



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 53 卷 第 21 期 (总第 728 期)

2022 年 11 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.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.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

· 化学成分 ·

- 6653 枸杞子中 1 个新的环香叶烷类单萜
张文静, 范雨欣, 胡梦雅, 刘 云, 王小兰, 孙彦君, 李 孟
郭 涛, 冯卫生, 陈 辉
- 6660 伸筋草中 1 个新芒柄花萜醇衍生物
袁瑞琪, 胡靖瑶, 王 希, 湛顺清, 蔡诗琪, 王 聪, 蔡由生
- 6666 华中五味子根部木脂素类化学成分及其抗氧化活性研究
姜 侃, 郭晔红
- 6674 基于 GC-MS 和 UPLC-Q-Exactive MS 技术的首荟通便胶囊质量标志物研究
梁红宝, 孙建之, 姜宇璐, 袁晓梅, 姚景春, 关永霞
张贵民, 李 峰

· 药剂与工艺 ·

- 6686 基于 HPLC-Q-Exactive 液质联用技术与 HPLC 的通脉降糖胶囊成分分析及指纹图谱研究
武宇佳, 万浩芳, 李 畅, 万海同, 杨洁红
- 6698 基于苦味阈值浓度的苦味中药分子苦度当量定量方法研究
王青晓, 高晓洁, 桂新景, 王艳丽, 王君明, 李晨旭, 任延娜
姚 静, 张 璐, 施钧瀚, 李学林, 刘瑞新
- 6706 基于近、中红外光谱的热毒宁注射液制剂过程投料和二次热处理工序快速检测方法研究
童 枫, 徐芳芳, 张 欣, 李执栋, 吴 云, 章晨峰, 王振中
- 6716 Box-Behnken 响应面结合基准关联度和 AHP-熵权法优化经典名方半夏泻心汤的提取工艺
樊箫雨, 杨凯丽, 李花花, 杨麒麟, 杨天姿, 白 洁, 杜守颖
- 6726 甘露糖修饰雷公藤红素脂质体处方工艺优化及体外靶向性评价
司徒奇, 刘 洋, 蔡佳雨, 刘婉滢, 李津芮, 孔 亮, 李学涛
- 6734 荷载甘草酸 EL100-55/PLGA 肠溶纳米粒的制备及其对葡聚糖硫酸钠诱导结肠炎的治疗作用
田春雨, 秦之琦, 汤洪萍, 郝吉福
- 6741 HPLC-PDA 联合 Box-Behnken 响应面法优选五苓散低极性部位提取工艺
王慧森, 刘 明, 李更生, 梁瑞峰, 葛文静, 夏书椿

· 药理与临床 ·

- 6750 草澄茄素治疗失眠症的药效及相关机制研究
王 玮, 杨世林, 彭万钱, 张 壮, 欧阳辉, 冯育林
罗颖颖, 何明珍
- 6759 酸枣仁总皂苷改善对氯苯丙氨酸诱导失眠大鼠模型学习记忆损伤机制的研究
衡依然, 段慧竹, 杜 鹤, 闫 艳, 杜晨晖
- 6771 基于 mTOR/HIF-1 α /VEGF 通路研究红芪多糖防治放射性肺损伤的作用机制
王 强, 王 艺, 张 莉, 尚 芸, 李亮亮, 杜和芹
李 爽, 简兴遥
- 6779 多药耐药相关蛋白 2 对汉黄芩素及其主要 II 相代谢产物药动力学特征的影响
郑 蓉, 张淇淞, 胡雪黎, 徐 睿, 彭国爽, 昌冰琳, 胡泽华
胥鑫林, 杨 宝
- 6785 荆防颗粒对异丙肾上腺素诱导大鼠急性心肌梗死的保护作用研究
董利洋, 程国良, 姚景春, 曹天佑, 李小鹏, 屈会化, 孔 慧
赵 琰, 张贵民



ZHONGCAOYAO

Chinese Traditional and Herbal Drugs

第 53 卷 第 21 期 (总第 728 期)

2022 年 11 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 50.00 元 全年 1200.00 元

广告发布登记号

BH 2020-01

封面图片提供

李 信

英文责任编辑

王祎然

本期责任编辑

李亚楠

6795 基于 IRS2/PI3K/FOXO4 信号通路研究复方仙草颗粒抑制糖尿病肾病足细胞上皮-间充质转化的作用机制

刘丹宁, 黄国东, 杨鑫勇, 周婧艳, 王亚南

6805 甜梦口服液联合舍曲林对改善脑功能减退患者认知功能、焦虑情绪及睡眠障碍的临床研究

刘佩佩, 刘小娟, 黄质诚, 刘 茹, 刘 烨

• 数据挖掘与循证医学 •

6810 复方夏天无片治疗类风湿性关节炎的临床综合评价

雷 超, 张 强, 王志飞, 谢雁鸣

6820 中成药联合米非司酮治疗子宫肌瘤的网状 Meta 分析

王 晨, 汪 娟, 杨凤娜, 魏志玲, 王 芳

6832 基于全球专利视角下的中药护肤品相关研究的可视化分析

束雅春, 李丹婷, 李 静, 刘 杨, 江志伟

• 药材与资源 •

6840 翼首草鲨烯合酶 (PhSQS2) 全长克隆、表达特性分析及蛋白功能验证

王 芸, 吴 宇, 蒋庆峰, 何 焱, 兰小中, 张 磊

6848 三七细胞色素 P450 酶基因 *PnCyp450_3* 响应丛枝菌根真菌诱导的表达特性分析

曹冠华, 张兴开, 柏 旭, 毕 悦, 殷红伟, 张 芸, 贺 森

6857 藏药兔耳草常用基原的 ITS2 序列鉴定研究

高必兴, 齐景梁, 钟 红, 马璐琳, 李 倩, 连 艳

蒋桂华, 蒋运斌

6865 基于 ISSR 和 SRAP 分子标记的黄精种质遗传多样性研究

姜 武, 李亚萍, 陈家栋, 陶正明

6874 外源 H₂O₂ 预处理对垂盆草抗寒性及药材产量和品质的影响

赖秋洁, 崔运启, 朱再标, 晏梦恬, 成 琳, 韩佳沛

6881 基于 UPLC 特征图谱结合多模式识别和色度值的槐角炮制前后差异研究

邓李红, 王寿富, 陈仕妍, 邝 敏, 黄贵发, 林伟雄, 张志鹏

• 综 述 •

6888 基于特征肽发现与应用的胶类中药质量控制

蔡 翔, 韩疏影, 夏浩然, 闫邳焱, 黄潇正, 赵 明

段金殿, 刘 睿

6900 中药挥发油稳定性影响因素、变化机制及保护策略

吴 意, 万 娜, 刘 阳, 林瑞华, 张雨恬, 郭冬云, 廖嘉宝

周同辉, 伍振峰, 杨 明

6909 姜黄素抗肺纤维化作用的分子机制研究进展

郑 蕾, 黄 红, 吴 涵, 张钧岚, 蔡 雄, 范伏元

6919 确保盲法实施的中药安慰剂制备和评价关键问题

张三妹, 吴 梅, 吴 飞, 王俊杰, 胡佳亮, 林 晓, 冯 怡

6931 道地药材品质特征及形成机制研究进展

赵露颖, 施梦瑶, 张巧艳, 秦路平, 孙艺琦

6948 桑属植物中异戊烯基黄酮类化合物及其药理活性研究进展

姜 玥, 刘洋洋, 田海涛, 邓志鹏

6959 霍山石斛活性成分对肝脏疾病作用及其机制研究进展

邓光辉, 俞年军, 王妍妍, 叶梦娟, 蔡 肖, 张晓倩, 彭代银

6968 天然药物化学史话: 天然产物化学研究与有机化学发展

王 磊, 李 鹭, 佟苗苗, 付 炎, 李力更

本刊投稿须知见《中草药》2022, 53(1): 326-328.

期刊基本参数: CN 12-1108 R * 1970 * sm * A4 * 240 * zh * P * ¥ 50.00 * 3000 * 35 * 2022 - 21

CHINESE TRADITIONAL AND HERBAL DRUGS

Vol. 53 No. 21 Nov. 2022

Chinese Traditional and Herbal Drugs

(Semimonthly)

Founded in January, 1970

Directed 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 Chang-xiao TANG Li-da

Executive Editor-in-chief

CHEN Chang-qing

Contents

· Chemical Constituents ·

- 6653** A new cyclogeraniene monoterpene from fruits of *Lycium barbarum*
ZHANG Wen-jing, FAN Yu-xin, HU Meng-ya, LIU Yun, WANG Xiao-lan, SUN
Yan-jun, LI Meng, GUO Tao, FENG Wei-sheng, CHEN Hui
- 6660** A new onocerin-type triterpenoid derivative from *Lycopodium Herba*
YUAN Rui-ying, HU Jing-yao, WANG Xi, CHEN Shun-qing, CAI Shi-qi,
WANG Cong, CAI You-sheng
- 6666** Lignans chemical constituents of roots of *Schisandra sphenanthera* and their
anti-oxidative effects
JIANG Kan, GUO Ye-hong
- 6674** Study on quality markers of Shouhui Tongbian Capsule based on GC-MS and
UPLC-Q-Exactive MS technology
LIANG Hong-bao, SUN Jian-zhi, JIANG Yu-jun, YUAN Xiao-mei, YAO
Jing-chun, GUAN Yong-xia, ZHANG Gui-min, LI Feng

· Pharmaceuticals and Technology ·

- 6686** Composition analysis and fingerprint establishment of Tongmai Jiangtang Capsule
based on HPLC-Q-Exactive-MS and HPLC
WU Yu-jia, WAN Hao-fang, LI Chang, WAN Hai-tong, YANG Jie-hong
- 6698** Study on quantitative method of equivalent molecular bitterness of traditional
Chinese medicines based on bitterness threshold concentration
WANG Qing-xiao, GAO Xiao-jie, GUI Xin-jing, WANG Yan-li, WANG
Jun-ming, LI Chen-xu, REN Yan-na, YAO Jing, ZHANG Lu, SHI Jun-han, LI
Xue-lin, LIU Rui-xin
- 6706** Research on fast detection method of feeding and secondary heat treatment
process of Reduning Injection preparation process by near-infrared and
mid-infrared reflectance spectroscopy
TONG Feng, XU Fang-fang, ZHANG Xin, LI Zhi-dong, WU Yun, ZHANG
Chen-feng, WANG Zhen-zhong
- 6716** Optimization of extraction process for classical prescription Banxia Xiexin
Decoction based on Box-Behnken design-response surface, standard relation and
analytic hierarchy process combined with entropy method
FAN Xiao-yu, YANG Kai-li, LI Hua-hua, YANG Qi-lin, YANG Tian-zi, BAI Jie,
DU Shou-ying
- 6726** Optimization of mannose-modified celastrol liposome formulation and targeting
evaluation *in vitro*
SI Jia-qi, LIU Yang, CAI Jia-yu, LIU Wan-ying, LI Feng-rui, KONG Liang, LI
Xue-tao
- 6734** Preparation of glycyrrhizic acid-loaded EL100-55/PLGA enteric nanoparticles and
evaluation of their effect on dextran sodium sulfate induced ulcerative colitis
TIAN Chun-yu, QIN Zhi-qi, TANG Hong-ping, HAO Ji-fu
- 6741** Optimization of low polarity components extraction process of Wuling Powder by
HPLC-PDA combined with Box-Behnken response surface methodology
WANG Hui-sen, LIU Ming, LI Geng-sheng, LIANG Rui-feng, GE Wen-jing,
XIA Shu-chou

· Pharmacological Studies and Clinical Observations ·

- 6750** Efficacy and related mechanism of cubebin in treatment of insomnia
WANG Wei, YANG Shi-lin, PENG Wan-qian, ZHANG Zhuang, OUYANG Hui,
FENG Yu-lin, LUO Ying-ying, HE Ming-zhen
- 6759** Mechanism of total saponins of *Ziziphi Spinosae Semen* on learning and memory
impairment in DL-4-chlorophenylalanine-induced insomnia rats
HENG Yi-ran, DUAN Hui-zhu, DU He, YAN Yan, DU Chen-hui
- 6771** Mechanism of hedysarum polysaccharides on preventing and treating
radiation-induced lung injury based on mTOR/HIF-1 α /VEGF signaling pathway
WANG Qiang, WANG Yi, ZHANG Li, SHANG Yun, LI Liang-liang, DU
Xian-qin, LI Shuang, LIN Xing-yao
- 6779** Effect of multidrug resistance protein 2 on pharmacokinetics of wogonin and its
major phase II metabolites
ZHENG Rong, ZHANG Qi-song, HU Xue-li, XU Rui, PENG Guo-shuang,
CHANG Bing-lin, HU Ze-hua, XU Xin-lin, YANG Bao
- 6785** Protective effect of Jingfang Granules on acute myocardial infarction induced by
isoproterenol in rats
DONG Li-yang, CHENG Guo-liang, YAO Jing-chun, CAO Tian-you, LI
Xiao-peng, QU Hui-hua, KONG Hui, ZHAO Yan, ZHANG Gui-min

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

Nov. 12, 2022

Editor in Charge of English

WANG Yi-ran

Editor in Charge of This Issue

LI Ya-nan

- 6795** Mechanism of Compound Xianchao Granules on inhibiting epithelial mesenchymal transformation in diabetic nephropathy podocytes based on IRS2/PI3K/FOXO4 signaling pathway
LIU Dan-ning, HUANG Guo-dong, YANG Xin-yong, ZHOU Chang-yan, WANG Ya-nan
- 6805** Clinical study of Tianmeng Oral Liquid combined with sertraline on improving cognitive function, anxiety and sleep disorders in patients with cerebral hypofunction
LIU Pei-pe, LIU Xiao-juan, HUANG Zhi-cheng, LIU Ru, LIU Ye
- **Data Mining and Evidence-Based Medicine** •
- 6810** Clinical comprehensive evaluation of Compound Xiatianwu Tablets in treatment of rheumatoid arthritis
LEI Chao, ZHANG Qiang, WANG Zhi-fei, XIE Yan-ming
- 6820** Network Meta-analysis of Chinese patent medicine combined with mifepristone in treatment of uterine fibroid
WANG Chen, WANG Juan, YANG Feng-na, WEI Zhi-ling, WANG Fang
- 6832** Visual analysis of related research on traditional Chinese medicine skin care products based on global patents perspective
SHU Ya-chun, LI Dan-ting, LI Jing, LIU Yang, JIANG Zhi-wei
- **Medicinal Materials** •
- 6840** Cloning, expression pattern and functional analysis of squalene synthase (PhSQS2) in *Pteroccephali Herba*
WANG Yun, WU Yu, JIANG Qing-feng, HE Yan, LAN Xiao-zhong, ZHANG Lei
- 6848** Expression characteristics of Panax notoginseng cytochrome P450 gene *PnCyp450_3* under induction of *Arbuscular Mycorrhizal Fungi*
CAO Guan-hua, ZHANG Xing-kai, BAI Xu, BI Yue, YIN Hong-wei, ZHANG Yun, HE Sen
- 6857** Identification of commonly used origins of Tibetan medicine *Lagotidis Herba* based on ITS2 barcode and market analysis
GAO Bi-xing, QI Jing-liang, ZHONG Hong, MA Lu-ling, LI Qian, LIAN Yan, JIANG Gui-hua, JIANG Yun-bin
- 6865** Genetic diversity analysis of *Polygonati Rhizoma* based on ISSR and SRAP molecular markers
JIANG Wu, LI Ya-ping, CHEN Jia-dong, TAO Zheng-ming
- 6874** Exogenous H₂O₂ pretreatment improve cold resistance, yield and quality of *Sedum sarmentosum*
LAI Qiu-jie, CUI Yun-qi, ZHU Zai-biao, YAN Meng-tian, CHENG Lin, HAN Jia-pe
- 6881** Comparative study on UPLC characteristic chromatogram combined with multiple chemical pattern recognition and chromatic value of *Sophorae Fructus* and its processed products
DENG Li-hong, WANG Shou-fu, CHEN Shi-yan, KUANG Min, HUANG Gui-fa, LIN Wei-xiong, ZHANG Zhi-peng
- **Reviews** •
- 6888** Research progress on quality control of gelatinous traditional Chinese medicine based on discovery and application of specific peptides
CAI Shuo, HAN Shu-ying, XIA Hao-ran, YAN Zhi-ye, HUANG Xiao-zheng, ZHAO Ming, DUAN Jin-ao, LIU Rui
- 6900** Influencing factors, changing mechanisms and protection strategies of volatile oil from traditional Chinese medicine
WU Yi, WAN Na, LIU Yang, LIN Rui-hua, ZHANG Yu-tian, GUO Dong-yun, LIAO Jia-bao, ZHOU Tong-hui, WU Zhen-feng, YANG Ming
- 6909** Research progress on molecular mechanism of curcumin against pulmonary fibrosis
ZHENG Lei, HUANG Hong, WU Han, ZHANG Jun-lan, CAI Xiong, FAN Fu-yuan
- 6919** Key issues in preparation and evaluation of traditional Chinese medicine placebo to ensure blinded implementation
ZHANG San-mei, WU Mei, WU Fei, WANG You-jie, HU Jia-liang, LIN Xiao, FENG Yi
- 6931** Research progress on quality characteristics and formation mechanism of genuine medicinal materials
ZHAO Lu-ying, SHI Meng-yao, ZHANG Qiao-yan, QIN Lu-ping, SUN Yi-qi
- 6948** Research progress on prenylated flavonoids from *Morus* plants and their pharmacological activities
JIANG Yue, LIU Yang-yang, TIAN Hai-tao, DENG Zhi-peng
- 6959** Research progress on effect and mechanism of *Dendrobium huoshanense* and its active components against liver diseases
DENG Guang-hui, YU Nian-jun, WANG Yan-yan, YE Meng-juan, CAI Xiao, ZHANG Xiao-qian, PENG Dai-yin
- 6968** Historical story on natural medicinal chemistry: Research of natural product chemistry and development of organic chemistry
WANG Lei, LI Zhi, TONG Miao-miao, FU Yan, LI Li-geng