

论著

中国与日本不同地域品系日本血吸虫蛋白组分的SDS-PAGE和EITB分析

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摘要

目的: 补充观察我国浙江、江西、台湾省和日本山梨的日本血吸虫成虫的蛋白组分, 以及上述4地和安徽、湖北、四川、云南省血吸虫与广西省钉螺和日本钉螺抗血清的反应性。方法: 采用SDS-聚丙烯酰胺凝胶电泳(SDS-PAGE)和酶联免疫电转移印迹(EITB)分析。结果与结论: 浙江、江西、台湾省和日本的血吸虫隔离群雄虫及雌虫抗原经SDS-PAGE后, 以考马斯亮蓝染色结果分别可见7~17条(江西省和日本的血吸虫雄虫条带显色很淡)及1~6条显色带; 银染结果分别可见14~23条及4~19条(台湾省的血吸虫雌虫仅见1条极淡的)显色带。台湾省血吸虫雄虫与浙江省血吸虫雄虫谱型相似, 但在81 kDa以上组分有所不同, 江西省血吸虫雄虫54 kDa条带明显, 日本的血吸虫雄虫不仅条带少, 谱型也与浙江、江西及台湾省的血吸虫各异。EITB结果: 所试血吸虫成虫与广西省钉螺和日本的钉螺抗血清均产生反应, 证明存在交叉反应抗原组分。所试血吸虫成虫与广西省钉螺和日本的钉螺间存在共同抗原组分。

关键词 [日本血吸虫](#) [品系](#) [SDS-聚丙烯酰胺凝胶电泳](#) [酶联免疫电转移印迹](#)

分类号

SDS-PAGE AND EITB ANALYSIS OF THE PROTEIN COMPONENTS OF DIFFERENT ISOLATES OF SCHISTOSOMA JAPONICUM IN CHINA AND JAPAN *

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Abstract

AIM: To make a supplementary observation on the protein components prepared from adult *S. japonicum* of 4 different isolates from Zhejiang, Jiangxi, Taiwan Provinces of China and Japan in origin and to observe antigen reactivity of the above-mentioned isolates together with adult worms from Anhui, Hubei, Sichuan and Yunnan isolates against heterologous anti-*Oncomelania h. hupensis* (collected from Guangxi, China and Japan) sera by EITB. METHODS: SDS-PAGE and EITB. RESULTS AND CONCLUSION: SDS-PAGE showed that by Coomassie blue staining, male *S. japonicum* from Jiangxi, Zhejiang, Taiwan Provinces and Japan isolates revealed 7-17 bands while female worms revealed 1-6 bands. The protein patterns of Taiwan and Zhejiang male worm were similar, but slight difference could be seen above 81 kDa. By silver staining, male worms of the 4 isolates revealed 10-23 bands while female worms revealed 1-19 bands. Male worms from Japan not only showed less bands but also differed in their pattern as compared to those of other Chinese isolates. Results of EITB revealed that each of the 4 isolates had slightly different pattern but all of the tested isolates had common antigens with their heterologous snail hosts i.e., *Oncomelania h. hupensis* from Guangxi, China and Japan.

Key words [Schistosoma japonicum strain](#) [SDS-polyacrylamide gel electrophoresis \(SDS-PAGE\)](#) [enzyme-linked immunoelectro-transfer blot \(EITB\)](#)

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