

特约综述

钉螺遗传学及其生物学特性的研究进展

周晓农, 李石柱, 刘琴, 张仪

中国疾病预防控制中心寄生虫病预防控制所, 世界卫生组织疟疾、血吸虫病和丝虫病合作中心, 上海 200025

收稿日期 修回日期 网络版发布日期 接受日期

摘要

钉螺的生物学研究一直受到研究者关注, 近年来许多研究者运用种群遗传学、分子生物学等方法对钉螺遗传学特性, 及其与钉螺分布和对血吸虫易感性等开展了系列研究, 旨在探索阻断血吸虫生活史的新方法。但国内就钉螺遗传学研究特别是与日本血吸虫相容性的遗传特性方面的研究仍较薄弱, 今后研究重点应借鉴国际上对曼氏血吸虫中间宿主——光滑双脐螺的大量研究成果与方法, 特别是借助基因组学、转录组学和蛋白组学等现代研究方法, 开展钉螺遗传特性及其与血吸虫关系的研究, 以提升我国钉螺遗传学的研究水平。

关键词 [钉螺](#) [遗传学](#) [生物学特性](#) [研究进展](#)

分类号

Advances on Genetics and Biological Characteristics of *Oncomelania hupensis*

ZHOU Xiao-nong, LI Shi-zhu, LIU Qin, ZHANG Yi

National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention, WHO Collaborating Centre for Malaria, Schistosomiasis and Filariasis, Shanghai 200025, China

Abstract

This review focused on the research progress in genetic features of *Oncomelania hupensis*, including its relation to the snail distribution, susceptibility to *Schistosoma japonicum*. Series studies were done on genetic characteristics for snail distribution and its infectivity with *S. japonicum* by using population genetics and molecular biology approaches to explore the new avenue to block the transmission of schistosomiasis. However, limited progress has been achieved in this field inside in China comparing with global achievements. It is therefore recommended that future studies have to be focused on genetic features related to schistosome infections by referencing the study model of *Biomphalaria glabrata* / *S. mansoni*, and with assistance of modern technology on biomics, in order to improve investigations on genetics of *Oncomelania hupensis* in the country.

Key words [Oncomelania hupensis](#) [Genetics](#) [Biological Characteristics](#) [Advances](#)

DOI:

通讯作者

作者个人主页 周晓农; 李石柱; 刘琴; 张仪

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF \(335KB\)](#)
- ▶ [\[HTML全文\]\(OKB\)](#)
- ▶ [参考文献\[PDF\]](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“钉螺”的 相关文章](#)
- ▶ 本文作者相关文章

- [周晓农](#)
- [李石柱](#)
- [刘琴](#)
- [张仪](#)