

# 中 草 药<sup>®</sup>

ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 55 卷 第 23 期 (总第 778 期)

2024 年 12 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 陈士林

执行主编 陈常青

## 目 次

### · 化学成分 ·

- 7923 手参化学成分及神经保护活性研究  
秦 娟, 薛诗意, 王建斌, 袁海恋, 刘 量
- 7932 山油柑枝叶中化学成分及其抗类风湿性关节炎活性研究  
傅小雅, 李林轩, 李昕怡, 王天玉, 崔龙城, 刘艳萍, 付艳辉
- 7939 基于体外化学成分-体内移行成分-功效靶点探究三叶糖脂清片治疗  
2 型糖尿病、动脉粥样硬化、高脂血症“异病同治”物质基础及质  
量标志物预测  
王凤颖, 高雪莲, 段红莉, 田 爽, 李自强
- 7950 胡芦巴多糖自组装递送对姜黄素体内代谢产物及代谢途径的影响  
胡琼丹, 龙 蕊, 刘 佳, 唐鑫星, 李 玲, 马入瑜, 熊 雯  
罗 霄, 郑 萍, 肖洪涛, 李 锐

### · 药剂与工艺 ·

- 7969 紫草素脂质纳米粒的制备、表征和透皮性能研究  
张俏莉, 郑俊侨, 禹佳惠, 彭睿翔, 刘冬榕, 时 军
- 7979 烤制、蒸制三七中皂苷类成分的化学模式识别及定量测定  
张海莹, 王淑冰, 敖选丽, 刘倩如, 何怡霖, 赏 宇, 陈兴龙  
张文平, 毛晓健, 王 亭, 张荣平, 侯 博
- 7989 基于多指标-响应面法优选甘草制巴戟天工艺及其总寡糖体外抗  
氧化活性研究  
刘梦云, 闫小景, 王 宸, 朱丽君, 朱建光, 康 乐, 田连起  
魏 玉, 李红伟, 李 凯
- 7999 参柏温敏凝胶的制备及其对痔疮模型大鼠的药效作用  
管咏梅, 张煜薇, 陶 颖, 郝凌烽, 陈丽梅, 李 哲  
朱卫丰, 臧振中
- 8011 以甜菊糖苷为载体的二氢杨梅素纳米胶束的制备、表征及口服生物  
利用度评价  
王彦阁, 陈 晨, 丁 林, 王丽君, 刘俊霞, 决利利
- 8023 党参炮制工艺优化及颜色与其内在关键质量属性相关性研究  
张陈了一, 李阳阳, 李明星, 武俏欣, 周露晨, 王金宏, 王 昊  
胡 扬, 杨 波, 贾绍华, 徐蓓蕾, 李文兰

### · 药理与临床 ·

- 8035 经典名方桃红四物汤抗血栓药效作用及其机制研究  
马 川, 吴彦欣, 李敏敏, 何小芳, 李如萍, 何 瑶, 杜克群
- 8046 基于抗氧化活性研究淫羊藿黄酮类化合物对脑缺血再灌注损伤的  
保护作用  
陈 颖, 刘 秋, 吉春燕, 李 良, 王振中, 王 欣, 肖 伟
- 8056 黄芪甲苷联合 BMSCs-Exos 对 PC12 细胞铁死亡的影响  
刘恩旭, 聂 颖, 段嘉豪, 孙 飞, 孙 钰, 杨少锋, 杨 雷
- 8067 基于网络药理学和代谢组学探究荆防颗粒对类风湿关节炎的保护  
作用及机制  
王秀文, 张丛慧, 韦方娇, 李 梦, 周继栋, 姚景春  
孙成宏, 程国良
- 8079 基于“开窍通络”探究艾片改善冠脉微循环障碍的作用机制  
侯 薇, 陈兰英, 袁蓓欣, 崔亚茹, 段文彬, 汪文龙, 刘荣华
- 8091 麝香通心滴丸改善心衰大鼠心脏冠脉微血管重构作用  
姚骏凯, 郭抒娟, 黄明月, 李 春, 王 勇, 王 伟



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 55 卷 第 23 期 (总第 778 期)

2024 年 12 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

封面图片提供

黎 舒

英文责任编辑

王祎然

本期责任编辑

时 圣 明

• 数据挖掘与循证医学 •

- 8101 基于全集提升度与重复 SLPA 算法的病机视角下中医药组方配伍规律挖掘及同效药鉴别方法 张 迪, 牛琪锴, 赵钰文, 张伟娜
- 8111 《中国药典》含沉香中成药组方分析及疾病注释 崔 雪, 王振国, 邵欣欣, 张艳新, 刘 杰, 陈 聪, 李 佳
- 8121 基于数据挖掘探析中药治疗 3 种常见致盲性眼病的用药规律 常 蕊, 钟溢源, 肖晓燕, 黎颖雪, 王思琪, 庞 龙
- 8130 基于 Citespace 可视化分析 5 种真菌多糖研究进展 池 妍, 王雅芝, 王 昊, 汲晨锋

• 药材与资源 •

- 8153 基于全长转录组挖掘八角果实中木脂素生物合成关键基因 李金梅, 覃艳红, 黄 鼎, 陈建桦, 明如宏, 姚绍嫦, 李良波, 谭 勇, 黄荣韶
- 8162 裸花紫珠群体遗传结构及其有效成分与 SSR 标记的关联分析 黄 梅, 李 鑫, 王 凯, 江 芊, 李 伟, 陈振夏, 于福来
- 8171 丙二酰基人参皂苷对南洋参和线叶南洋参细胞生长及皂苷积累的影响 吕思琴, Nosov Aleander Mihaylovich, Eugene A. Rogozhin, Andrey A. Gontcharov, 杨 玲
- 8185 UFLC-Q-TOF-MS/MS 结合 HPLC-DAD 多成分定量对不同生长期滨蒿的质量评价 王璐瑶, 李余佳, 李传娟, 戴 莹, 窦志华
- 8197 基于指纹图谱结合多指标化学模式识别的鲜地黄药材质量评价 王慧森, 张宏伟, 刘 明, 葛文静, 梁瑞峰, 李更生, 唐素勤, 张迪文, 赵家慧

• 综 述 •

- 8208 植物来源囊泡防治炎症性肠病的疗效、机制评价及药用开发前景 任 媛, 贺 敏, 曾 千, 曾 雯, 何维维, 何永恒, 汤晓娟, 李勇毅
- 8222 中医药干预扩张型心肌病作用机制研究进展 陶诗怡, 于林童, 李 军, 杨德爽, 谭雨晴, 黄炫淳, 薛甜甜
- 8235 当归综合利用及产业化研究进展 杨白梅, 朱田田, 晋 玲, 张 帅, 刘天乐, 张 菁, 徐 丽, 康舒淇
- 8245 天麻素的结构修饰及生物活性研究进展 杨艺娜, 王蓓蓓, 金 徽, 陈 琛
- 8256 毛蕊花糖苷药理作用及其制剂研发进展 黄文静, 谢兴亮, 盛艳梅
- 8269 中药治疗不同证候慢传输型便秘的研究进展 刘睿婷, 樊薛津, 金博文, 尹清晟, 郭 虹, 庄朋伟
- 8278 白术及其复方治疗炎症性肠病的研究进展 赵 薇, 郝彦伟, 张 怡, 方锐洁, 袁玲玲, 刘娅欣
- 8290 药食同源中药中生物碱类成分对睡眠的改善作用及机制研究进展 施呈林, 江丽洁, 沈鹤云, 张泉龙, 蒙雄裕, 崔 琦, 刘巨钊, 秦路平
- 8301 甘草黄酮调节糖脂代谢作用的研究进展 陈竞苗, 秦 虹, 郑温雅

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 \* 2024-23

# CHINESE TRADITIONAL AND HERBAL DRUGS

Vol. 55 No. 23 Dec. 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

CHEN Shilin

## Executive Editor-in-chief

CHEN Changqing

## Contents

### • Chemical Constituents •

- 7923** Chemical constituents and neuroprotective effects of *Gymnadenia conopsea*  
QIN Juan, XUE Shiyi, WANG Jianbin, YUAN Hailian, LIU Liang
- 7932** Chemical constituents from stems and leaves of *Acronychia pedunculata* and their anti-rheumatoid arthritis activities  
FU Xiaoya, LI Linxuan, LI Xinyi, WANG Tianyu, CUI Longcheng, LIU Yanping, FU Yanhui
- 7939** Exploring material basis and Q-Markers for treatment of type 2 diabetes, atherosclerosis, and hyperlipidemia with Sanye Tangzhiqing Tablets based on *in vitro* components - *in vivo* transferring components - efficacy targets  
WANG Fengying, GAO Xuelian, DUAN Hongli, TIAN Shuang, LI Ziqiang
- 7950** Effects of self-assembly delivery system of fenugreek polysaccharide on curcumin metabolites and metabolic pathways *in vivo*  
HU Qiongdan, LONG Rui, LIU Jia, TANG Xinxing, LI Ling, MA Ruyi, XIONG Wen, LUO Xiao, ZHENG Ping, XIAO Hongtao, LI Rui

### • Pharmaceutics and Technology •

- 7969** Preparation, characterization and transdermal properties of shikonin lipid nanoparticles  
ZHANG Qiaoju, ZHENG Junqiao, YU Jiahui, PENG Ruixiang, LIU Dongrong, SHI Jun
- 7979** Chemical pattern recognition and quantitative determination of saponins in baking and steaming *Notoginseng Radix et Rhizoma*  
ZHANG Haiying, WANG Shubing, AO Xuanli, LIU Qianru, HE Yilin, SHANG Yu, CHEN Xinglong, ZHANG Wenping, MAO Xiaojian, WANG Ting, ZHANG Rongping, HOU Bo
- 7989** Optimal processing technology of *Glycyrrhizae Radix et Rhizoma* processed *Morindae Officinalis Radix* with multi-indicator-response surface methodology and antioxidant effect evaluation  
LIU Mengyun, YAN Xiaojing, WANG Chen, ZHU Lijun, ZHU Jianguang, KANG Le, TIAN Lianqi, WEI Yu, LI Hongwei, LI Kai
- 7999** Preparation of Shenbo thermosensitive gel and its pharmacodynamic effect on hemorrhoid model rats  
GUAN Yongmei, ZHANG Yuwei, TAO Ying, HAO Lingfeng, CHEN Limei, LI Zhe, ZHU Weifeng, ZANG Zhenzhong
- 8011** Preparation, characterization and oral bioavailability evaluation of dihydromyricetin nanomicelles using stevioside as carriers  
WANG Yang, CHEN Chen, DING Lin, WANG Lijun, LIU Junxia, JUE Lili
- 8023** Optimization of processing technology and study on correlation between intrinsic key quality attributes and color of *Codonopsis Radix*  
ZHANG Chenlianyi, LI Yangyang, LI Mingxing, WU Qiaoxin, ZHOU Luchen, WANG Jinhong, WANG Hao, HU Yang, YANG Bo, JIA Shaohua, XU Beilei, LI Wenlan

### • Pharmacological Studies and Clinical Observations •

- 8035** Antithrombotic effect and mechanism of classic famous prescription Taohongng Siwu Decoction  
MA Chuan, WU Yanxin, LI Minmin, HE Xiaofang, LI Ruping, HE Yao, DU Kequn
- 8046** Protective effect of flavonoids extract from *Epimedii Folium* on cerebral ischemia-reperfusion injury based on antioxidant activity  
CHEN Ying, LIU Qiu, JI Chunyan, LI Liang, WANG Zhenzhong, WANG Xin, XIAO Wei
- 8056** Effects of astragaloside IV combined with BMSCs-Exos on ferroptosis in PC12 cells  
LIU Enxu, NIE Ying, DUAN Jiahao, SUN Fei, SUN Yu, YANG Shaofeng, YANG Lei
- 8067** Exploration of protective effect and mechanism of Jingfang Granules on rheumatoid arthritis based on network pharmacology and metabolomics  
WANG Xiuwen, ZHANG Conghui, WEI Fangjiao, LI Meng, ZHOU Jidong, YAO Jingchun, SUN Chenghong, CHENG Guoliang
- 8079** Mechanism of *Blumea balsamifera* in improving coronary microcirculatory disorders based on "Kaiqiao Tongluo"  
HOU Wei, CHEN Lanying, YUAN Beixin, CUI Yaru, DUAN Wenbin, WANG Wenlong, LIU Ronghua
- 8091** Effect of Shexiang Tongxin Dropping Pills on coronary microvascular remodeling in heart failure rats  
YAO Junkai, GUO Shujuan, HUANG Mingyue, LI Chun, WANG Yong, WANG Wei

## 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

Dec. 12, 2024

### Editor in Charge of English

WANG Yiran

### Editor in Charge of This Issue

SHI Shengming

### • Data Mining and Evidence-Based Medicine •

- 8101** Method of traditional Chinese medicine prescription compatibility mining and identification of same effect medicines from perspective of pathogenesis based on universal set lift index and repeated SLPA algorithm  
ZHANG Di, NIU Qikai, ZHAO Yuwen, ZHANG Weina
- 8111** Formulary analysis and disease annotation of Chinese patent medicine containing *Aquilariae Lignum Resinatum* in *Chinese Pharmacopoeia*  
CUI Xue, WANG Zhenguo, SHAO Xinxin, ZHANG Yanxin, LIU Jie, CHEN Cong, LI Jia
- 8121** Analysis on medication rule of traditional Chinese medicine in treatment of three blinding eye diseases based on data mining  
CHANG Rui, ZHONG Yiyuan, XIAO Xiaoyan, LI Yingxue, WANG Siqi, PANG Long
- 8130** Visual analysis of research progress on five kinds of fungal polysaccharides based on Citespace  
CHI Yan, WANG Yazhi, WANG Hao, JI Chenfeng

### • Medicinal Materials •

- 8153** Full-length transcriptome analysis reveals key genes involved in lignan biosynthesis in fruits of *Illicium verum*  
LI Jinmei, QIN Yanhong, HUANG Ding, CHEN Jianhua, MING Ruhong, YAO Shaochang, LI Liangbo, TAN Yong, HUANG Rongshao
- 8162** Analysis of population genetics and effective components associations with SSR markers in *Callicarpa nudiflora*  
HUANG Mei, LI Xin, WANG Kai, JIANG Qian, LI Wei, CHEN Zhenxia, YU Fulai
- 8171** Effects of malonyl-ginsenosides on cell growth and saponin accumulation of *Polyscias fruticosa* and *Polyscias filicifolia*  
LYU Siqin, Nosov Alexander Mihaylovich, Eugene A. Rogozhin, Andrey A. Gontcharov, YANG Ling
- 8185** Quality evaluation of *Artemisia scoparia* at different growth periods through compositional analysis by UFLC-Q-TOF-MS/MS and quantitative analysis of multicomponents by HPLC-DAD  
WANG Luyao, LI Yujia, LI Chuanjuan, DAI Ying, DOU Zhihua
- 8197** Quality evaluation of fresh *Rehmannia Radix* based on fingerprint combined with multi-index chemical pattern recognition  
WANG Huisen, ZHANG Hongwei, LIU Ming, GE Wenjing, LIANG Ruifeng, LI Gengsheng, TANG Suqin, ZHANG Diwen, ZHAO Jiahui

### • Reviews •

- 8208** Efficacy and mechanism evaluation, and medicinal development prospects of plant-derived vesicles in therapeutics of inflammatory bowel disease  
REN Yuan, HE Min, ZENG Qian, ZENG Wen, HE Weiwei, HE Yongheng, TANG Xiaojuan, LI Yongmin
- 8222** Research progress on mechanism of traditional Chinese medicine in intervention dilated cardiomyopathy  
TAO Shiyi, YU Lintong, LI Jun, YANG Deshuang, TAN Yuqing, HUANG Xuanchun, XUE Tiantian
- 8235** Research progress on comprehensive utilization and industrialization of *Angelica sinensis*  
YANG Baimei, ZHU Tiantian, JIN Ling, ZHANG Shuai, LIU Tianle, ZHANG Jing, XU Li, KANG Shuqi
- 8245** Research progress on structural modification and biological activity of gastrodin  
YANG Yina, WANG Beibei, JIN Hui, CHEN Chen
- 8256** Pharmacological effects and preparation development progress of verbascoside  
HUANG Wenjing, XIE Xingliang, SHENG Yanmei
- 8269** Research progress on traditional Chinese medicine in treatment of slow transit constipation with different syndromes  
LIU Ruiting, FAN Xuejin, JIN Bowen, YIN Qingsheng, GUO Hong, ZHUANG Pengwei
- 8278** Research progress on *Atractylodis Macrocephalae Rhizoma* and its compounds in treatment of inflammatory bowel disease  
ZHAO Wei, HAO Yanwei, ZHANG Yi, FANG Ruijie, YUAN Lingling, LIU Yaxin
- 8290** Effects and mechanisms of alkaloid components in medicinal and edible traditional Chinese Medicine on sleep improvement  
SHI Chenglin, JIANG Lijie, SHEN Heyun, ZHANG Quanlong, MENG Xiongyu, CUI Qi, LIU Juzhao, QIN Luping
- 8301** Research progress on licorice flavonoids regulating glucose and lipid metabolism  
CHEN Jingmiao, QIN Hong, ZHENG Wenya