• 药剂与工艺 •

- 6874 顶空固相微萃取-气相色谱-质谱结合 Heracles NEO 超快速气相电子
鼻分析太子参不同加工品的挥发性成分
刘自强, 胡 培, 韩童童, 邵 坚, 马绍龙, 周鋈剑, 湛瑞林
- 6889 基于超高效液相色谱/四级杆-静电场轨道阱质谱的芩百清肺浓缩丸
质量控制方法研究
辛 杨, 于 洋, 王海军, 杨清竹, 王伟明
- 6902 宣肺败毒颗粒中 14 种成分的 UHPLC-Q-MS 含量测定方法研究
胡晨秀, 王芝艳, 王书芳, 邵 青
- 6909 红花黄色素纳米柔性脂质体的制备研究
张雅筠, 程玉钊, 李伟泽, 赵琳儒, 李 杰, 蒋境兴
倪 艳, 郝旭亮
- 6918 微型化介质研磨法制备大黄素纳米混悬剂及其体外评价
王梦琳, 胡宇峰, 马思媛, 朱海婷, 张俊丽, 张新宁, 王慧楠
姜明瑞, 吴 玥, 王英姿
- 6929 基于电子仿生感官技术的山楂不同炮制品颜色、味道变化研究
曲珍妮, 吕 畅, 毕 钰, 冯金鹰, 朱娟娟, 周 巧, 卢 琪
石典花, 戴衍朋

• 药理与临床 •

- 6940 荔枝核总黄酮调控 Skp2-p21/p53 信号轴抑制非小细胞肺癌的增殖和
转移
任 红, 李小兰, 蒋 琳, 韩瑶瑶, 廖韵诺, 付杰军, 郭宏伟
- 6953 基于 System Xc-/GPX4 通路探讨白术内酯 I 对 2 型糖尿病大鼠胰岛细
胞铁死亡的作用机制
田朝阳, 张碧激, 马雷雷, 李 超, 王静雅, 韩茹杰, 李嘉钰
张文丽, 李继安
- 6964 气液交互法构建患者来源的结直肠癌类器官模型及其在扶正类中药
多糖活性评价中的应用
黄楚月, 冷 强, 周炳文, 王 培, 路悦阳, 王 璐, 樊志敏
- 6973 菊花提取物对大鼠缺血性脑卒中后肌肉萎缩的改善作用
祁 琥, 田 丹, 张雄伟, 高元琳, 张泽洋, 曾 南, 杨若聪
- 6983 基于 SCFAs/5-HT 途径研究桃胶粉对过食“辛辣醇酒”致便秘小鼠
的作用 张文隆, 魏柯健, 董子墨, 陈钰岚, 吕圭源, 苏 洁
- 6995 基于网络药理学及实验验证探讨萆薢止带方治疗外阴阴道假丝酵母
菌病的作用机制 陈志霞, 陈思琪, 冯淑仪



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 55 卷 第 20 期 (总第 775 期)

2024 年 10 月 28 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

封面图片提供

黎 舒

英文责任编辑

王祎然

本期责任编辑

郑礼胜

• 数据挖掘与循证医学 •

- 7006 基于“成分群协同”与“生物过程网络”解析都梁方治疗偏头痛作用机制
李如萍, 吴彦欣, 马 川, 李燕燕, 何小芳, 陈卓平, 傅超美
何 瑶, 骆 勇
- 7021 基于量效关系从“中药-成分-靶点”探讨大黄、枳实和厚朴不同配比的疗效作用机制
游海心, 杨晓艳, 罗奕宇, 曾 光, 贺福元, 丁长松
- 7033 基于 Citespace 和 VOSviewer 可视化分析沉香研究的发展态势
何国浩, 杨 云, 曾 琳, 许利嘉, 魏建和, 肖培根
- 7047 基于文献计量学的沙棘多糖研究现状与发展动态的可视化分析
凌 娜, 郭春秋, 田海燕, 王子豪, 王祺瑶, 高铭泽, 汲晨锋

• 药材与资源 •

- 7062 巴戟天 AP2/ERF 基因家族的全基因组鉴定及生物信息学分析
陈纪佟, 刘楚弦, 韩逸飞, 潘芸燕, 段礼新, 季爱加
- 7072 三叶青烟草花叶病毒 lncRNA 测序鉴定、蛋白表达及其序列分析
洪森荣, 徐燕萍, 郭依瑶, 章 成
- 7085 不同产地蒙古黄芪中 12 种药效成分含量差异及其与地理分布和气候因子相关性分析
李新星, 刘凤波, 王雅净, 周 易, 陈万金, 阳定菲, 聂昕伟
赵 婷, 张 媛, 魏胜利
- 7093 富民枳叶绿体基因组密码子偏好性分析
徐 荣, 宋文政, 乔振升, 张晓琳, 于国栋, 何承忠, 纵 丹
- 7101 土壤消毒和添加有机物料对连作条件下土壤性质与三七生长及发病率的影响
马玉丹, 杨启良, 袁 勇, 苗为伟

• 综 述 •

- 7110 黄精炮制原理解析及工艺优化策略
李得天, 封 亮, 贾晓斌, 杨 冰
- 7122 斑马鱼心血管疾病模型的建立及中药干预作用研究进展
李嘉欣, 白立鼎, 李 琳, 王炎炎, 王 婷, 潘桂湘, 李玉红
- 7132 姜黄素拮抗重金属镉、铅毒性机制的研究进展
高汶静, 梅雪婷, 郑西雨, 彭俊伟, 麦智聪, 许东晖
- 7144 基于药性特征的中药挥发油透皮促渗“热者易效”规律与机制
陈 军, 何天雨, 燕 妮, 段金庭
- 7155 基于肠道菌群代谢的中药干预流感引起的肠菌免疫失调研究进展
刘洪涛, 孙启慧, 杨 勇, 倪 艳, 容 蓉
- 7165 党参内生菌的研究进展
刘晓玲, 马海棠, 刘文静, 郑婷月, 黄钰芳, 杨扶德
- 7172 基于“引经理论”探讨中药调控 SDF-1/CXCR4 信号通路影响骨髓间充质干细胞归巢及分化的科学内涵
孙 钰, 刘恩旭, 李兆勇, 杨少锋
- 7180 细胞焦亡在糖尿病及其并发症中的作用及中药干预进展
陈志超, 林巧妮, 杨宇峰, 石 岩
- 7192 分子生物学技术在薯蓣属植物中的应用研究进展
朱绍杰, 王宇飞, 于 丹, 都晓伟

本刊投稿须知见《中草药》2024, 55(1): 354-356.

期刊基本参数: CN 12-1108 R * 1970 * sm * A4 * 240 * zh * P * ¥ 60.00 * 3000 * 34 * 2024-20

CHINESE TRADITIONAL AND HERBAL DRUGS

Vol. 55 No. 20 Oct. 2024

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# Huirendao, 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 Changxiao

Executive Editor-in-chief

CHEN Changqing

Contents

• Chemical Constituents •

- 6831** Studies on triterpenoids from *Verbena officinalis*
XIE Anqi, LI Jie, LIANG Yonghong, LIU Jianqun, PENG Caiying, SHU Jicheng
- 6838** Chemical constituents from petroleum ether extract of *Salacia obovatilimba*
XU Haonan, WANG Haoxin, CHEN Lin, XIE Hongxi, HAO Junjie, DING Zuxiao, LUO Yanqiu, JIANG Zhiyong
- 6845** Identification and comparative analysis of metabolites in rats after oral administration of *Trichosanthis Fructus*, *Trichosanthis Pericarpium* and *Trichosanthis Semen*
ZHANG Xiaoyu, XIA Kairou, SONG Xueyu, LIU Pei, LIU Yuping, LIU Yimin, CHEN Yan, ZHANG Huangqin
- 6862** Rapid identification of chemical constituents in close relative lacking plants *Pileostegia tomentella* based on biosynthetic pathway combined with LC-MS technology
LU Guoshou, HU Xiaoxi, HUANG Zhoufeng, ZHANG Yunyun, HUANG Jianyou

• Pharmaceutics and Technology •

- 6874** Analysis of volatile components of different processed products of *Pseudostellariae Radix* by HS-SPME-GC-MS combined with ultra-fast gas phase electronic nose
LIU Ziqiang, HU Pei, HAN Tongtong, SHAO Jian, MA Shaolong, ZHOU Yunjian, CHEN Ruilin
- 6889** Quality control of Qinbai Qingfei Concentrated Pills based on UHPLC/Q-Exactive Orbitrap MS
XIN Yang, YU Yang, WANG Haijun, YANG Qingzhu, WANG Weiming
- 6902** Content determination method of 14 constituents in Xuanfei Baidu Granules by UHPLC-Q-MS
HU Chenxiu, WANG Zhiyan, WANG Shufang, SHAO Qing
- 6909** Preparation of nanoscale flexible liposomes in safflower
ZHANG Yajun, CHENG Yuchuan, LI Weize, ZHAO Linru, LI Jie, JIANG Jingxing, NI Yan, HAO Xuliang
- 6918** Preparation of emodin nanosuspension by miniaturized media milling method and its *in vitro* evaluation
WANG Menglin, HU Yufeng, MA Siyuan, ZHU Haiting, ZHANG Junli, ZHANG Xinning, WANG Huinan, JIANG Mingrui, WU Yue, WANG Yingzi
- 6929** Color and taste changes of different processed products of hawthorn based on electronic bionic sensory technology
QU Zhenni, LYU Chang, BI Yu, FENG Jinying, ZHU Juanjuan, ZHOU Qiao, LU Qi, SHI Dianhua, DAI Yanpeng

• Pharmacological Studies and Clinical Observations •

- 6940** Total flavonoids from *Litchi Semen* inhibit proliferation and metastasis of non-small cell lung cancer by regulating Skp2-p21/p53 signaling axis
REN Hong, LI Xiaolan, JIANG Lin, HAN Yaoyao, LIAO Yunnuo, FU Jiejun, GUO Hongwei
- 6953** Mechanism of atractylenolide I on ferroptosis in pancreatic islet cells of type 2 diabetes mellitus rats based on System Xc-/GPX4 pathway
TIAN Zhaoyang, ZHANG Biwei, MA Leilei, LI Chao, WANG Jingya, HAN Rujie, LI Jiayu, ZHANG Wenli, LI Ji'an
- 6964** Establishment of patient-derived colorectal cancer organoids by air-liquid interface and its application in evaluating activity of "Fuzheng" traditional Chinese medicine polysaccharides
HUANG Chuyue, LENG Qiang, ZHOU Bingwen, WANG Pei, LU Yueyang, WANG Lu, FAN Zhimin
- 6973** Improvement effect of *Chrysanthemum morifolium* extract on muscle atrophy after ischemic stroke in rats
QI Hu, TIAN Dan, ZHANG Xiongwei, GAO Yuanlin, ZHANG Zeyang, ZENG Nan, YANG Rucong
- 6983** Effects of Peach Gum Powder on constipated mice induced by excessive consumption of "spicy alcohol" based on SCFAs/5-HT pathway
ZHANG Wenlong, WEI Kejian, DONG Zimo, CHEN Yulan, LYU Guiyuan, SU jie
- 6995** Mechanism of Biling Zhidai Decoction on vulvovaginal candidiasis based on network pharmacology and experimental verification
CHEN Zhixia, CHEN Siqi, FENG Shuyi

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

Publication Date

Oct. 28, 2024

Editor in Charge of English

WANG Yiran

Editor in Charge of This Issue

ZHENG Lisheng

· Data Mining and Evidence-Based Medicine ·

- 7006** Analysis on mechanism of Duliang Fang in treatment of migraine based on “ingredient group synergy” and “biological process network”
LI Ruping, WU Yanxin, MA Chuan, LI Yanyan, HE Xiaofang, CHEN Zhuoping, FU Chaomei, HE Yao, LUO Yong
- 7021** Study on therapeutic mechanism of different ratios of *Rhei Radix et Rhizoma*, *Aurantii Fructus Immaturus* and *Magnoliae Officinalis Cortex* from “traditional Chinese medicine-component-target” based on dose-effect relationship
YOU Haixin, YANG Xiaoyan, LUO Yiyu, ZENG Guang, HE Fuyuan, DING Changsong
- 7033** Visual analysis on development trend of *Aquilariae Lignum Resinatum* based on CiteSpace and VOSviewer
HE Guohao, YANG Yun, ZENG Lin, XU Lijia, WEI Jianhe, XIAO Peigen
- 7047** Visualized analysis of research status and development trend of *Hippophae rhamnoides* polysaccharides based on bibliometrics
LING Na, GUO Chunqiu, TIAN Haiyan, WANG Zihao, WANG Qiyao, GAO Mingze, JI Chenfeng

· Medicinal Materials ·

- 7062** Genome-wide identification and bioinformatics analyses of *AP2/ERF* gene family in *Morinda officinalis*
CHEN Jitong, LIU Chuxian, HAN Yifei, PAN Yunyan, DUAN Lixin, JI Aijia
- 7072** lncRNA sequencing identification, protein expression and sequence analysis of tobacco mosaic virus of *Tetrastigma hemsleyanum*
HONG Senrong, XU Yanping, GUO Yiyao, ZHANG Cheng
- 7085** Differences in content of 12 medicinal components of *Astragalus membranaceus* var. *mongolicus* from different regions and their correlation with geographical distribution and climate factors
LI Xinxing, LIU Fengbo, WANG Yajing, ZHOU Yi, CHEN Wanjin, YANG Dingfei, NIE Xinwei, ZHAO Ting, ZHANG Yuan, WEI Shengli
- 7093** Codon preference analysis of chloroplasts genome in medicinal plants of *Poncirus polyandra*
XU Rong, SONG Wenzheng, QIAO Zhensheng, ZHANG Xiaolin, YU Guodong, HE Chengzhong, ZONG Dan
- 7101** Effects of soil disinfection and addition of organic materials on soil properties, growth and morbidity of *Panax notoginseng* under continuous cropping conditions
MA Yudan, YANG Qiliang, YUAN Yong, MIAO Weiwei

· Reviews ·

- 7110** Processing principle and process optimization strategy of *Polygonati Rhizoma*
LI Detian, FENG Liang, JIA Xiaobin, YANG Bing
- 7122** Research progress on establishment of zebrafish cardiovascular disease model and intervention effect of traditional Chinese medicine
LI Jiaxin, BAI Liding, LI Lin, WANG Yanyan, WANG Ting, PAN Guixiang, LI Yuhong
- 7132** Research progress on antagonistic mechanism of curcumin against heavy metal cadmium and lead toxicity
GAO Wenjing, MEI Xueting, ZHENG Xiyu, PENG Junwei, MAI Zhicong, XU Donghui
- 7144** “Hot property enhancing efficacy” regularity and mechanism of traditional Chinese medicine essential oil penetration enhancement effect based on drug property characteristics
CHEN Jun, HE Tianyu, YAN Ni, DUAN Jiniao
- 7155** Research progress on traditional Chinese medicine intervention on intestinal bacterial immune disorder caused by influenza based on intestinal flora metabolism
LIU Hongtao, SUN Qihui, YANG Yong, NI Yan, RONG Rong
- 7165** Research progress on endophytes in *Codonopsis Radix*
LIU Xiaoling, MA Haitang, LIU Wenjing, ZHENG Tingyue, HUANG Yufang, YANG Fude
- 7172** Scientific connotation of regulating SDF-1/CXCR4 signaling pathway by traditional Chinese medicine in bone marrow mesenchymal stem cell homing and osteogenic differentiation based on meridian guide theory
SUN Yu, LIU Enxu, LI Zhaoyong, YANG Shaofeng
- 7180** Role of pyroptosis in diabetes mellitus and its complications and advances in traditional Chinese medicine intervention
CHEN Zhichao, LIN Qiaoni, YANG Yufeng, SHI Yan
- 7192** Application of molecular biology technology in *Dioscorea*
ZHU Shaojie, WANG Yufei, YU Dan, DU Xiaowei