

中草药[®]

ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 55 卷 第 18 期 (总第 773 期)

2024 年 9 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.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：天津市滨海高新区滨海科技园

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 •

- 6107 尖萼紫珠枝叶中 1 个新的异海松烷型二萜
吴晓露, 刘 婷, 邹芷琪, 丁 涛, 宁德生, 潘争红
6115 杯叶海绵的化学成分研究
吴高玲, 吕凤翊, 范晓婷, 林厚文, 成 熙, 杨 帆
6123 尖尾芋化学成分及其抗肿瘤活性研究
靳建杰, 毛旭东, 梁永枢, 胡 晓, 颜仁梁, 黄春跃
6131 五神汤中化学成分研究
张 敏, 朱先宏, 石 芸, 秦昆明, 高 瑞

• 药剂与工艺 •

- 6144 银杏叶片体外溶出度与空间分布均匀度评价及关联辨识研究
王 静, 吴志生, 李明爽, 赵小军, 王恺怡, 何 啓
林 玲, 王逸飞
6154 基于分析质量源于设计同时开发盐酸青藤碱制药过程 3 种物料的指
纹图谱方法
颉佳乐, 邱艳妮, 仇 萍, 丁 丰, 龙宪军, 龚行楚
6167 金银花-蒲公英提取液不同相态主要成分含量测定及其对痤疮丙酸
杆菌抑制作用的有效相态筛选
赵氏淳, 陶 颖, 卢 艺, 朱卫丰, 刘丽丽, 陈丽华
臧振中, 管咏梅
6174 AHP-CRITIC 综合加权联用响应面法的蜜百合炮制工艺优选及颜色
相关性分析
黄 莉, 杨 磊, 金 凯, 肖望重, 戴 冰, 蔡嘉洛, 高 昱, 王 璐
6186 鹿筋的常温浸提工艺与化学成分分析及提取物抗炎镇痛活性研究
陈永柱, 周希志, 郭亚明, 潘季红, 徐彩珠, 王 洋, 郭 慕
黄瑞卿, 李 巍, 赵余庆
6196 藤椒油粕黄酮类成分的提取纯化工艺及成分鉴定和抑菌作用研究
王光燕, 于 涵, 杨 婷, 黎 坤, 黄世伟, 刘晓华, 邢春欣
龙 飞, 吕光华

• 药理与临床 •

- 6208 基于代谢组学与肠道菌群探讨炒酸枣仁治疗睡眠-觉醒昼夜节律障
碍小鼠模型的作用机制
何 灵, 张圣美, 陶 宇, 裴香萍, 闫 艳, 杜晨晖
6226 龙胆酒炙前后对四氯化碳诱导小鼠肝损伤保护作用的对比研究
王景媛, 张舒雯, 张 桥, 赵重博, 翟思程, 史亚军
6238 疏血通注射液通过抑制泛凋亡改善大鼠脑缺血再灌注损伤
理扎·沙布尔江, 尚津峰, 文胤连, 黄贵金属, 张晓璐
崔一然, 刘 欣
6250 右归丸含药血清通过下调瘦素表达抑制 RLE-6TN 细胞上皮间质转化的
机制研究
萧 阖, 邓朝阳, 江晓翠, 郑 岚
6261 人参皂苷 Rg3 通过 PI3K 途径抑制胰腺癌细胞上皮间质转化及血管生
成拟态
赵婷婷, 王兆洪, 林胜璋
6269 姜黄素对七氟烷引起发育中胎鼠大脑神经毒性的影响
张佩军, 王 涵, 张艳菊, 贾金娥, 李静宇, 孙 哲
刘美玉, 于志强



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 55 卷 第 18 期 (总第 773 期)

2024 年 9 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

陈雨虹

本期责任编辑

赵慧亮

- 6276 紫龙金片对III~IV期非小细胞肺癌患者生存期的影响**
游佳凤, 于明薇, 吴桐桐, 李妹蒙, 张兴涵, 张怀锐, 刘强
郭秋香, 王笑民, 杨国旺

• 数据挖掘与循证医学 •

- 6283 二陈汤治疗非酒精性脂肪性肝病燥湿化痰功效表征-靶点网络-物质基础整合研究**
李航, 李荣荣, 杜航, 生立嵩, 郑晖, 孙蓉
6298 基于图卷积神经网络的中药方剂功效分类与自动推荐
赵丹宁, 卢海霞, 白森
6305 中西医治疗射血分数保留的心力衰竭研究热点和趋势
林静怡, 陈映冰, 罗小非, 樊官伟
6315 稳心颗粒治疗心肌病合并心律失常有效性和安全性系统评价和 Meta 分析
姜慧茹, 韩松洁, 许倩倩, 兰真真, 商洪才

• 药材与资源 •

- 6324 蛇足石杉中石杉碱甲合成相关基因 *HsPKS1* 的克隆及表达分析**
沈玉, 吴昊, 吴德财, 姚诗晴, 李欣媛, 戴亮芳, 罗向东
6335 长春花 *CrZCTs* 转录因子调控文多灵及长春质碱合成研究
张燕妮, 崔悦, 刘师, 李芙蓉, 孙小涵, 于放, 刘志文
6344 HPLC 指纹图谱和多成分定量结合化学模式识别评价蜜款冬花质量
龚秀娟, 彭亮, 陈晓颖, 周可心, 贺喜泉, 杨冰月
6355 基于指标成分测定及指纹图谱模式识别的紫苏叶产地差异性研究
廖楠汐, 石德志, 肖莲莲, 刘华兰, 解雨欣, 杨正清, 赵勉
郑超, 朱喻波, 胡杨, 程建明
6363 基于 HS-GC-IMS 技术解析远志及其炮制品中挥发性有机物的差异性
党小琳, 杨冰月, 姬海月, 高静, 陈莹, 颜永刚, 张岗
胡本祥, 彭亮

• 综 述 •

- 6372 川芎治疗脑卒中的理论溯源及研究进展**
龙宇, 张定堃, 郑川, 李楠
6383 基于蛋白质组学筛选关节炎相关生物标志物的研究进展
郑梓桐, 王美娟, 冯育林, 吕尚
6393 基于铁死亡探讨中医药干预肾脏疾病作用机制研究进展
白晶雪, 雷根平, 王婷, 董盛, 谢炯东
6402 丹参活性成分抗肿瘤分子机制研究进展
廖江龙, 范子祥, 孟秋月, 李艳英, 王婧斯
6416 中药炮制气味变化及其分析技术研究进展
叶慧, 孙海英, 刘晓华, 李小宁, 葛卫红, 杜伟峰
6425 民族医药治疗类风湿关节炎的研究进展
刘维, 陈娟娟, 陈常青, 王思维, 卡玉秀, 许懿聪, 顾庆香
岳青云, 林芳芳, 丁久力
6437 红参的炮制工艺及质量评价研究进展
袁佳宝, 曹帅, 李丽敏, 胡青, 毛秀红, 季申
6448 中药制剂量值传递研究进展
庄重, 侯文成, 刘伟锐, 李文兰, 刘洋洋

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 * 2024-18

CHINESE TRADITIONAL AND HERBAL DRUGS

Vol. 55 No. 18 Sep. 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 •

- 6107** A new isopimarane-type diterpenoid from branches and leaves of *Callicarpa loboapiculata*
WU Xiaolu, LIU Ting, ZOU Zhiqi, DING Tao, NING Desheng, PAN Zhenghong

- 6115** Chemical constituents of *Phyllosporgia foliascens*

- WU Gaoling, LYU Fengyi, FAN Xiaoting, LIN Houwen, CHENG Xi, YANG Fan

- 6123** Chemical constituents of *Alocasia cucullate* and their antitumor activities
JIN Jianjie, MAO Xudong, LIANG Yongshu, HU Xiao, YAN Renliang, HUANG Chunyue

- 6131** Chemical constituents in Wushen Decoction

- ZHANG Min, ZHU Xianhong, SHI Yun, QIN Kunming, GAO Xun

• Pharmaceutics and Technology •

- 6144** Research on evaluation and correlation identification of *in vitro* dissolution and spatial distribution uniformity of *Ginkgo Folium* Tablets

- WANG Jing, WU Zhisheng, LI Mingshuang, ZHAO Xiaojun, WANG Kaiyi, HE Han, LIN Ling, WANG Yifei

- 6154** Developing fingerprint analysis methods simultaneously for three materials in pharmaceutical process of sinomenine hydrochloride based on analytical quality by design

- XIE Jiale, TAI Yanni, QIU Ping, DING Feng, LONG Xianjun, GONG Xingchu

- 6167** Determination of contents of major components in different phases of *Lonicerae Japonicae Flos-Taraxaci Herba* extract and screening of effective phases for its inhibitory effect on *Propionibacterium acnes*

- ZHAO Shichun, TAO Ying, LU Yi, ZHU Weifeng, LIU Lili, CHEN Lihua, ZANG Zhenzhong, GUAN Yongmei

- 6174** Optimization of processing technology and color correlation analysis of honey-fried *Lilii Bulbus* based on AHP-CRITIC comprehensive weighting method combined with response surface method

- HUANG Li, YANG Lei, JIN Kai, XIAO Wangzhong, DAI Bing, CAI Jialuo, GAO Yu, WANG Lu

- 6186** Study on extraction process of deer sinew at room temperature, chemical composition analysis, and anti-inflammatory and analgesic activities of extract

- CHEN Yongzhu, ZHOU Xizhi, GUO Yaming, PAN Jihong, XU Caizhu, WANG Yang, GUO Rui, HUANG Ruiqing, LI Wei, ZHAO Yuqing

- 6196** Extraction-purification procedure of flavonoids in *Zanthoxylum armatum* Residue with chemical identification and antibacterial activity

- WANG Guangyan, YU Han, YANG Ting, LI Kun, HUANG Shiwei, LIU Xiaohua, XING Chunxin, LONG Fei, LYU Guanghua

• Pharmacological Studies and Clinical Observations •

- 6208** Mechanism of fried *Ziziphi Spinosae Semen* on sleep-wake circadian rhythm disturbance in mice model based on metabolomics and gut microbiota

- HE Ling, ZHANG Shengmei, TAO Yu, PEI Xiangping, YAN Yan, DU Chenhui

- 6226** Comparative study on protective effect of *Gentianae Radix et Rhizoma* before and after processing with wine against carbon tetrachloride induced liver damage in mice

- WANG Jingyuan, ZHANG Shuwen, ZHANG Qiao, ZHAO Chongbo, ZHAI Sicheng, SHI Yajun

- 6238** Shuxuetong Injection alleviates cerebral ischemia reperfusion injury via inhibiting PANoptosis in rats

- LIZHA Shabuerjiang, SHANG Jinfeng, WEN Yinlian, HUANG Guijinfeng, ZHANG Xiaolu, CUI Yiran, LIU Xin

- 6250** Mechanism of Yougui Pills containing serum on inhibiting epithelial-mesenchymal transition in RLE-6TN cells by down-regulating leptin expression

- XIAO Min, DENG Chaoyang, JIANG Xiaocui, ZHENG Lan

- 6261** Ginsenoside Rg₃ inhibits epithelial-mesenchymal transition and vasculogenic mimicry of pancreatic cancer cells through PI3K signaling

- ZHAO Tingting, WANG Zhaozhong, LIN Shengzhang

- 6269** Effect of curcumin on sevoflurane-induced neurotoxicity in developing fetal rat brain

- ZHANG Peijun, WANG Han, ZHANG Yanju, JIA Jin'e, LI Jingyu, SUN Zhe, LIU Meiyu, YU Zhiqiang

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

Sep. 28, 2024

Editor in Charge of English

CHEN Yuhong

Editor in Charge of This Issue

ZHAO Huiliang

6276 Survival analysis of Zilongjin Tablets in treatment of non-small cell lung cancer with stage III—IV
YOU Jiafeng, YU Mingwei, WU Tongtong, LI Shumeng, ZHANG Xinghan, ZHANG Huairui, LIU Qiang, GUO Qiuxiang, WANG Xiaomin, YANG Guowang

• Data Mining and Evidence-Based Medicine •

6283 Erchen Decoction treating non-alcoholic fatty liver disease: Integrated study on efficacy characterization of dampness and phlegm elimination, targeted network and material basis
LI Hang, LI Rongrong, DU Hang, SHENG Lisong, ZHENG Hui, SUN Rong

6298 Efficacy classification and automatic recommendation of traditional Chinese medicine formulas based on graph convolutional neural network
ZHAO Danning, LU Haixia, BAI Sen

6305 Research hotspots and trends of traditional Chinese and western medicine in treatment of heart failure with preserved ejection fraction
LIN Jingyi, CHEN Yibing, LUO Xiaofei, FAN Guanwei

6315 Efficacy and safety of Wenxin Granules in treatment of myocardial infarction complicated with arrhythmia: A systematic review and Meta-analysis
JIANG Huiru, HAN Songjie, XU Qianqian, LAN Zhenzhen, SHAGN Hongcai

• Medicinal Materials •

6324 Cloning and expression analysis of *HsPKS1* gene related to synthesis of huperzine A in *Huperzia serrata*
SHEN Yu, WU Hao, WU Decai, YAO Shiqing, LI Xinyuan, DAI Liangfang, LUO Xiangdong

6335 Regulation of vindoline and catharanthine biosynthesis by transcription factor *CrZCTs* in *Catharanthus roseus*
ZHANG Yanni, CUI Yue, LIU Shi, LI Furong, SUN Xiaohan, YU Fang, LIU Zhiwen

6344 HPLC fingerprint and multi-components determination combined with chemical pattern recognition to evaluate quality of honeyed *Farfarae Flos*
GONG Xiujuan, PENG Liang, CHEN Xiaoying, ZHOU Kexin, HE Xiquan, YANG Bingyue

6355 Regional differences of *Perillae Folium* based on index component determination and fingerprint pattern recognition
LIAO Nanxi, SHI Dezh, XIAO Lianlian, LIU Hualan, XIE Yuxin, YANG Zhengqing, ZHAO Mian, ZHENG Chao, ZHU Yubo, HU Yang, CHENG Jianming

6363 Analysis of volatile compounds of raw and processing *Polygalae Radix* based on headspace-gas chromatography-ion mobility spectrometry
DANG Xiaolin, YANG Bingyue, JI Haiyue, GAO Jing, CHEN Ying, YAN Yonggang, ZHANG Gang, HU Benxiang, PENG Liang

• Reviews •

6372 Theoretical tracing and research progress on Chuanxiong Rhizoma in treatment of stroke
LONG Yu, ZHANG Dingkun, ZHENG Chuan, LI Nan

6383 Research progress on screening arthritis-related biomarkers based on proteomics
ZHENG Zitong, WANG Meijuan, FENG Yulin, LYU Shang

6393 Research progress on mechanism of traditional Chinese medicine in intervention of kidney disease based on ferroptosis
BAI Jingxue, LEI Genping, WANG Ting, DONG Sheng, XIE Jiongdong

6402 Research progress on antitumor molecular mechanism of active ingredient in *Salvia miltiorrhiza*
LIAO Jianglong, FAN Zixiang, MENG Qiuyue, LI Yanling, WANG Jingxi

6416 Research progress on odor changes of traditional Chinese medicine processing and its analysis techniques
YE Hui, SUN Haiying, LIU Xiaohua, LI Xiaoning, GE Weihong, DU Weifeng

6425 Research progress on Chinese ethnic medicine in treatment of rheumatoid arthritis
LIU Wei, CHEN Shujuan, CHEN Changqing, WANG Siwei, KA Yuxiu, XU Yicong, GU Qingxiang, YUE Qingyun, LIN Fangfang, DING Jiuli

6437 Research progress on processing technology and quality evaluation of *Ginseng Radix et Rhizoma Rubra*
YUAN Jiabao, CAO Shuai, LI Limin, HU Qing, MAO Xiuhong, JI Shen

6448 Research progress on quantitative value transfer of traditional Chinese medicine preparations
ZHUANG Zhong, HOU Wengcheng, LIU Weirui, LI Wenlan, LIU Yangyang