

炮制对巴戟天化学成分及药理作用影响的研究进展^Δ

白娜^{1*}, 付天义¹, 马亚乐¹, 王宸¹, 李红伟^{1,2}, 李凯^{1,2}, 康乐^{1,2}, 刘梦云^{1,2#} (1. 河南中医药大学药学院, 郑州 450046; 2. 河南省中药特色炮制技术工程研究中心, 郑州 450046)

中图分类号 R932; R283.1 文献标志码 A 文章编号 1001-0408(2026)13-1778-06

DOI 10.6039/j.issn.1001-0408.2026.13.21



摘要 巴戟天为“四大南药”之一,临床上常用于治疗肾阳不足所致阳痿遗精、宫冷不孕、月经不调、少腹冷痛、风湿痹痛、筋骨痿软等。基于“生熟异治”原则,本文梳理不同炮制方法对巴戟天中化学成分及药理作用的影响。研究发现,炮制会对巴戟天糖类、环烯醚萜类及蒽醌类成分的含量和结构产生影响,进而调控其抗骨质疏松、调节免疫、抗疲劳、抗抑郁等药理作用,其中盐巴戟天在抗骨质疏松、增强免疫等方面表现突出。尽管目前研究已初步明确了巴戟天的主要化学物质成分及其药理作用特征,但炮制过程中成分的动态转化路径仍需进一步阐明,尤其是建立与炮制工艺关联的质量标志物体系,以实现炮制工艺的精准化和智能化发展。

关键词 巴戟天;炮制;化学成分;药理作用;生熟异治

Research progress on the effects of processing on the chemical constituents and pharmacological effects of *Morinda officinalis*

BAI Na¹, FU Tianyi¹, MA Yale¹, WANG Chen¹, LI Hongwei^{1,2}, LI Kai^{1,2}, KANG Le^{1,2}, LIU Mengyun^{1,2} (1. School of Pharmacy, Henan University of Traditional Chinese Medicine, Zhengzhou 450046, China; 2. Henan Research Center for Special Processing Technology of Chinese Medicine, Zhengzhou 450046, China)

ABSTRACT *Morinda officinalis* is one of the “Four Great Southern Medicines” and is commonly used in clinical practice to treat erectile dysfunction and nocturnal emissions caused by kidney yang deficiency, uterine cold infertility, menstrual disorders, low abdominal pain, rheumatism, and muscle and bone weakness. Based on the principle of “treating raw and cooked differently”, this article summarizes the effects of different processing methods on the chemical constituents and pharmacological effects of *M. officinalis*. Research has found that processing can affect the content and structure of sugars, iridoids, and anthraquinones in *M. officinalis*, thereby regulating its pharmacological effects such as anti-osteoporosis, immune regulation, anti-fatigue, and anti-depression. Among them, salt *M. officinalis* shows outstanding performance in anti-osteoporosis and enhancing immunity. Although previous studies have preliminarily elucidated the major chemical constituents of *M. officinalis* and their pharmacological characteristics, the dynamic transformation paths of constituents during the processing remain to be further clarified, especially the establishment of a quality marker system associated with the processing technology, to achieve the precision and intelligent development of the processing.

KEYWORDS *Morinda officinalis*; processing; chemical constituents; pharmacological effects; treating raw and cooked differently

巴戟天,四大南药之一,为茜草科植物巴戟天 *Morinda officinalis* How 的干燥根,道地产区为广东肇庆。其性微温,味甘、辛,归肾、肝经;传统功效为补肾阳、强筋骨、祛风湿,临床上常用于治疗肾阳不足所致阳

痿遗精、宫冷不孕、月经不调、少腹冷痛、风湿痹痛、筋骨痿软等^[1]。在中药理论与实践,“生熟异治”是一项极具特色的用药原则,即同种药材在生品和炮制品状态下,其药性、功效及应用范围存在显著差异,能够针对不同病症发挥不同的治疗效果。这一原则在巴戟天上得到充分体现:生品偏于补肝肾而祛风湿,而经盐制后,其甘温补益之性增强,长于补肾助阳^[2]。因此,炮制不仅是加工过程,更是通过改变药效物质基础以提升临床疗效、缓和毒副作用的重要环节。

Δ 基金项目 国家自然科学基金项目(No.82404865);河南省高校科技创新团队支持计划(No.26IRTSTHN018)

* 第一作者 硕士。研究方向:中药炮制技术。E-mail: banana202507@163.com

通信作者 讲师,博士。研究方向:中药饮片炮制及其质量标准。E-mail: liumengyun218@163.com